# Monthly Oil Market Report

11 September 2019

# Feature article: Review of global economic development

Oil market	t highlights	

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# Oil Market Highlights

#### **Crude Oil Price Movements**

The OPEC Reference Basket (ORB) declined \$5.09, or 7.9%, to average \$59.62/b. Crude oil futures prices also declined in August compared to the previous month. ICE Brent fell \$4.71, or 7.3%, to average \$59.50/b in August, and NYMEX WTI dropped by \$2.70, or 4.7%, to average \$54.84/b. Year-to-date, ICE Brent was \$6.94, or 9.6%, lower compared to the same period last year, averaging \$65.05/b, while NYMEX WTI declined by \$9.31, or 14.0%, to average \$57.12/b over the same period. All crude benchmark structures were in backwardation in August, with Brent and Dubai price structures steepening further. Hedge funds and other money managers slightly raised their net long positions for NYMEX WTI, but cut them for ICE Brent.

### **World Economy**

The global economic growth forecast was revised down to 3.0% for 2019 and to 3.1% for 2020, compared to the previous forecast of 3.1% and 3.2%, respectively, in last month's report. This was triggered by the ongoing slowdown in the US and the Euro-zone, lower-than-expected 1H19 growth in India, rising sovereign debt issues in Argentina, and the continuation of the US-China trade dispute, among other factors. US economic growth was revised down to 2.3% for 2019 and 1.9% for 2020. The forecast for Euro-zone growth in 2019 remains at 1.2%, while 2020 was revised down to 1.1%. Japan's 2019 growth was revised up to 0.9% due to a stronger-than-expected 1H19, although there was a downward revision to 0.3% in 2020. China's 2019 growth forecast remains at 6.2% and is expected to slow to 5.9% in 2020. India's growth forecast was revised down to 6.1% for 2019 and 6.7% for 2020. Brazil's 2019 growth forecast was revised down to 0.8%, but is then projected to reach 1.4% in 2020. After low 1Q19 growth, Russia's growth forecast for 2019 was revised down to 1.1%, and is forecast at 1.2% in 2020.

#### **World Oil Demand**

World oil demand in 2019 is expected to grow by 1.02 mb/d, which is 0.08 mb/d lower than last month's projection. The drop can be attributed to weaker-than-expected data in 1H19 from various global demand centres and slower economic growth projections for the remainder of the year. Both OECD and non-OECD demand growth forecasts were revised lower, by 0.03 mb/d and 0.05 mb/d, respectively. In 2020, world oil demand is projected to increase by 1.08 mb/d. This also represents a downward adjustment of 0.06 mb/d from the previous month's assessment, mainly to accommodate changes to the world economic outlook for 2020.

## **World Oil Supply**

Non-OPEC oil supply growth for 2019 was revised up by 10 tb/d from last month's projections to 1.99 mb/d. Upward revisions to oil production from Russia, Kazakhstan, Australia and Canada outpaced a downward revision to the US oil supply forecast. The main drivers for growth in 2019 are the US with growth of 1.8 mb/d, along with Brazil, China, the UK, Australia and Canada. Mexico and Norway are projected to see the largest declines. In contrast, non-OPEC oil supply growth in 2020 was revised down by 136 tb/d from last month's assessment to 2.25 mb/d. This is mainly due to a large downward revision to US oil supply, which is now expected to grow by 1.54 mb/d. The forecast for next year remains subject to many uncertainties, mainly relevant to capital spending discipline and a slowdown in drilling and completion activity in the US. OPEC NGLs production in 2019 and 2020 is expected to grow by 0.07 mb/d and 0.03 mb/d, respectively, to average 4.84 mb/d and 4.87 mb/d. In August, OPEC crude oil production increased by 136 tb/d to average 29.74 mb/d, according to secondary sources.

## **Product Markets and Refining Operations**

Product markets globally witnessed a notable downturn in the naphtha and fuel oil markets in August, although overall market performance was mixed. In the US, product markets suffered significant losses, as all products across the barrel weakened. The sharpest decline was felt at the top and bottom of the barrel, on the back of higher product output in the region, which, in general, placed product prices under pressure over the month. In Europe, middle distillates continued to perform positively supported by healthy demand amid higher product imports over the month. This offset the weakening at the top and bottom of the barrel and

#### Oil Market Highlights

provided a slight improvement in refining margins. Asian product markets lost ground, affected by a deterioration in high sulphur fuel oil (HSFO) markets, and pressured by weaker fundamentals as buying interest from the bunker sector declined in August, weighing on HSFO prices, and ultimately refining margins.

#### **Tanker Market**

Dirty vessel spot freight rates were broadly flat in August as gains in VLCCs were outweighed by declines in average rates for Aframax and Suezmax. A pick up in tonne-mile demand and reduced newbuilding deliveries supported the VLCC market at the start of the month, before slowing activities allowed availability lists to build, capping rates. In the clean tanker market, spot freight rates remained under pressure with declines West of Suez offsetting some improvement East of Suez.

#### **Stock Movements**

Preliminary data for July showed that total OECD commercial oil stocks fell by 10.5 mb m-o-m to stand at 2,944 mb. This was 108 mb higher than the same period a year ago, and 36 mb above the latest five-year average. Within the components, crude stocks fell by 41.3 mb m-o-m to stand at 20 mb below the latest five-year average, while product stocks rose by 30.8 mb m-o-m to 55 mb above the latest five-year average. In terms of days of forward cover, OECD commercial stocks declined by 0.1 days m-o-m to stand at 60.9 days, which was 2.2 days above the same period in 2018, but 0.6 days below the latest five-year average.

## **Balance of Supply and Demand**

Demand for OPEC crude in 2019 was revised down from the previous report to stand at 30.6 mb/d, which is 1.0 mb/d lower than the 2018 level. Demand for OPEC crude in 2020 remains unchanged from the previous report, to stand at 29.4 mb/d, around 1.2 mb/d lower than the 2019 level.

## **Feature Article**

## Review of global economic development

After two years of relatively high growth levels, global GDP growth is forecast to stabilize at 3.0% in 2019 and to rise to 3.1% in 2020. This constitutes sound growth with ongoing solid oil demand, given the many uncertainties that derive mainly from the political arena. The trade dispute between the US and China is ongoing, Brexit and a slow-down in Germany loom large in the EU, the sovereign debt crisis in Argentina is dampening Latin American growth, and ongoing structural challenges in India are leading the economy to significantly lower output. Upside to the current forecast could come from an agreement on trade-related issues between the US and its trading partners considering that trade was a substantial support factor for above-average global growth in the past two years (Graph 1). Furthermore, a soft Brexit, toning down of geopolitical tensions and stabilization in those economies that face fiscal challenges could also lift growth to a higher level. An important support factor so far this year has been the relatively stable oil market, which continues to benefit from the ongoing efforts under the OPEC-Non-OPEC Declaration of Cooperation (DoC). This has not only been beneficial to oil producing economies, including major OECD economies such as the US and Canada, but also to consumer nations as it provides better visibility in the oil market.

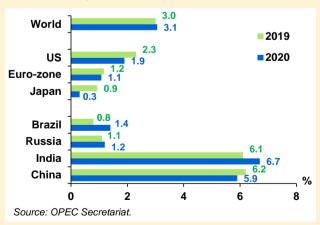
Within the OECD, the US economy continues to Graph 1: Global trade volume and value slow down after last year's support from the large fiscal stimulus measures. Consequently, growth is forecast at 2.3% in 2019, followed by growth of 1.9% in 2020. In the Euro-zone, economic challenges in Germany, political uncertainties in selective countries and Brexit are leading to lower growth, which is forecast at 1.2% for 2019 and 1.1% in 2020. Meanwhile, Japan's growth is forecast as holding up relatively well in 2019 at 0.9%. With the government intending to increase the sales tax in 4Q19 and the economy continuing to be constrained by very low unemployment and high utilization rates in the industrial sector, growth is forecast at 0.3% in 2020.



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

Monetary policies by the G4 central banks have supported growth. The Fed is forecast to lower interest rates at least one more time this year. The ECB may also expand its monetary supply further. Moreover, the BoJ has also indicated ongoing monetary support, while the BoE will likely expand its supply in the case of a worsening Brexit outcome. Importantly, central banks in several emerging and developing markets have lowered interest rates recently in order to support their economies. This ongoing monetary stimulus will still need to be further supported by the right fiscal and general policy mix to foster growth appropriately.

In the emerging economies, India has experienced Graph 2: GDP growth forecast for 2019-2020 significantly lower-than-expected growth rates for 1H19, amid ongoing structural challenges. While some pick-up in 2H19 is expected, growth rates are forecast to be lower than in past years at 6.1% for 2019 and 6.7% for 2020. China's GDP growth will continue Euro-zone slowing and will additionally be impacted by the ongoing trade dispute with the US. Growth in 2019 is forecast at 6.2%, followed by 5.9% in 2020. Meanwhile, Brazil's growth forecast stands at 0.8% for 2019 and at 1.4% for 2020. This will depend not only on policy actions by the government and commodity price developments, but also on developments in its close trading partner, Argentina. Russia's growth is forecast at 1.1% for 2019 and 1.2% in 2020, also dependent on external and domestic political developments, as well as energy commodity prices.



Given expectations for global economic growth, world oil demand is forecast at around 1 mb/d in 2019 and 2020. Nevertheless, this is expected to be outpaced by the strong growth in non-OPEC supply. This highlights the shared responsibility of all producing countries to support oil market stability to avoid unwanted volatility and a potential relapse into market imbalance.

## **Feature Article**

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## **Crude Oil Price Movements**

The **OPEC Reference Basket (ORB)** dropped in August by \$5.09, or 7.9%, to average \$59.62/b recording the second largest decline this year despite robust physical market fundamentals during the month. The ORB value was at its lowest level in seven months, as oil market sentiment remained dominated by fears of a slowing global economy amid the escalating US-China trade dispute.

Crude oil futures prices ended August lower with ICE Brent recording its lowest monthly average this year, wiping out all the previous month's gains. Oil futures were volatile over much of August, as the market was also impacted by non-fundamental factors with investors remaining focused on trade tensions. In August, ICE Brent was on average \$4.71, or 7.3%, lower m-o-m at \$59.50/b, while NYMEX WTI dropped m-o-m by \$2.70, or 4.7%, to average \$54.84/b. Y-t-d, ICE Brent was \$6.94, or 9.6%, y-o-y lower at \$65.05/b, while NYMEX WTI declined by \$9.31, or 14.0%, y-o-y to \$57.12/b. DME Oman crude oil futures also decreased m-o-m by \$4.39, or 6.9%, to settle at \$59.28/b. Y-t-d, DME Oman was down by \$4.90, or 7.0%, at \$64.64/b, compared to the same period a year earlier.

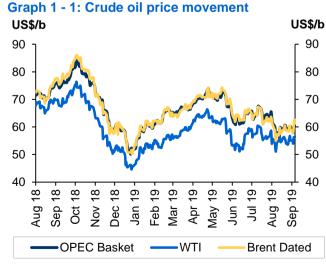
Hedge funds and other money managers have reacted in opposite ways regarding their wagers on Brent and WTI benchmarks. Speculators turned bearish on Brent and decreased their related net long positions to their lowest since early January amid declining ICE Brent prices, high uncertainty in the market and the US-China trade dispute. However, they raised their net long positions related to NYMEX WTI based on a significant decline in US crude stocks and prospects that new crude pipeline capacity would resolve the congestion in Permian Basin and Cushing, Oklahoma.

Although oil prices declined significantly in August, the **market structure** of all three major oil benchmarks – Brent, Dubai and WTI – was in backwardation, a sign of a more balanced global oil market and healthy crude demand. The Brent and Dubai backwardation structures strengthened further, and WTI price structures slipped into backwardation on the back of the ongoing draws in US crude oil stocks.

The **sweet/sour differentials** narrowed globally, except on the USGC where the spread widened more than twofold as demand for sour grades weakened and fuel oil margins declined, pushing the value of US sour crude to the lowest level in a year.

## **OPEC Reference Basket**

After experiencing an upturn in July, the ORB dropped in August by \$5.09, or 7.9%, m-o-m recording the second largest decline this year despite robust physical market fundamentals reflected in crude benchmark term structures continuing their shift to deeper backwardation during August, and healthy crude oil differentials. The physical crude market was supported by improving demand for September and October loading programmes, specifically in Asia, and by the tightening crude supply in Latin America, the Middle East and North Africa due to planned and unplanned outages. The oil market was further supported by the voluntary production adjustments from OPEC and non-OPEC participating countries that registered overall conformity of 159% in July 2019, or 22% higher than in June 2019.



Sources: Argus Media, OPEC Secretariat and Platts.

#### **Crude Oil Price Movements**

Furthermore, crude oil stocks in the US continued to fall in August, declining by about 13 mb in three weeks. US crude oil stocks reached about 428 mb in the week ending 23 August, according to EIA weekly data, declining 58 mb from its high level registered in June 2019.

Despite those bullish signs, the ORB value declined in August to its lowest level in seven months, as oil market sentiment remained dominated by fears of slowing global economy and its negative impact on oil demand, amid a new episode in the escalating trade dispute between the US and China.

M-o-m, the ORB value slipped \$5.09, or 7.9%, to settle at \$59.62/b on a monthly average. Y-t-d, the ORB value was \$4.92, or 7.1%, lower at \$64.63/b.

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

			Chang	ge	Year-to-d	Year-to-date		
	<u>Jul 19</u>	<u>Aug 19</u>	Aug/Jul	<u>%</u>	<u>2018</u>	<u>2019</u>		
Basket	64.71	59.62	-5.09	-7.9	69.55	64.63		
Arab Light	65.61	60.84	-4.77	-7.3	70.29	65.57		
Basrah Light	64.39	59.20	-5.19	-8.1	68.33	64.27		
Bonny Light	65.95	60.46	-5.49	-8.3	72.20	66.32		
Djeno	61.31	56.23	-5.08	-8.3	68.71	62.18		
Es Sider	63.36	58.38	-4.98	-7.9	69.94	64.11		
Girassol	65.98	61.64	-4.34	-6.6	71.67	66.46		
Iran Heavy	62.65	57.77	-4.88	-7.8	67.94	62.46		
Kuwait Export	64.90	60.35	-4.55	-7.0	68.41	64.83		
Merey	61.84	49.17	-12.67	-20.5	63.81	56.00		
Murban	64.86	60.19	-4.67	-7.2	72.10	65.43		
Oriente	61.46	56.09	-5.37	-8.7	66.28	61.08		
Rabi Light	63.16	58.08	-5.08	-8.0	70.35	64.03		
Sahara Blend	63.92	58.23	-5.69	-8.9	71.61	64.91		
Zafiro	65.58	60.81	-4.77	-7.3	71.26	66.11		
Other Crudes								
Dated Brent	63.91	58.83	-5.08	-7.9	71.34	64.78		
Dubai	63.21	58.88	-4.33	-6.9	69.30	64.33		
Isthmus	63.58	58.71	-4.87	-7.7	68.38	64.13		
LLS	62.69	58.61	-4.08	-6.5	70.36	63.71		
Mars	62.12	57.10	-5.02	-8.1	66.85	62.24		
Minas	61.56	57.40	-4.16	-6.8	65.96	60.34		
Urals	63.73	59.95	-3.78	-5.9	69.90	65.06		
WTI	57.51	54.84	-2.67	-4.6	66.54	57.08		
Differentials								
Brent/WTI	6.40	3.99	-2.41	-	4.80	7.70		
Brent/LLS	1.22	0.22	-1.00	-	0.99	1.07		
Brent/Dubai	0.70	-0.05	-0.75	-	2.05	0.45		

Sources: Argus Media, Direct Communication, OPEC Secretariat and Platts.

The **ORB component values** deteriorated along with relevant crude oil benchmarks, particularly the Brent and Dubai-related crudes. Crude oil physical benchmarks North Sea Dated and Dubai spot prices decreased m-o-m by \$5.08 and \$4.33/b, respectively, while WTI price fell by only \$2.67/b.

Light sweet crude **ORB components from West and North Africa** – including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – declined significantly last month, falling \$5.06 on average, or 7.9%, m-o-m to \$59.12/b, despite some recovery in light sweet crude differentials. Light sweet differentials were supported by healthy middle distillate margins, oil supply disruptions in Libya and healthy demand from the Asia-Pacific region, particularly China. The sizable decrease in North Sea Dated benchmark, which fell 7.9%, caused the price of the light sweet crude Basket components from West and North Africa to edge lower.

**Latin American ORB components** Venezuela's Merey and Ecuador's Oriente declined significantly, with Merey crude value falling the most on a monthly average, pressured down by a sharp decline in fuel oil margins and reduced flow to China in August. Venezuela's Merey and Ecuador's Oriente fell to \$49.17/b and \$56.09/b, respectively, losing \$12.67, or 20.5%, and \$5.37, or 8.7%.

The value of **multiple-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, also fell by \$4.85, or 7.5%, for the month, to \$59.54/b, tracking Dubai/Oman price slides. Weak heavy distillate margins, particularly fuel oil, and the decline of official selling prices of most Middle East crudes for September loading to Asian markets also contributed to the decline in the heavy components value. However, the tightening global sour market and healthy Asian demand limited the price decline.

Similarly, **Middle Eastern spot component** Murban edged lower in August, declining by \$4.67 m-o-m, or 7.2%, to \$60.19/b. Nonetheless, the Murban spot value was somewhat supported by healthy Asian demand for the grade with a narrow Brent/Dubai spread continued making Murban competitive compared to similar Brent-related grades such as Forties.

On 10 September, the ORB stood at \$62.74/b, \$3.12 above the August average.

## The oil futures market

Crude oil futures prices ended August lower with ICE Brent recording it lowest monthly average this year, wiping out all the previous month's gains. Oil futures were volatile over much of August. The market was driven mainly by non-fundamental factors, with investors remaining focused on new import tariffs imposed by the US and China as of 1 September. The escalating trade dispute further jolted market confidence and negatively affected global financial markets. Weaker economic data from China, Germany and the US contributed to the bearish market sentiment and added to concerns about a slowdown in the economy and oil demand. The continued strengthening of the US dollar during August also kept crude oil prices under pressure.

Investors shrugged off positive oil market fundamentals that continued to show resilient global oil demand reflected in the term structures of oil futures prices. Indeed, all crude benchmark structures, including WTI, were in backwardation in August, mirroring a more balanced global market. Production adjustment conformity levels for the OPEC and participating non-OEPC countries remained high, reaching 159% in July. In a sign of slowing US oil production, the US rig count fell in August for the ninth consecutive month to reach its lowest level since January 2018, according to Baker Hughes (BHGE) data.

On a monthly average, both ICE Brent and NYMEX WTI fell but by varying magnitudes. **ICE Brent** declined \$4.71, or 7.3%, to \$59.50/b, again recording the weakest performance amongst other benchmarks, while **NYMEX WTI** declined by only \$2.70, or 4.7%, to \$54.84/b.

WTI benchmark showed more resilience in August, supported by significant decline in US commercial crude oil stocks, particularly in Cushing, Oklahoma. Crude stocks at Cushing fell to 40.4 mb in the week ending 23 August, a decline of about 12 mb since July. WTI prices found further support after two crude oil pipelines, EPIC Crude and Cactus II, both started carrying crude from the Permian Basin to the USGC in mid-August 2019.

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

			Chan	ge	Year-to-date		
	<u>Jul 19</u>	<u>Aug 19</u>	<u>Aug/Jul</u>	<u>%</u>	<u>2018</u>	<u>2019</u>	
NYMEX WTI	57.55	54.84	-2.70	-4.7	66.42	57.12	
ICE Brent	64.21	59.50	-4.71	-7.3	72.00	65.05	
DME Oman	63.67	59.28	-4.39	-6.9	69.55	64.64	
Transatlantic spread (ICE Brent-NYMEX WTI)	6.67	4.66	-2.01	-30.2	5.58	7.94	

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

Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

Y-t-d, ICE Brent was \$6.94, or 9.6%, y-o-y lower at \$65.05/b, while NYMEX WTI declined by \$9.31, or 14.0%, y-o-y to \$57.12/b.

**DME Oman** crude oil futures also decreased m-o-m by \$4.39 in August, or 6.9%, to settle at \$59.28/b. Y-t-d, DME Oman was down by \$4.90, or 7.0%, at \$64.64/b, compared to the same period a year earlier.

On 10 September, ICE Brent stood at \$62.38/b and NYMEX WTI at \$57.40/b.

Hedge funds and other money managers have reacted in an opposite ways regarding their wagers on Brent and WTI benchmarks. Speculators turned bearish on Brent and decreased their related net long positions to their lowest levels since early January, amid declining ICE Brent prices, high uncertainty in the market and the US-China trade dispute. In contrast, they raised their net long positions related to WTI on a significant decline in US crude stocks and prospects that the new crude pipeline capacity will resolve the congestion in Permian basin and Cushing, Oklahoma.

Since the first week of August, hedge funds and other money managers reversed course and started to carefully raise their bullish wagers on US crude on expectations that the opening of two major new pipelines out of the Permian Basin will support **NYMEX** WTI price. Nonetheless, speculators reduced their net length in the week ending 27 August as concerns about the global economy took over. Hedge funds and other money managers increased their net long positions in futures and options in the NYMEX WTI by 14,335 contracts, or 8.5%, to 182,450 contracts for the week ending 27 August, according to US Commodity Futures Trading Commission (CFTC).

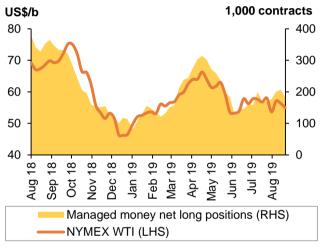
During the same period, gross short positions fell by 24,901 contracts or 30.3%, to 57,416 contracts.

However, hedge funds and other money managers reduced their futures and options net long positions linked to **ICE Brent** by 52,219 contracts, or 18.9%, to 224,121 contracts for the week ending 27 August. This is their lowest level since early January, according to the ICE Exchange.

The **long-to-short ratio** in ICE Brent speculative positions fell slightly to 4:1 in late August, compared to about 5:1 in July. The NYMEX WTI long-to-short ratio rose to 4:1 for the week ending 27 August, from around 3:1 at the beginning of the month.

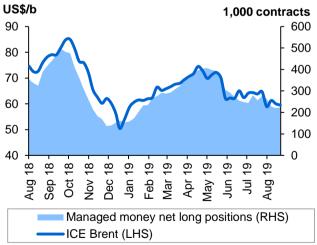
The total futures and options open interest volume in the two exchanges fell by only 64,225 contracts from the beginning of the month to stand at 5.5 million contracts in the week ending 30 July.

**Graph 1 - 2: NYMEX WTI vs.** managed money net long positions



Sources: CFTC, CME Group and OPEC Secretariat.

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



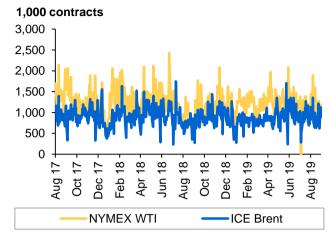
Sources: Intercontinental Exchange and OPEC Secretariat.

The daily average traded volume for NYMEX WTI contracts rose by 230,739 lots, or 22.2%, in August to 1,268,255 contracts. Nonetheless, the daily average traded volume for ICE Brent rose by only 54,372 contracts, or 6.4%, to 904,048 lots.

The daily aggregate traded volume for both crude oil futures markets rose by 285,112 contracts m-o-m to stand at 2.2 million futures contracts, or about 2.2 billion b/d of crude oil.

The **total traded volume** for NYMEX WTI was higher in August at 27.9 million contracts, or 22.2%, while that of ICE Brent was 1.8% higher at 19.9 million contracts. Traded volume was higher in August despite lower trading days compared to July.

# **Graph 1 - 4: NYMEX WTI and ICE Brent daily trading volumes**



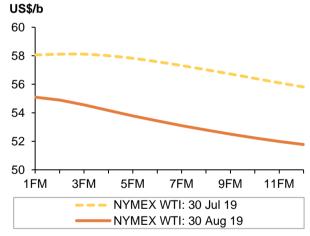
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

## The futures market structure

Although oil prices declined significantly in August, the **market structure** of all three major oil benchmarks – Brent, Dubai and WTI – was in backwardation, a sign of a more balanced global oil market and healthy crude demand. The Brent and Dubai backwardation structures strengthened further, and WTI price structures slipped into backwardation on the back of the ongoing draws in US crude oil stocks.

The term structure of **NYMEX WTI** futures flipped from contango to backwardation in early August, and the first-to-third month spread continued to widen over the month, as the prompt WTI price saw strong support from declining US crude oil stocks, specifically at Cushing, Oklahoma. In the week to 23 August, US crude stocks continued to fall by 10 mb, to the lowest level since November 2018. US crude oil stocks started to fall in June, declining by about 58 mb, the EIA reported. Also, crude stocks at Cushing fell to 40.4 million barrels in the week ending 23 August, a decline of about 12 mb since last July. WTI prices found further support after two crude oil pipelines, EPIC Crude and Cactus II, started carrying crude from the Permian Basin to the USGC in mid-August, and are expected to eliminate congestion in Permian Basin and in Cushing, Oklahoma trading.

**Graph 1 - 5: NYMEX WTI forward curves** 



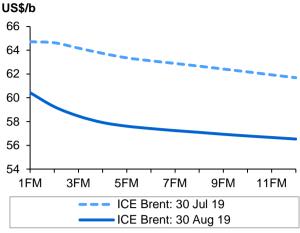
Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

The **Brent** price structure steepened in August with prompt prices supported by healthy crude oil demand, particularly from Asia; geopolitical tensions in the Middle East that restrained supply, and supply disruption from the El Sharara oil field in Libya. Higher shipments of North Sea crude to the Asia-Pacific region also added support. Unsold cargoes in the Atlantic basin were gradually clearing, giving some support to prompt prices. The ICE Brent first-to-third month spread widened to \$1.22/b on 26 August, compared to 51/b on 26 July.

The forward structure of **DME Oman** remained in backwardation, while the cash Dubai first-to-third-month price spread widened further as prompt prices were supported by robust demand from Asia and healthy Asian refining margins for middle distillates. Lower crude production in July also contributed. However, the sharp decline in fuel oil margins in early August put some pressure on heavy sour grades.

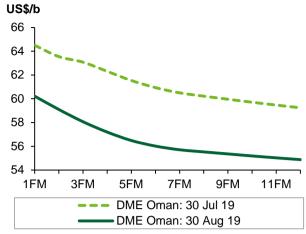
#### **Graph 1 - 6: ICE Brent forward curves**



Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

**Graph 1 - 7: DME Oman forward curves** 



Note: FM = future month.

Sources: Dubai Mercantile Exchange and OPEC Secretariat.

Regarding the **M1/M3 structure**, the North Sea Dated M1/M3 backwardation widened to 92¢/b in August, a rise of 38¢. The **Dubai** M1 premium to M3 also increased to \$1.74/b, up by 48¢ on a monthly average. In the US, the WTI M1-M3 spread contango of 11¢/b slipped into a backwardation of 31¢/b.

The **spread between the ICE Brent and NYMEX WTI** benchmarks continued to narrow further in August for the third consecutive month to reach its lowest level in more than a year, as the NYMEX WTI price continued to perform better than ICE Brent and other benchmarks. The Brent/WTI futures spread declined by \$2.01 in August to average at \$4.66/b. Concerns about the health of the global economy and the US-China trade situation kept Brent under pressure, while NYMEX WTI got support from the significant decline in US crude oil stocks and signs of declining US oil production growth. The WTI price was further helped by the opening of two major crude oil pipelines from the Permian to the USGC, which will eliminate congestion in Permian Basin and Cushing that had negatively affected the WTI price.

Table 1 - 3: Crude oil futures forward curves, US\$/b

		<u>1FM</u>	<u>2FM</u>	<u>3FM</u>	<u>6FM</u>	<u>12FM</u>	<u>12FM-1FM</u>
NYMEX WTI	30 Jul 19	58.05	58.11	58.11	57.58	55.81	-2.24
	30 Aug 19	55.10	54.89	54.56	53.43	51.78	-3.32
	Change	-2.95	-3.22	-3.55	-4.15	-4.03	-1.08
ICE Brent	30 Jul 19	64.72	64.63	64.18	63.11	61.69	-3.03
	30 Aug 19	60.43	59.25	58.46	57.41	56.53	-3.90
	Change	-4.29	-5.38	-5.72	-5.70	-5.16	-0.87
DME Oman	30 Jul 19	64.50	63.55	63.08	60.94	59.24	-5.26
	30 Aug 19	60.22	59.10	58.07	56.02	54.88	-5.34
	Change	-4.28	-4.45	-5.01	-4.92	-4.36	-0.08

Note: FM = future month.

Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

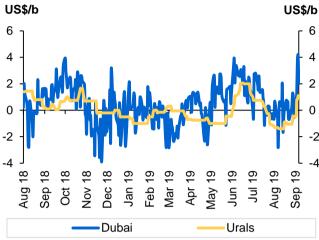
## The light sweet/medium sour crude spread

The **sweet/sour differentials** narrowed globally, except on the USGC where the spread widened more than twofold as demand for sour grades weakened and fuel oil margins declined, pushing the value of Mars sour crude to its lowest in a year.

Despite weak **European** high-sulphur fuel oil margins, the value of sour crude Urals strengthened against Brent Dated in August, on a monthly average, with the Brent/Urals premium of 18¢/b falling to a discount of \$1.12/b, a decline of \$1.30. Earlier in the month, the Urals crude differential strengthened and even reached an all-time high against Dated Brent in the Mediterranean, buoyed by lower supply planned for August and robust demand from European refiners. However, the Urals value lost strength in the second part of the month due to weakening margins and sluggish demand for the grade.

In **Asia**, the Tapis premium over Dubai also decreased slightly as the Dubai price was supported by healthy Asian demand and lower production in the Middle East in July. High volumes of light sweet crudes arriving in the Asia-Pacific region in July and August weighed on regional differentials. The Tapis/Dubai spread narrowed by 61¢ to \$4.64/b.

**Graph 1 - 8: Brent Dated vs. sour grades** (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

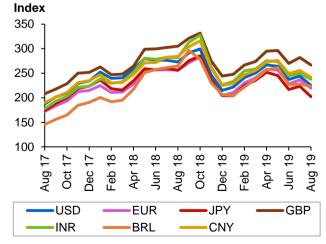
On the **USGC**, the LLS premium over medium-sour Mars increased by 94¢ to \$1.51/b, as Mars sour crude declined more than light sweet crude on weak demand and declining fuel oil margins. Furthermore, the decision of the US Department of Energy to release 10 mb of sour crude from the Strategic Petroleum Reserve (SPR) for October and November deliveries also affected sour crude values.

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

The **US dollar** (USD) advanced in August against most major currencies and posted larger gains against those of emerging markets. The escalation of the trade dispute between China and the US weakened financial market sentiment, resulting in a retreat from emerging markets and lower commodity prices. This in turn prompted the largest increase of the dollar against emerging market currencies this year. While the US Federal Reserve is expected to cut interest rates for the second time this year at its September meeting, the relative strength of the US economy has kept the US dollar well supported.

Against **major currencies**, the USD advanced against the Euro on average by 0.8% m-o-m with the European Central Bank expected to engage in some degree of monetary policy accommodation at its upcoming meetings in response to weak inflation readings and Brexit uncertainties. Against the Swiss franc, the dollar advanced by 0.9% m-o-m.

Graph 1 - 9: ORB crude oil price index compared with different currencies (base January 2016 = 100)



Sources: IMF and OPEC Secretariat.

#### **Crude Oil Price Movements**

The USD rose by 2.7% against the pound sterling on concerns of a no-deal Brexit, though the trend reversed after Parliament approved legislation aimed at securing an extension of the negotiation period. Against the Japanese yen, the dollar declined by 1.8% m-o-m, mainly due to safe haven demand in the midst of financial market turmoil last month.

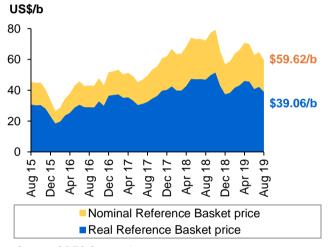
Against **emerging market currencies**, the dollar advanced by 2.1% against the Chinese yuan after the People's Bank of China let the yuan depreciate following the US announcement of additional tariffs on Chinese imports. The dollar increased by 3.4% against the Indian rupee, amid signs of deceleration of the Indian economy and increasing risk aversion in financial markets. Against the Brazilian real, the USD rose by 6.4% amid financial market turmoil due to the escalation of the trade disputes and, to some extent, the expectation of additional interest rate cuts by Brazil's central bank should inflation remain in check. The central bank announced interventions in the spot market to support the real in the second half of the month. Against the Russian ruble, the dollar was up by 3.7%, though the gains followed the sharp drop in crude oil prices experienced during the month. The USD fell by a slight 0.8% against the Turkish lira, but rose by a steep 23.9% against the Argentinian peso due to uncertainties over the October general elections. Argentina has experienced a sharp fall in international reserves and the imposition of currency controls.

In **nominal terms**, the price of the ORB decreased by \$5.09, or 8%, from \$64.71/b in July to \$59.62/b in August.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB decreased to \$39.06/b in August from a revised \$42.16/b (base June 2001=100) in the previous month.

Over the same period, the **USD** advanced by 0.6% against the import-weighted modified Geneva I + USD basket, while inflation was relatively stable m-o-m.

Graph 1 - 10: Impact of inflation and currency fluctuations on the spot ORB price (base June 2001 = 100)



Source: OPEC Secretariat.

# **Commodity Markets**

**Energy commodities** generally fell after the re-intensification of trade disputes between China and the US at the beginning of August, with oil and coal prices dropping, while natural gas results were mixed, declining in the US but advancing slightly in Europe, mainly due to outages.

In the group of **non-energy commodities**, base metals also declined amid the intensification of trade disputes and persistent weakness in global manufacturing. Nonetheless, nickel was an outlier, jumping on the prospect of an earlier-than-expected ban on Indonesian ore exports. Among precious metals, gold increased the most since 2016 on increased safe haven demand as the US Federal Reserve (Fed) is expected to cut interest rates amid decelerating economic growth.

## Trends in selected commodity markets

The **energy price index** increased by around 6% m-o-m in August and was down on average by 12% year-to-date (y-t-d) compared with the same period last year.

The **non-energy index** was down by 3.9% m-o-m as a result of decreases in both agricultural commodities and base metals. Y-t-d, the non-energy index declined 6.1% compared with the same period last year.

Table 2 - 1: Commodity prices

Commodity	Unit	Мо	nthly aver	rages	% Change	Yea	r-to-date
Commodity	Offic	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug 19/Jul 19	<u>2018</u>	<u>2019</u>
Energy*		73.1	74.9	70.3	-6.1	87.1	76.9
Coal, Australia	US\$/mt	72.5	72.1	65.6	-9.1	107.4	83.3
Crude oil, average	US\$/b	59.8	61.5	57.7	-6.2	69.0	62.0
Natural gas, US	US\$/mbtu	2.4	2.4	2.2	-5.8	2.9	2.6
Natural gas, Europe	US\$/mbtu	3.6	3.6	3.7	1.6	7.2	4.8
Non-energy*		82.6	82.7	79.5	-3.9	87.2	81.9
Base metal*		79.4	80.7	78.9	-2.2	93.7	82.2
Precious metals*		102.1	106.3	113.2	6.5	99.3	101.7

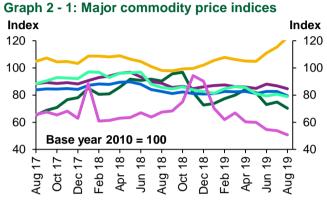
Note: \* World Bank commodity price indices (2010 = 100). Sources: World Bank, Commodity price data; OPEC Secretariat.

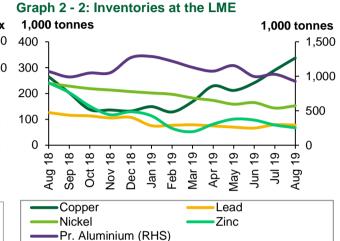
In August, the **Henry Hub natural gas index** decreased on average by 5.8% to \$2.2/mmbtu. Prices weakened amid the continuing rapid replenishment of inventories – despite some localized heatwaves, which shrank the inventory deficit to the previous five-year average during the month. According to the US Energy Information Administration (EIA), utilities added 84 bcf to working gas underground storage during the week ending 30 August. The build left total working gas in underground storage at 2,941 bcf, which was 2.7% lower than the previous five-year average. By the last week of July, inventories were 4.5% below the latest five-year average, while at the end of March they were at 30.9% below that average. However, towards the end of the month prices recovered some ground, as speculators reduced some of their extreme net short positions, and news arrived related to an expected increase in flows to Mexico after the country's Federal Electric Commission announced the renegotiation of contracts with three pipeline operators.

Natural gas prices in Europe recovered slightly with the Title Transfer Facility price increasing by 1.6% to \$3.67/mmbtu in August. This is 55% below the August 2018 average. Prices saw some minor upticks as a result of restricted flows from some Norwegian facilities. However, inventories are nearly full in many countries, a fact that restricts any upside potential. Natural gas inventories for EU Member States were around 92% of capacity at the end of August. Last year, inventories were 73% of capacity at the end of

August, according to Gas Infrastructure Europe. Inventories in Germany, France and the Netherlands are currently around 97% full.

**Australian thermal coal prices** decreased sharply in August by 9.1% m-o-m to average \$65.6/mt amid muted thermal power demand and rising Chinese coal output. The 3.0% increase in electricity generation in China so far this year (January–July) has been covered by renewables and other sources, as thermal power output has been roughly flat y-o-y. In July, thermal power generation increased in a seasonal pattern m-o-m, but was 1.6% lower compared to last year, according to data from the National Bureau of Statistics. Meanwhile, Chinese coal output jumped by 12.2% y-o-y in July and by 4.3% y-o-y in the January–July period compared with the same period last year. The most recent trade data showed Chinese coal imports rose slightly by 0.2% m-o-m in August, and by 14.9% y-o-y. In the January–August period, imports rose by 8.1% y-o-y.





Sources: World Bank, Commodity price data; S&P Goldman Sachs; Haver Analytics and OPEC Secretariat.

Energy

HH natural gas

Food

Sources: LME, Thomson Reuters and OPEC Secretariat.

The **base metal price index** declined on average by 2.2% m-o-m in August, weakened by the intensification of the trade dispute between China and the US at the end of July and due to uncertainty about the US dollar strength particularly against the Chinese yuan. At the same time, manufacturing surveys continued to signal a contraction in activity for the fourth consecutive month, albeit a slight improvement was observed in the latest survey. Indeed, the JP Morgan global manufacturing PMI recovered slightly to 49.5 in August from a final reading of 49.3 in July.

Non-energy

Base metals

Gold

Copper prices declined by 3.9% m-o-m in August, weighed down by worsening prospects regarding the US-China trade dispute, weak manufacturing prospects and rising inventories. The International Copper Study estimates that in the January–May period its world refined copper balance adjusted for unreported Chinese inventories showed a deficit of 95,000 tonnes, much higher than the deficit estimated for the January–April period of 15,000 tonnes. Inventories on the London Metal Exchange kept climbing to around 337,000 tonnes from 290,500 tonnes from the previous month, continuing to cast doubt on any potential strengthening of demand. A notable outlier among base metals is nickel, which has been supported by fears of supply disruption, as Indonesia announced a ban on nickel ore exports in 2020 – two years earlier than anticipated. Meanwhile, there is an expectation of higher demand for the manufacturing of electric vehicles. Prices rose on average by 16% m-o-m and by around 30% since June.

**Iron ore prices** decreased by 22.6% in August mainly following a recovery in exports from Brazil in July and August after the resumption of operations in its largest mine in the state of Minas Gerais, although the trade dispute escalation also weighed on prices. Chinese import data showed that iron ore imports rose by 4.2% in August, after a 21% surge in July. The surge came after the above-mentioned recovery in Brazilian supplies. Despite the recent surge in imports, they were still down by 3.5% in the January–August period compared with last year.

In the group of **precious metals**, the index advanced by 6.5%, with gold, silver and platinum up by 6.2%, 9.1% and 1.8%, respectively. Gold prices jumped after the intensification of the trade dispute firmed expectation that the US Fed would likely run a more accommodative monetary policy.

## Investment flows into commodities

**Open interest (OI)** increased on average in June for selected US commodity futures, such as natural gas, copper and precious metals, but decreased for crude oil. On average, speculative net long positions increased for crude oil and precious metals, but decreased for copper and natural gas.

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

	Open ir	nterest		Net length				
	<u>Jul 19</u>	<u>Aug 19</u>	<u>Jul 19</u>	<u>% OI</u>	<u>Aug 19</u>	<u>% OI</u>		
Crude oil	2,049	2,034	186	9	201	10		
Natural gas	1,313	1,349	-175	-13	-219	-16		
Precious metals	826	844	220	27	272	32		
Copper	264	286	-43	-16	-70	-24		
Total	4,452	4,513	194	12	-208	-1		

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

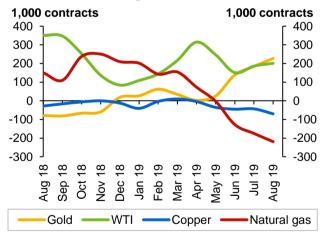
Sources: CFTC and OPEC Secretariat.

**Henry Hub's natural gas OI** increased by 2.8% in August, while money managers added to their net short position to reach an average of 218,803 contracts from 174,888 contracts the previous month amid continuing replenishment of inventories, which are closing in on the five-year average.

**Copper's OI** rose by 8.4% in August. Money managers increased their net short position to 69,746 contracts from 43,264 contracts in the previous month, amid persistent weakness in global manufacturing a result of rising inventories and intensifying trade disputes.

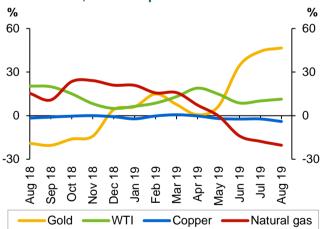
**Precious metals' OI** increased by 2.2%. Money managers' net long position rose by 24% to 271,878 contracts, versus 220,015 contracts in the previous month, on expectations that lower interest rates in the US will be required to offset the impact of ongoing trade disputes.

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 Secretariat.

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 Secretariat.

# **World Economy**

Global economic growth was revised down to 3.0% for 2019 and to 3.1% for 2020. This compares to previous month's forecast numbers of 3.1% and 3.2% respectively. A combination of numerous trends in various economies led to these revision. An ongoing slowdown in the US, particularly in the manufacturing sector, and the Euro-zone, Brexit-related uncertainties, lower-than-expected 1H19 growth in India, rising sovereign debt issues in Argentina and the continuation of the US-China trade dispute, among others, pushed the growth forecast lower. Moreover, the ongoing slowdown in global manufacturing activity, ongoing challenges in emerging and developing economies, high debt levels in important economies – including the OECD – pose additional risks. In such an environment, a stable commodities market, especially crude-oil market, will be important to economic growth.

Considering the ongoing challenges in several OECD economies, including the deceleration in the US, the 2020 OECD growth was revised down to 1.5% from 1.6%, while the 2019 growth forecast remains unchanged at 1.6%. The 2019 US economic growth forecast was revised down to 2.3% from 2.4%, after a weakening 2Q19 GDP number and an ongoing slowdown in the manufacturing sector. As some of this trend is forecast to continue into 2020, in combination with already implemented trade restrictions, the 2020 US growth forecast was revised down to 1.9% from 2.0%. Euro-zone growth remains unchanged at 1.2% for 2019, but given the rising uncertainties in key economies, especially Germany, in Italy and some others, 2020 growth was revised down to 1.1% from 1.2%. Japan's 2019 growth was revised up to 0.9% from 0.5%, considering a much better-than-expected 1H19 growth, while the 2H19 is forecast to slow down considerably, a trend that is forecast to carry over into 2020, causing a downward revision of the 2020 GDP growth forecast to 0.3% from 0.5%. Given the ongoing Brexit-related uncertainties in the UK, business activity is forecast to continue slowing, leading to a 2019 growth downward revision to 1.1% from 1.3%, followed by 1.2% in 2020, which compares to 1.4% in the previous month. Another important revision was made to Mexico's growth due to a considerably weakening 1H19 and ongoing challenges, now standing at 0.5% 2019 growth and 1.2% 2020 growth, compared to the past month's forecast of 0.8% and 1.4% respectively.

In the **emerging economies**, China's 2019 growth forecast remains at 6.2%. As the economy is expected to further slow, being at least slightly impacted the US-China trade-dispute, 2020 growth was revised down to 5.9%, compared to 6.0% in the previous month. India's 1H19 growth numbers showed a much larger-than-expected slowdown, leading to a downward revision of 2019 growth to 6.1% from 6.8%. Some spill-over is forecast to continue in 2020, leading to a downward revision to 6.7% from 7.0%. Brazil's 2019 growth forecast was lowered to 0.8% from 0.9%, followed by downwardly revised 2020 growth of 1.4%, compared to 1.7% in the previous month. The further trend may not only depend on the outcome of the ongoing structural reforms agenda, but also on the near-term developments in Argentina, its largest Latin American trading partner. Argentina's growth was revised down to -3.2% from -1.5% and to -1.0% from 1.1%. After a weak 1Q19 growth number and indications that the slowing growth trend continues, Russia's growth forecast for 2019 was revised down to 1.1%, compared to 1.3% in the previous month, followed by downwardly revised growth of 1.2%, compared to 1.4% in the previous months.

Table 3 - 1: Economic growth rate and revision, 2019-2020\*, %

					Euro-					
	World	OECD	US .	Japan	zone	UK	China	India	Brazil	Russia
2019	3.0	1.6	2.3	0.9	1.2	1.1	6.2	6.1	0.8	1.1
Change from previous month	-0.1	0.0	-0.1	0.4	0.0	-0.2	0.0	-0.7	-0.1	-0.2
2020	3.1	1.5	1.9	0.3	1.1	1.2	5.9	6.7	1.4	1.2
Change from previous month	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.3	-0.3	-0.2

Note: \* 2019-2020 = Forecast. Source: OPEC Secretariat.

## **OECD**

#### **OECD Americas**

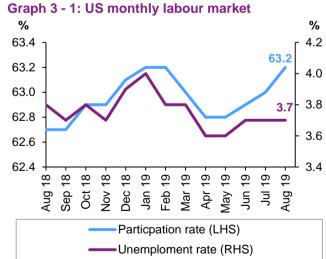
#### US

**US GDP** grew at a seasonally adjusted rate (SAAR) of 2.0% in in 2Q19, according to the second estimate of the Bureau of Economic Analysis. This compares to 3.1% q-o-q SAAR in 1Q19 and 1.1% q-o-q SAAR in 4Q19. A slowdown of investment, which declined by 6.1% q-o-q SAAR; ongoing domestic and external political uncertainties; and the tapering off of the fiscal stimulus package also had an impact on growth. While this trend of slowing investments may also lead to lower GDP growth in 2H19, growth will remain well supported by consumption. Consumption grew by 4.7% q-o-q SAAR and is expected to sustain economic growth in the US, albeit at a slowing rate. Another support factor will come from the ongoing accommodative monetary policies of the US Federal Reserve. It is expected to cut interest rates at least one more time in the current year, possibly at its September meeting. However, the manufacturing sector seems to continue facing challenges as the slowdown continues. By contrast, the services sector, which constitutes the majority of the US economy, continues to grow and support the economy. Given the importance of manufacturing-sector jobs to the US economy, it remains to be seen how long the services sector can remain resilient if industrial output continues to decelerate or even decline. Significantly slowing 2Q19 investment numbers and ongoing domestic and external political uncertainty, including trade-related issues between the US and its trading partners, especially China, also point to a visible slowdown.

**Trade-related issues** will continue to constitute a very important aspect of the US growth forecast going forward. The Secretariat estimates that the already announced or implemented trade restrictions will have a limited negative impact of around 0.1 pp in 2019 to US GDP growth. However, these already announced or implemented trade restrictions will have a negative impact of up to 0.4 pp in 2020. Another risk is a further escalation of trade-related issues with the EU or tariffs on cars and auto parts. This will further drag down short-term economic growth in the US. After imposing 15% tariffs on an additional \$100 billion of Chinese imports in September, the US announced another round of tariffs increases on \$250 billion in imports from China in October, and further duties in December. China has retaliated by raising tariffs on \$75 billion worth of US products. It remains to be seen whether negotiations can ease the situation and prevent further tariff increases.

In addition to trade issues, ongoing domestic political uncertainties and the fading effects of fiscal stimulus accentuate the downside risk for US economic growth. Limited capacity for improvement in the labour market – given a multi-decade low unemployment rate – is also providing less room to the upside.

The **labour market** remained sound in August, with the unemployment rate remaining at 3.7%. **Non-farm payrolls** in July increased by 130,000, after slightly downwardly revised 159,000 job additions in July. Growth in average hourly earnings for the private sector stood at 3.2% y-o-y, a solid number and only slightly below the July growth of 3.3%. Long-term unemployment rose slightly to 20.6% from 19.2%, which was the lowest level since the onset of the financial crisis in 2009. The participation rate rose to 63.2%, after reaching 63.0% in June.



Sources: Bureau of Labor Statistics and Haver Analytics.

Overall **inflation** recovered from a low in June of 1.6% y-o-y to stand at 1.8% in July. On average y-t-d inflation stood at 1.7% y-o-y, well below the Fed's 2.0% target. Core inflation – excluding volatile items such as food and energy – stood at 2.2% y-o-y in July, up from 2.1% in June. The Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), stood at 1.4% in July, the latest available month. This ongoing, relatively low inflation – combined with softening underlying US growth – provides the Fed with more flexibility.

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Graph 3 - 2: US house prices

% change y-o-y

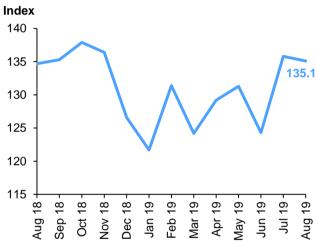
Jun 18 - 4 Aug 18 - 5 Sep 18 - 6 Oct 18 - 7 Aug 18 - 7 Aug 18 - 7 Apr 19 - 7

Sources: Federal Housing Finance Agency and Haver Analytics.

After some ups and downs in the past months, consumer sentiment held up well. The lead indicator, published by the Conference Board, remained almost unchanged in August, to stand at 135.1, compared to 135.8 in July and 124.3 in June.

The trend in consumer sentiment was visible in **retail sales** growth which also improved in July, rising by 3.5% y-o-y, compared to 3.3% y-o-y in June. However, this is below the April and March levels, which both stood at 3.8%. The 2019 levels are also significantly lower than last year's highgrowth environment, when annual growth of retail sales stood at 4.9% y-o-y.

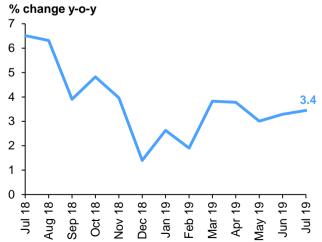
Graph 3 - 3: US consumer confidence index



Sources: The Conference Board and Haver Analytics.

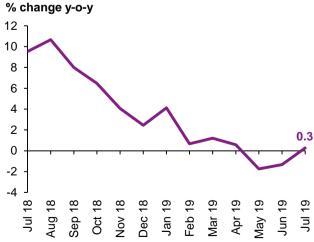
**Industrial production** rose by 0.5% y-o-y in July, compared to 1.2% y-o-y in June and 1.7% y-o-y in May. This trend shows a clear deceleration from 1Q19 numbers, when quarterly average growth stood at 2.9%.

Graph 3 - 4: US retail sales



Sources: Census Bureau and Haver Analytics.

**Graph 3 - 5: US manufacturing orders** 



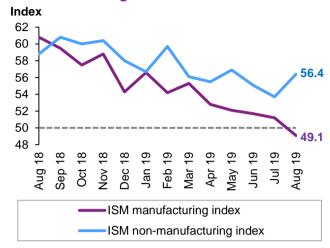
Sources: Census Bureau and Haver Analytics.

**Manufacturing orders**, a good lead indicator for future manufacturing activity, rose by 0.3% y-o-y in July after declining in May and June.

August's **Purchasing Managers' Index (PMI)**, as provided by the Institute of Supply Management (ISM), indicated a decline in the manufacturing sector, while the services sector improved again.

The manufacturing PMI dipped below the growth-indicating level of 50. It stood at 49.1, compared to 51.2 in July and 51.7 in June. The services sector improved significantly to 56.4, compared to 53.0 in July. Considering that it accounts for around 70% of the US economy, support from the services sector is vital for growth going forward. However, it remains to be seen for how long services will outperform manufacturing at the current rate.

Graph 3 - 6: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

Taking into account the ongoing trade issues and weakening growth trend in 2Q19, the GDP growth forecast was revised down. **GDP growth** in 2019 is now forecast to reach 2.3%, compared to 2.4% in the previous month. A deceleration is forecast to continue in 2020 as the effects of the fiscal stimulus – initiated to support growth in 2018 and 2019 – are fading and the fiscal space has become more limited. Furthermore, the already implemented trade barriers are forecast to slow growth to a level of 1.8%, compared to 2.0% in the previous month. Monetary policies are expected to remain relatively accommodative. Domestic policy issues will continue and underlying domestic demand is slowing. Trade-related matters in particular will require further monitoring.

#### **Mexico**

The **Mexican economy** continues to be affected by a challenging external trade environment, falling commodity prices and a **slowdown** in domestic activity. As a result, the economic environment remains challenging.

**Industrial production** fell again in June, declining by 2.1% y-o-y, compared to -3.1% y-o-y in May, continuing the trend of monthly declines that started in October last year. This had a negative impact the economy, which faces declines in construction and mining on top of a sluggish manufacturing sector that has experienced a downward trend for several months. The outlook for all sub-components of industrial production remains weak. Mining, which includes the oil sector, is also expected to be challenged by falling oil production and prices.

The latest **PMI** index for manufacturing also points to a sluggish trend in the sector. In August, the PMI was below the growth-indicating level of 50 for the third consecutive month, reaching 49.0, compared to 49.8 in July and 49.2 in June.

Taking into consideration the weak 1h19 GDP numbers and an ongoing challenging environment in 2019 for the Mexican economy, the **GDP growth forecast** for 2019 was revised down to 0.5%, compared to 0.8% in the previous month. The growth forecast for 2020 was revised down as well to 1.2%, compared to 1.4% a month earlier.

#### **OECD** Asia Pacific

## Japan

While the initial 1H19 **GDP data in Japan surprised to the upside**, the second data release showed some slight downward revisions. Nonetheless, growth in 1Q19 and 2Q19 was surprisingly good. Higher domestic consumption ahead of the anticipated sales-tax increase combined with external trade-related distortions in the 1H19 led to very strong 1H19 GDP growth. 1Q19 growth stood at 2.2% q-o-q SAAR while 2Q19 GDP was 1.4% q-o-q SAAR. However, some data points in the Japanese economy seem to be less buoyant than is reflected in the 1H19 GDP numbers, particularly the 1Q19 number. In anticipation of the 4Q19 sales tax increase, private consumption rose by 2.5% y-o-y SAAR in 2Q19, after a soft decline of 0.1% in 1Q19. Growth is forecast to turn negative in 4Q19, when the sales tax increase takes effect. Past sales tax rises have had a significantly negative impact in the quarter of implementation and to some extent in the following quarters.

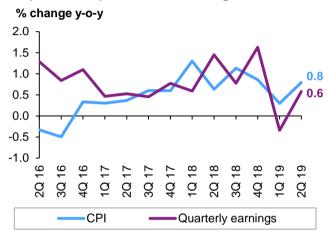
Total inflation decelerated again, partly due to lower energy prices, while improvements in domestic pricing supported inflation. July inflation retracted to 0.5% y-o-y, from 0.7% y-o-y in June. While inflation seems to have been well supported by a rise in earnings in the past months, this trend turned negative in July, with earnings falling by 1.8% y-o-y. Core inflation remained unchanged in July, growing by 0.6% y-o-y. Given labour market tightness, the unemployment rate fell to 2.2% in July, the lowest since the financial crisis in 2009. The Bank of Japan (BoJ) is expected to continue its accommodative monetary policies, given the economic growth trend and low inflation. There is even some possibility that the BoJ will increase its monetary support.

Given ongoing trade disputes and the rising fragility of the global economy, **export** growth slowed again in July, declining by 1.6%, albeit much better that the June decline of 6.6% y-o-y, non-seasonally adjusted. This compares to -7.8% y-o-y in May and -2.4% y-o-y in April.

**Industrial production** declined again in July, falling by 1.5% y-o-y, compared to -2.3% y-o-y in June. Manufacturing orders rose by 0.7% y-o-y in June, after falling 12.8% y-o-y in May and 4.3% y-o-y in April. Manufacturing orders also recorded declines in the first three months of the year.

**Domestic retail demand** fell considerably in July, declining by 2.0% y-o-y, compared to an increase of 0.5% y-o-y in June and 1.3% y-o-y in May.

Graph 3 - 7: Japan's CPI vs earnings



Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Haver Analytics.

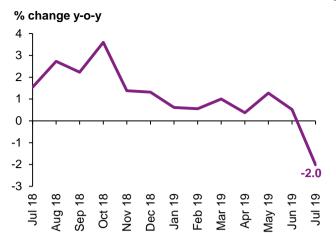
Graph 3 - 8: Japan's exports



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

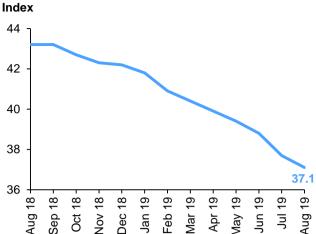
**Consumer confidence** fell further and now stands at 37.0 in August, the lowest level since March 2014. This compares to 37.6 in July, 38.4 in June and 39.2 in May, based on the Cabinet Office's index level.

Graph 3 - 9: Japan's retail trade



Sources: Ministry of Economy, Trade and Industry and Haver Analytics.

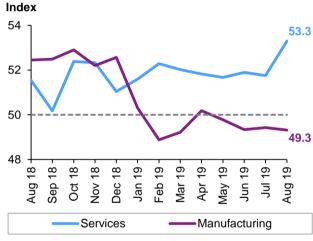
# Graph 3 - 10: Japan's consumer confidence index



Sources: Cabinet Office of Japan and Haver Analytics.

The latest **August PMI numbers** confirm the low growth trend for the manufacturing, while the non-manufacturing sector performed relatively better. The manufacturing PMI stood at 49.3, after reaching 49.4 in July and 49.3 in June. Hence, six out of eight months of the year showed an index level of below 50, which amounts to a contraction in the sector. The services sector PMI – the sector that constitutes around two-thirds of the Japanese economy – rose to 53.3, compared to 51.8 in July.

Graph 3 - 11: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

After the strong 1H19 GDP growth numbers, Japan's 2019 **GDP growth** forecast was revised up to 0.9%, compared to 0.5% in the previous month. In general the underlying sluggish growth trend is expected to continue and given the envisaged sales tax increase later this year, 4Q19 growth is forecast to be significantly negative. This low growth momentum is forecast to carry over into 2020. Consequently GDP growth for 2020 was revised down to stand at 0.3%, compared to 0.5% in the previous month.

#### South Korea

The **South Korean economy** continues to be supported by domestic demand, but it may be impacted in the coming months if external trade declines further. Exports fell considerably again in August, down by 7.3% y-o-y after declining by 6.8% y-o-y in July and 7.6% y-o-y in June. Consequently, industrial production (IP) was down by 0.4% y-o-y in July, compared to -0.8% y-o-y in June and -0.3% y-o-y in May. The August **PMI number** for the manufacturing sector, 49.0, reflected the ongoing challenging environment. This was, however, much better than the July level of 47.3 and May's 47.5. The index was below 50 for seven out of eight months so far this year, indicating a contraction in the sector.

It remains to be seen how the ongoing trade challenges will affect the economy. Taking into consideration the slowing trend in underlying growth, the 2020 **GDP growth** forecast was revised down to 2.1% from 2.2%. The figure for 2019 remains unchanged at 1.9%.

## **OECD Europe**

#### Euro-zone

Growth in the Euro-zone seems to continue to soften, amid ongoing weakness in Germany, and also to some extent in Italy and a few other economies. On the upside, the region remains supported by the European Central Bank's (ECB) accommodative monetary policy, which is supporting domestic investments and demand. The German economy remains weak, according to the latest data releases. Italy continues to face political uncertainties despite the newly formed government, while Spain's growth is holding up well although the political situation needs to be monitored.

Germany's economy showed increasingly weakening numbers as the country is confronted with a deceleration in global investment and a decline in external demand. This sentiment is reflected in local business surveys that point to a continued downside. On a positive note, France's economy is to some extent counterbalancing the downward slide in the Euro-zone economy, although the latest production numbers are weakening. The August PMI manufacturing number, 49.7, was signalling a contraction of the sector although it recovered in September to stand at 51.1.

labour market, the Euro-zone's unemployment rate was unchanged in July at 7.5%, the lowest rate since 2008. Unemployment in Germany fell to 3.0% in July from 3.1% in June and May. France's unemployment rate stood at 8.5% for the fourth consecutive month in July, according to the latest data. Spain's labour market improved further as its jobless rate declined to 13.9% in July. from 14.0% in June and 14.1% in May. Unemployment in Italy remained below 10% for a third consecutive month, but worsened slightly in July, as it moved back to 9.9%, compared to 9.8% in June.

8.2 8.0 7.8 7.6 7.5 7.4 7.2 19 19 19 Oct . 20 N Feb. Dec Jan Mar H 3

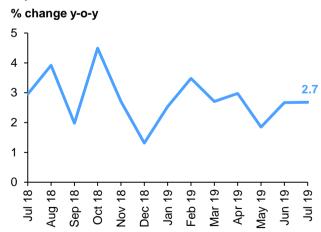
Graph 3 - 12: Euro-zone unemployment rate

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

**Retail trade** held up well and retail trade growth remains an important support factor for the Euro-zone economy. In value terms it stood at 2.7% y-o-y in July, unchanged from June, compared to 1.9% y-o-y in May and 3.0% in April.

Industrial production (IP) in the Euro-zone fell again. June's IP declined by 2.4% y-o-y, after -0.9% y-o-y in May and -0.6% y-o-y in April, still very much influenced by the downward trend in Germany, where IP fell by a significant 5.2% y-o-y in July and 5.9% y-o-y in June. In Italy IP declined by 1.2% y-o-y in June, after falling 0.7% in May. France performed relatively better with IP growth being flat in June, after 3.9% y-o-y growth in May. With the expectation of some pick-up in global trade and a recovery in investments, this trend may turn in 2H19, though it remains uncertain: the most recent manufacturing order numbers that showed growth of 0.8% m-o-m, which translates into a yearly decline of 3.1%.

#### Graph 3 - 13: Euro-zone retail sales



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

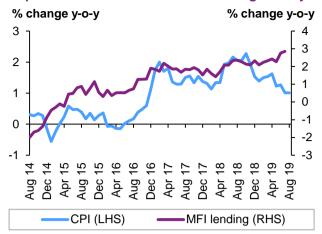
**Inflation** remained low in August at only 1.0% y-o-y, the same level as in July. So far there seems to be only minor support from the Euro-zone labour market to push inflation towards the ECB's 2% target, despite earnings growth of around 2.5% y-o-y in the Euro-zone, according to latest available data. The important core inflation rate – the CPI, excluding energy and food – stood at 1.0% y-o-y in August, a slight uptick from 0.9% y-o-y in July.

Developments in **lending activity** –a motor for investment – remained supportive. The latest growth numbers from July stood at 2.9% y-o-y compared to 2.7% y-o-y in June, a strong pickup from past months, when growth was hovering around 2.3%. While some areas of the Euro-zone's banking sector remain weak, the growth of liquidity lines continued fuelling the Euro-zone, and with the ongoing support of the ECB, is expected to continue to do so.

The Euro-zone's latest August **PMI indicators** remained mixed. The manufacturing PMI improved, but remained below the growth-indicating level of 50. The August manufacturing PMI stood at 47.0, compared to 46.5 in July and 47.6 in June. The important PMI for services, the largest sector in the Euro-zone, improved slightly to stand at 53.5 in August, compared to 53.2 in July and 53.6 in June.

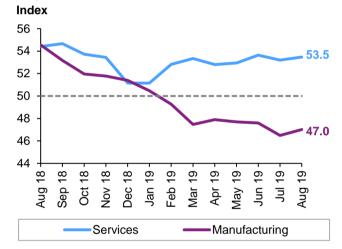
Considering the slowdown in Germany, the economic and political developments in Italy, weaknesses in the banking sector, Brexit, as well as monetary policies and high sovereign debt levels in some economies, the developments in the Eurozone remain uncertain. Given signs of slowing momentum, the 2019 **GDP growth** forecast remains unchanged at 1.2%, while 2020 GDP growth was revised down to 1.1%. This compares to a 2020 growth forecast of 1.2% in the previous month.

Graph 3 - 14: Euro-zone CPI and lending activity



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

Graph 3 - 15: Euro-zone PMIs



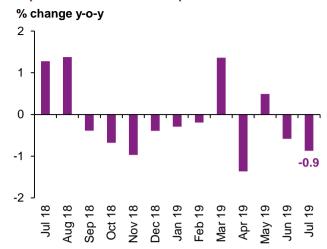
Sources: IHS Markit and Haver Analytics.

#### UK

The **UK's economy** continues to be affected by Brexit, the slowdown in the Euro-zone and global economic challenges, including those related to trade. That certainly makes the economic environment for the UK economy relatively challenging. GDP in 2Q19 declined and the latest indicators point to a stabilisation at best. It is clear that the very near-term developments largely depend on what happens with Brexit given that the Parliament and government are pursuing different ambitions. 2Q19 GDP fell by a seasonally adjusted 0.2% q-o-q after growth of 0.5% q-o-q in 1Q19.

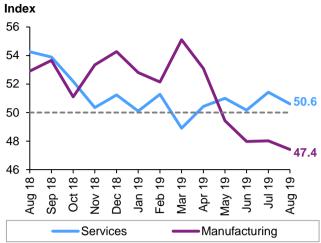
**Retail trade** in value terms held up well, up by 3.9% y-o-y in July, compared to 4.5% y-o-y in June. **Exports** picked up in July with growth recorded at 4.5% y-o-y, compared to 0.2% y-o-y in June. **Industrial production** fell in July, declining by 0.9% y-o-y, after a decline of 0.6% y-o-y in June.

#### Graph 3 - 16: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Graph 3 - 17: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

August **PMI lead indicators** showed a downward trend. The PMI for manufacturing fell to 47.4, compared to 48.0 in July, indicating an ongoing contraction in the sector. The very important PMI of the services sector, which constitutes the majority of the UK's economy, held up better but also retracted to stand at 50.6 in August, compared to 51.4 in July.

Given the ongoing Brexit uncertainties and the slowdown in the economy, 2019 **GDP growth** was revised down to 1.1% from 1.3%. 2020 growth was revised down to 1.2% from 1.4% in the previous month. This 2020 forecast assumes a non-disruptive and soft Brexit, which given the ongoing uncertainties remains to be seen. Depending on the Brexit developments, further downside risk remains considerable, but more so for 2020.

## Non-OECD

### **BRICs**

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2019-2020\*

	GDP growth rate,		Consumer price index, % change y-o-y		Current ac baland US\$ b	ce,	Government of Go	ance,	Net public debt, % of GDP	
	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>
Brazil	0.8	1.4	3.8	3.6	-16.9	-23.2	-5.8	-4.7	82.0	82.8
Russia	1.1	1.2	4.8	4.2	122.2	115.7	2.1	1.5	9.6	9.5
India	6.1	6.7	3.6	4.2	-51.3	-44.2	-3.5	-3.4	47.0	46.5
China	6.2	5.9	2.8	3.1	96.4	44.1	-4.5	-4.5	18.7	21.9

Note: \* 2019-2020 = Forecast.

Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, Oxford Economics and OPEC Secretariat.

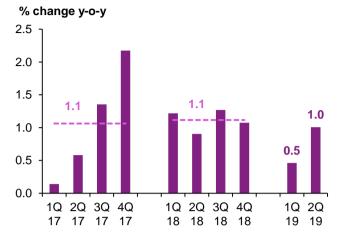
#### **Brazil**

**Brazil's GDP** registered growth of 1.0% y-o-y in 2Q10, compared to 0.5% growth in the previous quarter. Private consumption, GFCF, and exports contributed to the relatively faster pace of growth. It should be noted that despite 2Q19 growth being faster than 1Q19, it is still anaemic when compared to the long-term growth average of 2.3% y-o-y.

**The trade surplus** increased to \$3.3 billion in August 2019 from \$2.8 billion in August 2018. Exports declined nearly 13% y-o-y and imports dropped at a higher rate of 17%.

**Exports** fell mainly due to lower sales of primary goods and industrial goods. Meanwhile, exports of semi-manufactured products rose in August, in particular iron, ferroalloys, cast iron, raw zinc and gold. Exports to China declined by 8.3%, to the US by 1.5%, to the EU by 1.5%, Argentina by 40.4%, and the ASEAN countries by 1%.

Graph 3 - 18: Brazil's GDP growth

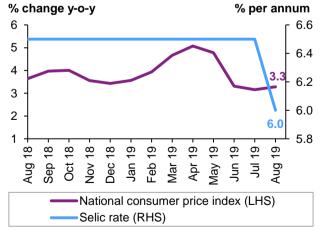


Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

**Imports** decreased due to lower purchases of intermediate goods, capital goods and consumption goods. In addition, to the fall in exports of fuels and lubricants, imports dropped from China by 41% and from Argentina by 30%, but advanced from the EU by nearly 2% and the US by approximately 19%. Brazil recorded trade surplus of nearly \$32 billion during January – August 2019, lower than the \$36.7 billion trade surplus over the same period of 2018.

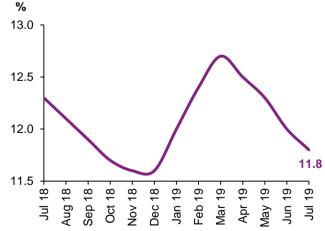
In August, the **real** depreciated by 6.4% m-o-m, from 2.1% m-o-m appreciation in July. On a y-o-y comparison, the real was lower by 2.3% compared to the dollar in August 2019. The real depreciated by 18% in the full 2018. **Inflation** increased by 3.3% y-o-y in August, from 3.2% in July. In 2018, inflation average stood at 2.9%. The central bank cut its benchmark **interest rate** at the end of August from 6.5% to 6.0%, the lowest rate since 1986. The lower rate came amid an economic slowdown that has been more notable than expected, and a government attempt at social security reforms, which are currently in the process of congressional debate and voting. The **unemployment rate** eased in July to 11.8%, from June's to 12.0%. **Consumer confidence** index improved in August to 89.1, from 87.0 in July.

Graph 3 - 19: Brazil's inflation vs. interest rate



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

Graph 3 - 20: Brazil's unemployment rate



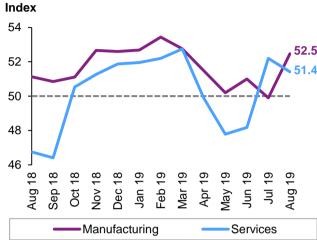
Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

The health of the Brazilian **manufacturing** industry strengthened solidly in August, supported by marked increases in factory orders and output. Rising from 49.9 in July to 52.5 in August, the IHS Markit Brazil manufacturing PMI pointed to a renewed improvement in operating conditions that was the strongest since March. Moreover, the PMI edged above its long-run average. One contributing factor to the upward movement in the headline figure was a marked and accelerated increase in order books. Survey participants reported better demand conditions, the successful launch of new products and the securing of extra clients. Aggregate sales expanded at the fastest pace in almost one-and-a-half years.

Graph 3 - 21: Brazil's consumer confidence index



Graph 3 - 22: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Sources: Fundação Getúlio Vargas and Haver Analytics.

Brazil's **service** sector remained in expansion during August, as a marked and accelerated upturn in new work intakes supported further growth of business activity. Demand strength encouraged companies to hire additional workers in August, with the rise in jobs only the second highest in the past ten months. Latest data also showed quicker increases in both input costs and output charges, while business confidence waned from July's recent high. Posting 51.4 in August, the IHS Markit Brazil Services Business Activity Index highlighted output growth for the second consecutive month. However, falling from 52.2 in July, the latest reading was indicative of a softer rate of expansion. Those companies that lifted activity cited strengthening demand and new client wins.

The recent financial meltdown in Argentina and the high likelihood of falling into deeper recession in 2019 and 2020, are expected to cause a further hit to Brazilian exports to Argentina. Furthermore, the continuation and intensification of trade tariffs between the US and China have added more negativity to exports prospects. **GDP** is forecast to grow by 0.8% in 2019, from the 1.1% growth achieved in 2018. For 2020, Brazil's GDP is expected to continue posting below potential growth at around 1.4%. The pension system reform has gained momentum during the previous month and it is widely expected to be signed into law during October. However, the approved version of the pension overhaul is less ambitious and enables the government to make less savings out of it.

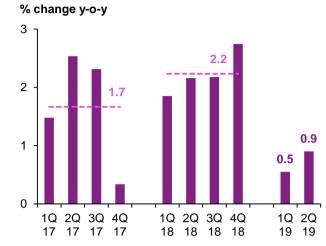
#### Russia

Russia' GDP growth in 2Q19 stood at 0.9% y-o-y, from 0.5% in 1Q19, according to the Federal State Statistics Service. Despite being higher than the previous quarter, GDP growth in 2Q19 remains way below the long-term average growth of 3.0% y-o-y. Further details on GDP components in 2Q19 are not published yet.

**Trade balance** in goods narrowed to \$12.5 billion in June 2019, from \$15.2 billion in June 2018. **Exports** of goods were 10.5% y-o-y lower in June 2019, while **imports** were 5.3% y-o-y less over the same period.

The **ruble** depreciated by 3.7% m-o-m in August, after appreciating by 1.6% m-o-m in July. On a y-o-y comparison, the ruble was 0.8% higher in August 2019 from its level a year earlier.

Graph 3 - 23: Russia's GDP growth

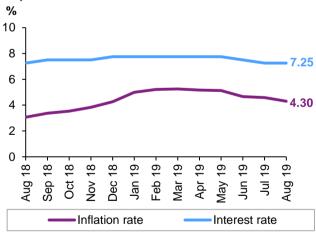


Sources: Federal State Statistics Service and Haver Analytics.

Consumer price **inflation** eased in July to 4.6% y-o-y in July, from 4.7% a month earlier. In January 2019, inflation accelerated to 5.0% y-o-y, up from December's 4.3% and November's 3.8%, as a result of the VAT increase. In March 2019, inflation rose by 5.3% y-o-y, which was the highest inflation rate since December 2016.

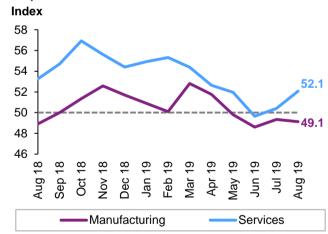
The central bank kept its benchmark **one-week repo rate** unchanged in August at 7.25%. The repo rate was lowered by 25 basis points to 7.25% in July, following a similar reduction in June to 7.50%, from May's 7.75%. The central bank indicated that more cuts are likely later this year amid slowing inflation and global growth concerns.

Graph 3 - 24: Russia's inflation vs. interest rate



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

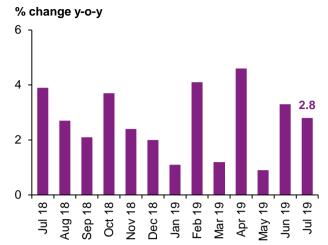
Graph 3 - 25: Russia's PMIs



Sources: IHS Markit and Haver Analytics.

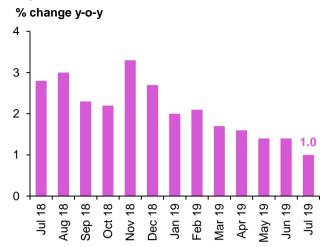
August data continued to signal deteriorating operating conditions across the **manufacturing** sector. The overall decline was driven by the fastest contraction in new orders for over four years. The latest decrease in new business partly stemmed from a sharper fall in new orders from abroad, the strongest since September 2016. Consequently, firms registered a renewed decrease in workforce numbers. The seasonally adjusted IHS Markit Russia manufacturing PMI registered 49.1 in August, down from 49.3 in July, and signalling the fastest deterioration in the health of the Russian manufacturing sector since June. Although only marginal, latest data extended the current sequence of decline to four months. **Industrial production** increased by 2.8% y-o-y in July, from 3.3% y-o-y in June. Industrial production stood in the expansion territory since January 2018.

Graph 3 - 26: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 27: Russia's retail sales



Sources: Federal State Statistics Service and Haver Analytics.

The IHS Markit Russia **Services** Business Activity Index posted 52.1 in August, up from 50.4 in July. The latest reading indicated a stronger, albeit moderate increase in business activity across the Russian service sector. Although only moderate overall, the pace of expansion was the fastest for four months. Supporting the upturn was a stronger increase in new business and a renewed rise in new export orders. That said, firms reduced their workforce numbers for the fourth month running amid the lowest degree of business confidence for five months. In June, **retail trade** posted an expansion of 1.0% y-o-y in July, from 1.4% in June and May. Retail trade has been in the expansion territory since February 2017.

**Russia's GDP growth** forecast points to 1.1% y-o-y in 2019 and 1.2% in 2020. Expectation for economic activity growth are being challenged by a number of factors, including the slowing business conditions in the manufacturing sector together with the base-line effect of strong harvest, commodity prices uncertainties, geopolitical risk, and conservative public spending. On the other hand, the slowly easing trend of inflation and reduced interest rates are expected to be supportive to consumer spending growth.

#### India

**India's GDP growth** rate was a slower than expected 5.0% in the 2Q19. India's economy grew 8% in the same quarter of 2018, and 5.8% in the 2Q19.

Signs of slowing demand and investment are widespread. Many indicators such as automobile sales, rail freight, petroleum product consumption, domestic air traffic and imports signal declining domestic consumption. In July, auto sales tumbled 31% from a year earlier, the biggest decline in nearly two decades, resulting in the loss of hundreds of thousands of jobs.

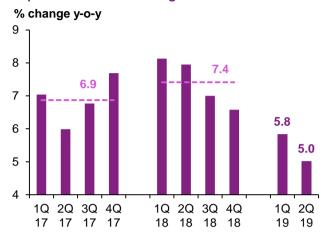
In the 2Q19, private investment grew 3.1%, down from 7.2% in the previous quarter, while government spending growth slowed to 8.8% from 13.1%.

Capital investment picked up to 4.0% from 3.6%, indicating a rise in lending by banks, while agriculture grew modestly and manufacturing edged up just 0.6%. Fixing India's weak growth has become the highest priority while a benign inflation outlook has given the central bank room to cut rates. Transmission remains inadequate, monetary policy committee meeting minutes showed. The government was looking into policy issues such as exempting foreign portfolio investor trusts from recently imposed high tax, deferring a proposal to raise minimum public shareholding in listed companies to 35% from 25% and an easing of banking credit.

With India's auto sales declining for the ninth straight month in July, more automotive manufacturers are laying off workers and temporarily halting production to keep costs in check House prices are expected to rise just 1% on average this year and 2% in 2020, the lowest median predictions since polling began for the two years. It seems stimulus from both the RBI and the government, along with a near-normal monsoon, could provide some economic relief in the 2H19.

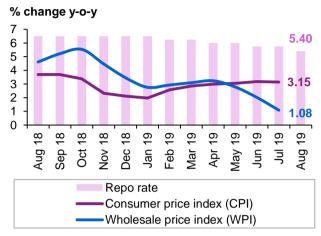
The Reserve Bank of India (RBI) lowered the repo rate by 35bp to 5.4%, against the consensus expectation of a 25bp cut, and retained its accommodative stance. It also announced further measures to spur credit growth and reiterated its commitment to improving monetary policy transmission. The RBI's growth assessment keeps the door open for further cuts. With signs that a recovery may be taking hold; it may choose to pause now and focus on hastening the pass-through of rate cuts to the real economy. The RBI maintained its "accommodative" stance but said further rate reductions would depend on the level of inflation.

Graph 3 - 28: India's GDP growth



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

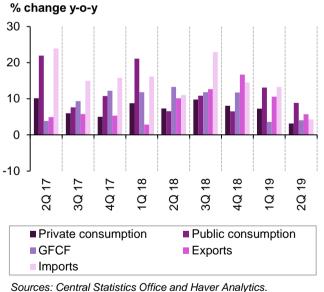
Graph 3 - 29: Repo rate and inflation in India



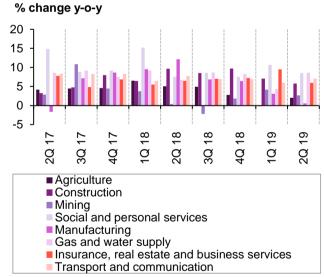
Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

India's **CPI inflation** stood at 3.15% y-o-y in July 2019, remains quite subdued, helped by favourable developments in energy prices. Inflation remained below the Reserve Bank of India's (RBI) medium-term target of 4 % for the twelfth consecutive month, despite recent interest rate cuts. **India's WPI** rose by 1.08% y-o-y in July 2019, easing from a 2.02% gain in the previous month. It was the lowest wholesale rate since June 2017, mainly due to a slowdown in manufacturing inflation and a decline in fuel prices.

Graph 3 - 30: India's GDP growth by demand side



Graph 3 - 31: India's GDP growth by supply side

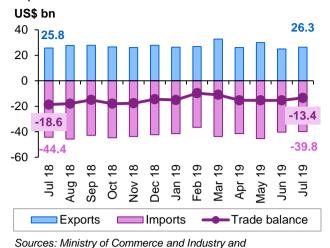


Sources: Central Statistics Office and Haver Analytics.

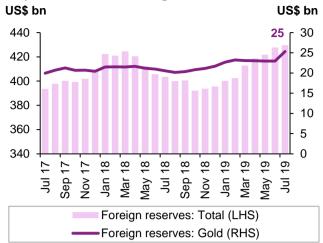
India **trade deficit** narrowed to \$13.43 billion in July 2019 from \$18.63 billion in the same month last year and below market expectations of \$15.70 billion. **Exports** rose 2.25% to \$26.33 billion, led by increases in sales of electronic goods, drugs & pharmaceuticals and organic & inorganic chemicals. Meanwhile, **imports** were down 10.4% to \$39.76 billion as purchases fell for pearls, precious & semi-precious stones, petroleum, crude & products.

Haver Analytics.

Graph 3 - 32: India's trade balance





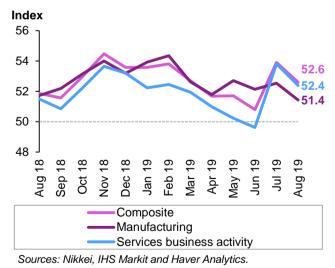


Sources: Reserve Bank of India and Haver Analytics.

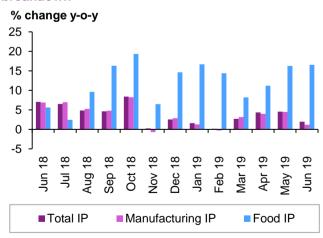
India has large **foreign-exchange reserves**; holdings of cash, bank deposits, bonds, and other financial assets denominated in currencies other than India's national currency, the Indian rupee. The reserves are managed by the RBI for the Indian government and the main component is foreign currency assets. India's total foreign exchange reserves stand at \$430.5 billion on August, highest ever with foreign exchange assets (FCA) component at \$398.3 billion, gold reserves \$27.1 billion and SDRs (Special Drawing Rights with the IMF) of \$1.4 billion.

The **Nikkei India Manufacturing PMI** dropped 51.4 in August 2019, the lowest since May 2018, from 52.5 in the previous month. Output advanced the least in a year, new order growth slowed to 15-month low and overseas sales expanded at the softest rate since April 2018. At the same time, purchasing activity fell for the first time in 15 months and was at the fastest since mid-2017. Subsequently, holdings of raw materials and semi-finished items declined, ending a 17-month period of accumulation. Meanwhile, employment rose marginally, with backlogs of works being unchanged. In terms of prices, input price inflation remained below its long-run average. On the other hand, charge inflation eased as a number of factories refrained from price hikes amid efforts to boost sales.

Graph 3 - 34: India's PMI



Graph 3 - 35: India's industrial production (IP) breakdown



Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

The **Nikkei India Services PMI** dropped to 52.4 in August 2019 from 53.8 in the previous month. The latest reading pointed to the second straight month of expansion in the services sector, amid sustained increases in activity, sales and employment. On the price front, input prices continued to increase, boosted by higher food, fuel and staff costs, while the rate of charge inflation quickened to a 17-month high.

**Consumer confidence** in India decreased to 95.70 Index Points in the 3Q19 from 97.30 Index Points in the 2Q19.

It seems India's economic slowdown could continue for the next two to three years as the economy faces serious structural reform, which will hurt consumer demand and manufacturing. Structural reforms - covering labour laws, taxation and the legal system also ease the path for India's businesses in coming year.

India's GDP growth was revised down to 6.1% for 2019 and 6.7% for 2020.

### China

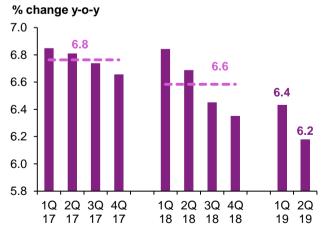
China's GDP growth momentum weakened in July as domestic activity slowed after a pick-up in June. Growth in industrial value added fell markedly to 4.8% y-o-y in July, the slowest growth since 2009. Overall fixed asset investment (FAI) growth also decelerated to 5.1% y-o-y in July from 6.3% in June. In particular, growth in real estate investment declined to 8.5% y-o-y in July from 10.1% in June. Housing starts growth also slowed to 5.4% y-o-y from 7.8% in the month before, even as housing sales rebounded to grow 3.4% y-o-y in July, after declining in the previous two months. Growth in infrastructure investment also eased in July to an estimated 2.8% y-o-y, down from 3.4% in June. Positively, manufacturing investment growth increased further to 4.7% from 3.6% in June. Household consumption growth also decelerated in July, with real retail sales 5.7% higher on the year, down from 8% in June and 6.5% in 2Q19 as a whole. Goods exports rebounded to grow 3.3% y-o-y in July, after a decline in June and 2Q19 as a whole. We estimate that export volumes were up 2.8% y-o-y last month.

Growth in China's services sector activity picked up for the first time in five months in August, with the official numbers from a separate business survey rising to 53.8 from 53.7 in August. China has been relying on a strong services sector to cushion some of the economic impact from trade uncertainties and sluggish manufacturing activities. However, despite the higher overall figure, activity in the property industry contracted. The services sector has been propped up by Chinese consumers' rising wages and robust spending power in recent years. However, the sector softened late last year amid a broader slowdown.

China's property investment slowed to its weakest pace this year in a sign the housing market's resilience may be waning as Beijing toughens its crackdown on speculative investments and holds back on new stimulus.

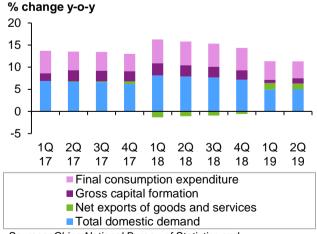
The China's economic outlook remains challenging in the short- term. Subdued global demand and the renewed escalation of US-China trade tensions are increasing downward pressure on growth, while domestically it appears that the impact of the policy easing so far has remained muted.

Graph 3 - 36: China's GDP growth



Sources: China's National Bureau of Statistics and Haver Analytics.

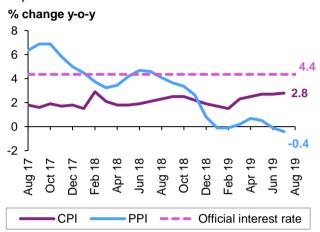
Graph 3 - 37: China's GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

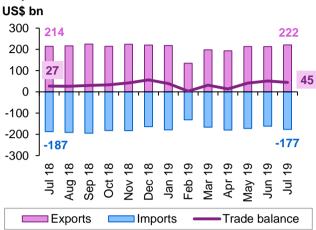
China's **CPI inflation** edged up to 2.8% y-o-y in July, from 2.7% in June. Non-food inflation continued to decline, registering 1.0% y-o-y in July compared with 1.2% the month before. However, overall food price inflation increased further to 6.7% amid the outbreak of African swine fever and the armyworm. In particular, pork prices rose 27% y-o-y in July. That said, a strong summer grain harvest, as reported by the government, should help dampen food price increases in the next few months. Meanwhile, **producer prices** dipped into negative territory, falling 0.3% y-o-y, the first decline since 2016. This was largely due to a decline in raw materials prices, which were 2.9% lower for the year in July, while manufacturing prices also dropped by 0.2%.

Graph 3 - 38: China's CPI and PPI



Sources: China Index Academy, China National Bureau of Statistics. Soufan and Haver Analytics.

Graph 3 - 39: China's trade balance



Sources: General Administration of Customs of China and Haver Analytics.

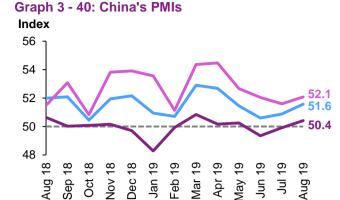
China's **trade surplus** was revised to \$44.61 billion in July 2019 from a preliminary estimate of \$45.05 billion and compared to last year's \$27.49 billion. **Exports** rebounded 3.3% y-o-y to \$221.55 billion in July, after a decline in June and 2Q19 as a whole, while sequential momentum also picked up. However, this was the fastest yearly growth in overseas sales since March 2019 despite escalating trade tensions with the US. Nevertheless, the rebound may be short-lived, with Washington preparing to impose more tariffs on Chinese goods from 1 September. **Imports** were fairly weak again in July amid soft domestic demand and a gloomy external outlook. Imports to China declined 5.3% y-o-y to \$176.94 billion in July 2019, easing from a 7.3% fall in June, revised figures showed. That was the third consecutive month of decrease in imports, suggesting domestic demand remained sluggish and could lead Beijing to add more stimulus. China has partially lifted restrictions on imports of gold, loosening curbs that had stopped an estimated 300–500 tonnes of the metal worth \$15-25 billion at current prices from entering the country since May. China is the world's biggest importer of gold, with around 1,500 tonnes of metal worth some \$60 billion – equivalent to one-third of the world's total supply – entering the country last year. The official factory gauge showed growing trade frictions with the United States and cooling global demand continued to cause chaos on China's exporters.

August saw dramatic escalations in the bitter year-long US-China trade row, with President Donald Trump announcing early in the month that he would impose new tariffs on Chinese goods from 1 September, and China letting its yuan currency sharply weaken days later. It seems China's government will cut some of its major lending rates in September for the first time in four years to help stabilize growth. Latest trade escalations mean that big benchmark rate cuts were considered a last resort, as policymakers worry that could fuel a further build-up in debt and squeeze bank's profit margins, heightening financial sector risks. So far, China's has relied on a combination of fiscal stimulus and monetary easing to deal with the economic slowdown, including hundreds of billions of dollars in infrastructure spending and tax cuts for companies.

The **official NBS Manufacturing PMI** (Business Confidence) fell to 49.5 in August, versus 49.7 in July, below the 50-point mark that separates growth from contraction on a monthly basis.

The Caixin China General Manufacturing PMI rose unexpectedly to 50.4 in August 2019 from 49.9 in the previous month and beating market expectations of 49.8. This was the first increase in factory activity since May, as output expanded the most in five months; while the sub-index for new orders stayed in expansionary territory, but it inched down. Also, buying activity grew for the second month running, while stocks of finished goods rose for the first time so far this year. At the same time, employment was broadly unchanged following a modest reduction in July.

Meanwhile, export sales shrank the most since last November, amid weakening global demand and ongoing trade dispute with the US. On the prices front, input cost dropped the most since January 2016 on the back of widespread reports of reduced raw material prices; while output charges fell at the steepest rate since December 2015. Finally, sentiment weakened to a level that was among the lowest in the series' history.



Composite PMI

Manufacturing PMI

Services business activity

Sources: Caixin, IHS Markit and Haver Analytics.

The **official Non-Manufacturing PMI** unexpectedly edged up to 53.8 in August 2019 from an eight-month low of 53.7 in the previous month and beating market estimates of 53.6.

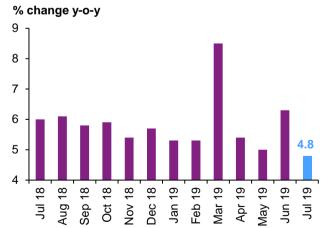
The **Caixin China General Services PMI** rose to a three-month high of 52.1 in August 2019 from 51.6 in the previous month. New orders rose the most in four months, with new export business increasing solidly, and the rate of job creation was the fastest since June 2018. Meantime, the amount of outstanding work declined slightly.

The **Caixin China General Composite PMI** rose to 51.6 in August 2019, the highest in four months, from 50.9 in the previous month. Services growth was at three-month high (PMI at 52.1 compared to 51.6 in July) and manufacturing production expanded for the first time since May (PMI at 50.4 compared to 49.9 in July). Total new order increased the most in four months and the pace of job creation was the fastest since January 2015.

China's industrial production decreased to 4.8% y-o-y in July 2019, the weakest gain since February 2002 and below market consensus, on the back of the escalating trade dispute with the US and sluggish domestic demand.

Factory activity in China shrank in August for the fourth month in a row as the US ramped up trade pressure and domestic demand remained sluggish, pointing to a further slowdown in the world's second-largest economy. Persistent weakness in China's vast manufacturing sector could fuel expectations that Beijing needs to roll out stimulus more quickly, and more aggressively, to weather the biggest downturn in decades. Export orders fell for the 15th straight month in August, although at a slower pace, with the sub-index picking up to 47.2 from July's 46.9.





Sources: China National Bureau of Statistics and Haver Analytics.

Total new orders from home and abroad - also continued to fall, indicating domestic demand remains soft, despite a flurry of growth-boosting measures over the past year. Manufacturers in consumption-oriented industries such as the auto sector have been especially vulnerable. The data showed activity at medium- and small-sized firms contracted, even as large manufacturers, many backed by the government, managed to expand in August. Factories continued to shed jobs in August amid the uncertain business outlook. The employment sub-index dropped to 46.9, compared with 47.1 in July.

China's **GDP growth** expectation remains unchanged at 6.2% in 2019 and was revised down from 6.0% to 5.9% in 2020.

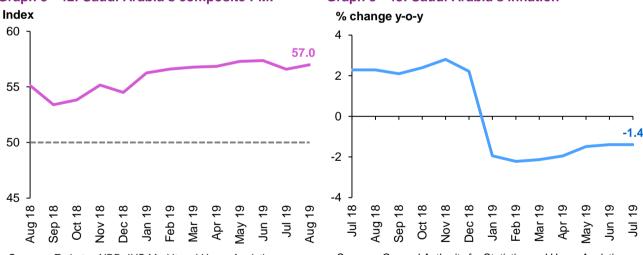
### **OPEC Member Countries**

### Saudi Arabia

In Saudi Arabia, the non-oil private sector regained momentum in August. Stronger domestic demand drove a faster upturn in output, which recovered from July's five-month low. On the price front, overall input costs decreased for the fourth time in the past eight months, driven by declines in both purchasing costs and wages. Meanwhile, business confidence among companies in Saudi Arabia's non-oil private sector picked up to a three-month high, amid forecasts of stronger customer demand in the year ahead. The IHS Markit Saudi Arabia PMI rose to 57.0 in August, from 56.6 in July. This brought the headline index closer to its long-run survey average of 57.6. The upturn in business conditions seen in August was led by a slight quickening of overall new order growth. Export sales also increased solidly, though at a slower pace than in July. As a result, domestic markets were the main impetus for inflows of new business. GDP grew by 1.7% y-o-y in 1Q19. Government consumption rose by 1.5% y-o-y in 1Q19, from -15.6% in 4Q18. Private consumption also grew by a higher rate of 4.8% y-o-y in 1Q19, compared to a 0.1% in 4Q18. Gross capital formation declined by 7.1% y-o-y in 1Q19, following a growth of 13.6% in the previous quarter.



Graph 3 - 43: Saudi Arabia's inflation



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Sources: General Authority for Statistics and Haver Analytics.

# Nigeria

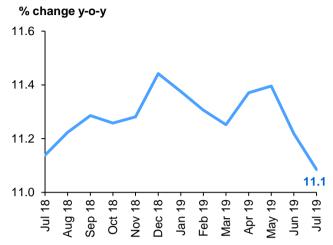
In **Nigeria**, GDP grew 1.9% y-o-y in 2Q19, from an upwardly revised 2.1% expansion in 1Q19. Stability in oil output and the successful political transition were the main drivers to growth. Private consumption expanded by 0.8% y-o-y in 2Q19, after declining by 0.1% in 1Q19. Government expenditures soared by 33.7% y-o-y in 2Q19, compared to 13.8% in the previous quarter. Gross capital formation showed a notable increase as well, rising by 7.4% y-o-y in 2Q19, from 1.1% in 1Q19. As for the trade element of the GDP equation, exports declined by 2.5% y-o-y in 2Q19, from a 16.4% rise in 1Q19. Imports went up by 11.4% y-o-y in 2Q19, down from 40.8% in the previous quarter. Growth of the private sector picked up during August, with output and new orders rising at much stronger rates than in July. As a result, companies were encouraged to take on additional staff and increase purchasing activity. Meanwhile, input costs rose at a broadly similar pace to the previous month and output price inflation slowed to a marginal pace.

The Stanbic IBTC Bank Nigeria PMI registered 56.4 in August. This was up from 54.6 in July and signalled the strongest improvement in the health of the private sector since June 2018.

Graph 3 - 44: Nigeria's composite PMI



Graph 3 - 45: Nigeria's inflation



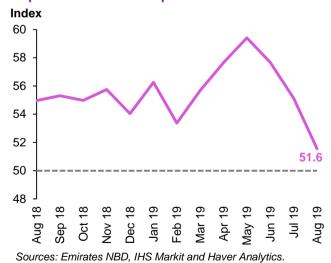
Sources: National Bureau of Statistics and Haver Analytics.

# The United Arab Emirates (UAE)

Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics.

In the **UAE**, the GDP of Abu Dhabi registered growth of 5.7% y-o-y in 1Q19, up from 3.7% in 4Q18. Financial and insurance activities declined by 2.4% y-o-y in 1Q19, after expanding by 1.2% in the previous quarter. Public expenditures grew by 0.1% y-o-y in 1Q19, after a 2.2% contraction in 4Q18. Household activity went up by 3.1% y-o-y in 1Q19, similar to the growth rate posted in the previous quarter. Business conditions in the non-oil private sector improved at only a modest pace in August, as activity and demand growth softened for the third month running. The IHS Markit UAE PMI fell from 55.1 in July to 51.6 in August, the lowest reading for eight years. This pointed to only a modest improvement in business conditions and the third successive month in which growth has slowed. Activity in the private sector increased at a notably softer rate compared to July, with weaker demand curbing the expansion. The rate at which output rose was the least in just over six years.

Graph 3 - 46: UAE's composite PMIs



Graph 3 - 47: UAE's inflation



Sources: National Bureau of Statistics and Haver Analytics.

## Other Asia

## **Philippines**

In the **Philippines**, expanded 5.5% y-o-y in 2Q19, slowing from a 5.6% growth in the previous quarter. This was the weakest growth rate since 1Q15, as both private consumption and government spending eased, while fixed investment shrank. In 2Q19, government expenditure went up by 6.9% y-o-y, slower than a 7.4% expansion in the previous quarter. Household consumption expanded by 5.6% y-o-y, slower than a 6.1% increase in 1Q19. In addition, fixed capital formation shrank by 4.8% y-o-y, following a 6.4% growth mainly due to a fall in durable equipment by 13%. Output slowed in construction and breeding stocks and orchard development. Meanwhile, intellectual property products rose faster during 2Q19. Regarding net trade, exports increased by 4.4% y-o-y in 2Q19, compared to 5.7% in 1Q19, while imports showed no growth, compared to 8.6% in 1Q19. The IHS Markit Philippines manufacturing PMI posted 51.9 in August, signalling a modest improvement in the health of the manufacturing sector. The index was down slightly from 52.1 in July, but was still one of the highest recorded this year so far. Latest data revealed some downward pressure on production growth over the month. Output did increase, but only modestly and at the slowest pace for four months. This was widely linked to a softening in the rate of new order growth.

### **Africa**

In **South Africa**, GDP expanded 0.9% y-o-y in 2Q19, after showing no growth in the previous quarter. Service activities were the main drivers of GDP growth, while manufacturing expansion eased and output continued to contract for agriculture, mining, utilities and construction. Within services, output growth was recorded for: trade, catering and accommodation at 0.6% in 2Q19 compared to -0.6% in 1Q19; transport, storage and communication at 2.5% in 2Q19 compared to 1.1% in 1Q19; finance, real estate and business services at 3.1% in 2Q19 compared to 2.4% in 1Q19; general government services at 1.8% in 2Q19 compared to 1.0% in 1Q19; and personal services at 0.8% in 2Q19 vs 1.3% in 1Q19.

Meanwhile, manufacturing expanded at a softer 0.5%, compared to 0.6% in the previous quarter. Output contracted for: agriculture by -6.7% in 2Q19 vs -12.7% in 1Q19; mining at -2.1% in 2Q19 vs -4.6% in 1Q19; electricity, gas and water by -0.5% in 2Q19 vs -1.4% in 1Q19; and construction by -2.5% in 2Q19 compared to -2.3% in 1Q19. The private sector operating conditions deteriorated for the fourth month in a row in August, according to latest PMI results, but the decline was marginal with output and new orders falling at weaker rates. Workforce numbers stabilized while input buying increased slightly. The rate of overall cost inflation slowed to a four-month low, whereas output prices were raised at a quicker pace. Meanwhile, optimism for future activity remained subdued. Rising from 48.4 in July to 49.7 in August, the IHS Markit South Africa PMI reading signalled a fourth successive month of declining business conditions in the private sector. However, the overall deterioration was weaker than in July and in line with that seen in June. This was due in part to softer drops in output and new orders, as well as stabilized employment numbers. New orders placed at South African firms fell for the fourteenth consecutive month during August. That said, the rate of decline was marginal and the slowest since April. Firms were notably helped by a slight increase in foreign orders. Nevertheless, reports of poor economic conditions in the private sector remained prevalent.

### **Latin America**

## **Argentina**

In **Argentina**, the recent financial meltdown has prompted expectations of GDP contraction, fast currency depreciation, and an inflation spike. This was triggered by economic policy risk that is stemmed from political uncertainty over October's presidential elections. The economy is falling quickly into a situation of credit crunch and fears of another default on its debt are on the rise. In an attempt to curb the pace of this financial/economic collapse, the government resorted to currency control, a measure that will hardly be successful and could even worsen the overall sentiment. The central bank's survey showed GDP forecast reversing from previously expected growth in 2020 into contraction. The current estimate of inflation points to 40% rise in consumer prices and is expected to reach 55% by the end of 2019. The currency is expected to lose more than 66% of its value to the dollar by the end of this year, according the central bank's survey. The GDP of Argentina contracted by 5.8% y-o-y in 1Q19, which was slower than a 6.1% drop during 1Q19. Private consumption expenditure declined by 10.5% y-o-y, GFCF contracted by 24.6% y-o-y, exports increased by 1.7% y-o-y, and imports went down by 24.6% y-o-y in 1Q19.

# **Transition region**

### Czechia

In Czechia, GDP expanded by 2.4% y-o-y in 2Q19, slower than 1Q's growth of 2.8%, as household consumption, and gross capital formation had grew by slower rates. Household consumption registered growth of 2.6% y-o-y in 2Q19, down from 2.9% in the previous quarter. Government consumption's pace of growth accelerated in 2Q19 to 3.3% y-o-y, from 2.8% in 1Q19. Gross capital formation was nearly unchanged in 2Q19, after growing by 4.9% in 1Q19. Exports expanded by a higher rate of 1.5% y-o-y in 2Q19, as compared to a 1.3% rise in the previous quarter. Imports, on the other hand, showed lesser growth in 2Q19 by 0.8% y-o-y, from 1.9% expansion in 1Q19. The IHS Markit Czech Republic manufacturing PMI signalled a softer deterioration in operating conditions across the manufacturing sector. The overall contraction was still the second-fastest for over a decade, largely driven by a marked fall in new business. Total new orders decreased in part due to the fastest decline in new business from abroad since April 2009. Subsequently, firms expressed greater hesitation towards hiring and future output. Employment contracted further, while business confidence slid to the lowest level for over six and a half years. At the same time, a subdued rise in cost burdens and efforts to remain competitive drove firms to discount their factory gate charges. The index registered 44.9 in August, up from July's recent low of 43.1, but continued to signal a substantial deterioration in the health of the manufacturing sector that was among the fastest since the depths of the financial crisis in 2009.

# **World Oil Demand**

**World oil demand growth for 2019** was revised lower by around 0.08 mb/d, primarily as a result of a slower than expected performance from both the OECD and non-OECD during the 1H19. The downward revision also accounts for the latest economic outlook for 2019 and 2020 oil demand data. World oil demand growth in 2019 is now pegged at 1.02 mb/d, with total global consumption at 99.84 mb/d.

In the **OECD**, anticipated 2019 oil demand growth has been revised downward by 0.03 mb/d after considering trends from latest available historical information and the most recent economic outlook. Oil demand in 1H19 has been resilient in Americas, but it remained in negative territory in Europe and the Asia Pacific.

OECD America oil demand data implied gains during June with support from industrial and transportation fuels, particularly related to the consumption of NGL/LPG, jet kerosene and diesel fuel. While oil demand growth was revised slightly downward for 1Q19, overall 1H19 oil demand exhibited a healthy performance.

OECD Europe incremental oil demand remains in negative territory for 1H19 and is expected to follow the same declining y-o-y trend for 2H19.

Expectations for the OECD Asia Pacific have been lowered further. This is due to declining activities in the petrochemical industry in Japan and South Korea, with challenges related to international trade leading to less oil requirements.

In the **non-OECD** region, based on the latest available data, oil demand growth in 2019 was adjusted lower by 0.05 mb/d, primarily due to a weaker than expected performance from Other Asia and Middle East in 2Q19. Smaller downward revisions were also seen in Latin America and China.

In Other Asia, oil demand growth in 2019 was adjusted downward by around 0.02 mb/d, mainly reflecting slower-than-expected oil demand in India, as well as various other countries in the region, such as Indonesia, Malaysia and Thailand.

In the Middle East, oil demand in 2019 was revised lower by around 0.02 mb/d, due to economic restructuring plans, including subsidy reductions.

**World oil demand growth for 2020** was revised lower by 0.06 mb/d compared to the previous report. This is in light of downward economic revisions to various regions and countries, as well as adjustments to the baseline data. World oil demand growth in 2020 is now anticipated to increase by 1.08 mb/d, with total global consumption reaching 100.92 mb/d.

# World oil demand in 2019 and 2020

Table 4 - 1: World oil demand in 2019\*, mb/d

							Change 2	2019/18
	<u>2018</u>	<u>1Q19</u>	<u> 2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	<u>Growth</u>	<u>%</u>
Americas	25.55	25.21	25.66	26.08	26.02	25.75	0.20	0.79
of which US	20.73	20.65	20.86	21.21	21.03	20.94	0.21	1.00
Europe	14.31	13.97	14.18	14.68	14.30	14.28	-0.02	-0.15
Asia Pacific	8.08	8.47	7.67	7.73	8.12	8.00	-0.08	-1.02
Total OECD	47.93	47.65	47.51	48.50	48.44	48.03	0.10	0.21
Other Asia	13.64	13.91	14.02	13.71	14.21	13.96	0.32	2.38
of which India	4.73	5.03	4.79	4.57	5.14	4.88	0.15	3.21
Latin America	6.53	6.36	6.58	6.83	6.49	6.57	0.04	0.62
Middle East	8.12	8.25	7.90	8.47	7.88	8.12	0.00	0.03
Africa	4.33	4.45	4.42	4.36	4.50	4.43	0.10	2.31
Total DCs	32.62	32.97	32.93	33.37	33.07	33.09	0.47	1.43
FSU	4.82	4.75	4.74	5.02	5.11	4.91	0.09	1.82
Other Europe	0.74	0.75	0.71	0.75	0.84	0.76	0.02	2.69
China	12.71	12.63	13.19	12.98	13.43	13.06	0.35	2.73
Total "Other regions"	18.27	18.13	18.64	18.75	19.38	18.73	0.45	2.49
Total world	98.82	98.75	99.08	100.63	100.89	99.84	1.02	1.03
Previous estimate	98.82	98.79	99.25	100.69	100.91	99.92	1.10	1.11
Revision	0.01	-0.03	-0.17	-0.06	-0.02	-0.07	-0.08	-0.08

*Note:* \* 2019 = *Forecast.* 

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 4 - 2: World oil demand in 2020\*, mb/d

							Change 2	2020/19
	<u>2019</u>	<u>1Q20</u>	<u>2Q20</u>	<u>3Q20</u>	<u>4Q20</u>	<u>2020</u>	<u>Growth</u>	<u>%</u>
Americas	25.75	25.43	25.84	26.24	26.19	25.93	0.18	0.69
of which US	20.94	20.83	21.00	21.33	21.18	21.09	0.15	0.70
Europe	14.28	13.92	14.15	14.66	14.28	14.25	-0.03	-0.21
Asia Pacific	8.00	8.39	7.58	7.66	8.05	7.92	-0.08	-0.99
Total OECD	48.03	47.73	47.57	48.56	48.52	48.10	0.07	0.14
Other Asia	13.96	14.27	14.38	14.09	14.60	14.33	0.37	2.65
of which India	4.88	5.20	4.94	4.73	5.32	5.05	0.16	3.36
Latin America	6.57	6.44	6.66	6.91	6.56	6.64	0.07	1.14
Middle East	8.12	8.30	7.95	8.55	7.97	8.19	0.07	0.86
Africa	4.43	4.53	4.52	4.46	4.59	4.52	0.09	2.00
Total DCs	33.09	33.54	33.50	34.00	33.72	33.69	0.60	1.83
FSU	4.91	4.83	4.81	5.11	5.19	4.99	0.08	1.65
Other Europe	0.76	0.76	0.72	0.76	0.85	0.77	0.01	1.54
China	13.06	12.91	13.50	13.28	13.77	13.37	0.31	2.37
Total "Other regions"	18.73	18.50	19.03	19.15	19.82	19.13	0.40	2.15
Total world	99.84	99.78	100.10	101.71	102.06	100.92	1.08	1.08
Previous estimate	99.92	99.87	100.33	101.83	102.14	101.05	1.14	1.14
Revision	-0.07	-0.09	-0.23	-0.12	-0.08	-0.13	-0.06	-0.06

Note: \* 2019-2020 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

# **OECD**

# **OECD Americas**

### US

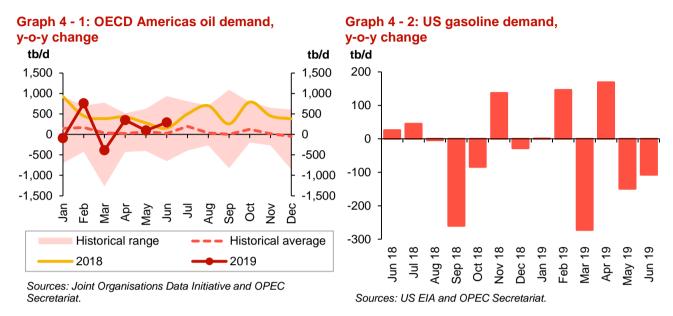
Based on preliminary weekly data, US data for June 2019 implies oil demand gains of around 0.19 mb/d y-o-y, following declines in May 2019. This is in line with a number of main indicators, including the country's solid economic growth and industrial activity, particularly in the petrochemical and oil producing industries. When disaggregating all increments, the gains in oil requirements for June 2019 originated mainly in the industrial and transportation sectors.

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

		Change 2019/18				
	<u>Jun 19</u>	<u>Jun 18</u>	<u>tb/d</u>	<u>%</u>		
LPG	3,353	2,540	813	32.0		
Naphtha	215	206	9	4.4		
Gasoline	9,691	9,798	-107	-1.1		
Jet/kerosene	1,809	1,855	-47	-2.5		
Diesel oil	4,556	3,954	602	15.2		
Fuel oil	387	249	138	55.2		
Other products	1,175	2,394	-1,219	-50.9		
Total	21,185	20,996	189	0.9		

Sources: US EIA and OPEC Secretariat.

Demand for NGL/LPG grew robustly y-o-y, notably in the petrochemical sector. Growth requirements in jet kerosene were stronger, when compared to the year-to-date (y-t-d) average, albeit as expected for a month in the holiday travel season. Motor gasoline requirements declined for the second consecutive month in June, in line with declining y-o-y vehicles sales and despite the low baseline during the same month in 2018. Developments in gasoline consumption relate to ongoing vehicle efficiency gains, fuel substitution and less mileage as a result of the declining trend in gasoline consumption per capita in the country over the last three years. June 2019 residual fuel oil requirements grew y-o-y amid the low baseline during the same month in 2018. Diesel fuel requirements grew strongly y-o-y in June.



With available data for eight months of 2019 – monthly data until June and preliminary weekly data for July and August – US oil demand has exhibited solid growth of around 0.2 mb/d. The bulk of the growth has originated in the lighter and middle part of the barrel – NGL/LPG, diesel fuel and jet kerosene. To date, gasoline demand is on a declining trend.

For the rest of 2019 and 2020, US oil demand is expected to be determined by developments in the industrial and transportation sectors, and hence, indirectly by the general economy and international trade-related issues. It is evident that the overall implied risks for future US oil demand development is balanced between the upside and downside. Upside risks originate in projected economic growth of and oil usage in the transportation and industrial sectors, while economy-related concerns, fuel substitution and vehicle efficiencies are the major downside risks.

### **Mexico**

**Mexican oil demand** remained in negative territory during July 2019, declining sharply by 5.6 % y-o-y. Shrinking demand for the majority of petroleum product categories was only slightly offset by rising diesel fuel requirements. The risks for 2019 and 2020 Mexican oil demand remain slightly skewed to the downside and relate to the country's economy and the degree of fuel substitution.

### Canada

In **Canada**, **oil demand** in June 2019 witnessed a solid y-o-y performance, following a decline in May 2019. This was despite declining demand for the majority of main petroleum product categories. Overall gains were attributed to solid gains in LPG and gasoline demand. Canadian oil demand in 2020 is projected to increase slightly y-o-y, with the risks balanced.

In 2019, **OECD Americas oil demand** is expected to grow 0.20 mb/d, when compared to 2018. In 2020, oil demand y-o-y is projected to increase by 0.18 mb/d.

# **OECD Europe**

The latest available June 2019 data for **OECD Europe** implies a sharp drop in oil demand requirements, following monthly y-o-y declines in February, March and May, as well as on a y-t-d basis. Oil demand losses were attributed to weaker demand for LPG, naphtha and gasoline, although this was partly offset by increasing jet kerosene and gasoline demand. One of the region's main oil demand indicators, passenger car registrations, saw a decline during the first six months of 2019, although this does follow a high historical baseline witnessed in previous years.

Table 4 - 4: Europe Big 4\* oil demand, tb/d

			Change 2019/18				
	<u>Jul 19</u>	<u>Jul 18</u>	tb/d	<u>%</u>			
LPG	484	435	49	11.4			
Naphtha	591	616	-25	-4.1			
Gasoline	1,215	1,207	8	0.7			
Jet/kerosene	895	914	-19	-2.1			
Diesel oil	3,201	3,172	29	0.9			
Fuel oil	210	232	-22	-9.5			
Other products	648	703	-55	-7.8			
Total	7,244	7,279	-35	-0.5			

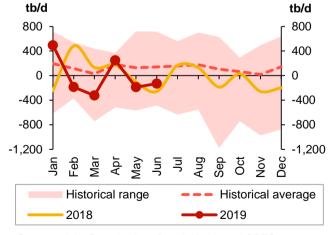
Note: \* Germany, France, Italy and the UK.

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

Preliminary July 2019 trends for the **European Big 4 oil consuming countries** imply y-o-y declines. The bulk of losses relate to naphtha, gasoline and jet kerosene requirements; Germany and the UK appear to be in negative oil demand territory, while Italian and French oil demand looks to have expanded y-o-y.

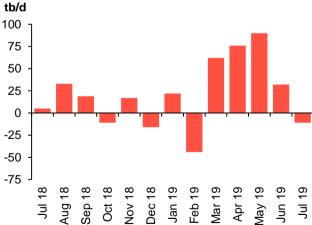
The region's 2019 and 2020 oil demand forecast is weighted by a number of risks, the majority of which may influence oil demand to the downside. The forecasted growth in the economy and the current oil price environment would principally support oil demand; however, unsolved debt-related and geopolitical issues, as well as efficiencies and fuel substitution may substantially reduce oil demand to the downside. Expectations for 2019 and 2020 oil demand in the region are unchanged since last month, but risks are skewed to the downside.

Graph 4 - 3: OECD Europe's oil demand, y-o-y change



Sources: Joint Organisations Data Initiative and OPEC Secretariat.

Graph 4 - 4: UK diesel demand, y-o-y change



Sources: Joint Organisations Data Initiative, UK Department for Business, Energy & Industrial Strategy and OPEC Secretariat.

In 2019, **OECD Europe oil demand** is forecast to fall by 0.02 mb/d y-o-y, while oil demand during 2020 is expected to be 0.03 mb/d lower when compared to 2019.

### **OECD** Asia Pacific

### Japan

Preliminary July 2019 data implies that **Japanese oil demand** shrank by 0.13 mb/d y-o-y, following of from declines in five months in the 1H19 and for the whole of 2018. The performance of petroleum products showed a divergence; LPG, gasoline and residual fuel oil requirements remained in the negative, while naphtha, jet kerosene and diesel fuel demand grew y-o-y. The direct use of crude oil and residual fuel oil for electricity generation showed declines y-o-y, as a result of substitution with other primary energy commodities.

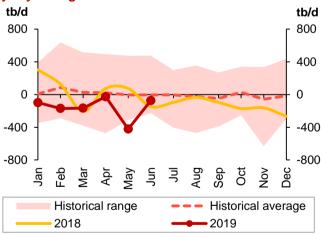
Table 4 - 5: Japan's domestic sales, tb/d

		Change 2019/18				
	<u>Jul 19</u>	<u>Jul 18</u>	<u>tb/d</u>	<u>%</u>		
LPG	299	338	-39	-11.5		
Naphtha	711	689	22	3.2		
Gasoline	870	937	-67	-7.2		
Jet/kerosene	311	311	0	0.0		
Diesel oil	753	738	15	2.0		
Fuel oil	223	264	-41	-15.6		
Other products	341	358	-17	-4.7		
Total	3,508	3,635	-127	-3.5		

Sources: JODI, Ministry of Energy and Trade and Industry of Japan and OPEC Secretariat.

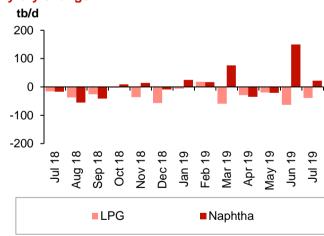
The gloomy outlook for 2019 and 2020 Japanese oil demand remains unchanged. Moreover, risks continue to be skewed to the downside, mainly due to economic forecasts, increasing efficiencies in the road transportation sector, as well as fuel substitution.





Sources: Joint Organisations Data Initiative and OPEC Secretariat.

# Graph 4 - 6: Japan's LPG and naphtha demand, y-o-y change



Sources: Ministry of Economy Trade and Industry of Japan, Joint Organisations Data Initiative and OPEC Secretariat.

### South Korea

In **South Korea**, oil demand in June 2019 decline sharply. The bulk of the losses can be attributed to a stumbling petrochemical industry, which has been significantly impacted by challenges in relation to imported feedstock, as well as the US-China trade dispute. LPG and naphtha requirements fell sharply y-o-y by 5.4% and 7.5%, respectively, while gains in demand for gasoline, jet kerosene and diesel fuel partly offset the overall decline.

The outlook for South Korean oil demand during 2019 and 2020 is in positive territory; however, risks are skewed to the downside compared to last month's projections.

### **Australia**

In **Australia**, June 2019 oil demand data implies losses y-o-y, on top of a high historical baseline. The bulk of the declines are seen in demand for diesel fuel, gasoline and residual fuel oil.

OECD Asia Pacific oil demand is projected to decline by 0.08 mb/d in both 2019 and 2020.

# Non-OECD

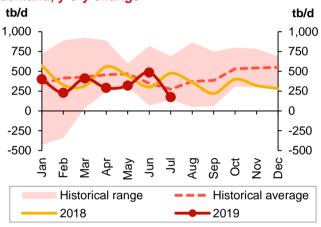
### China

Chinese oil demand showed a slower pace of growth, increasing by 0.17 mb/d or 1% during July 2019. The y-t-d average growth, based on Secretariat calculations, stands at 0.32 mb/d, or around 3%. In July 2019, oil demand growth was influenced by rising LPG and jet fuel requirements, while gasoline saw a significant growth slowdown compared to previous months. requirements for diesel fuel and fuel oil offset some of those gains. The increase in LPG requirements can be attributed to the country's expanding petrochemical industry, as LPG grew by more than 0.20 mb/d, or more than 12% y-o-y. Jet fuel rose by 0.04 mb/d, or around 4%, amid a continuation of solid growth in air traffic activities. According to the China National Bureau of Statistics, increased by 10.4% in July compared to the same month in 2018.

Gasoline demand has started to show signs of a slowdown, in line with declining car sales, according to statistics and analysis of China Association of Automobile Manufacturers (CAAM). In July 2019, China's automobile sales were at 1.90 million units, more than 4% lower than the same month in 2018. Y-t-d figures, with data for seven months, also highlight a significant drop in car sales with total units sold reaching 12.7 million units. This is down by 13% compared to the same period in 2018. In July, gasoline consumption y-o-y grew by 0.02 mb/d.

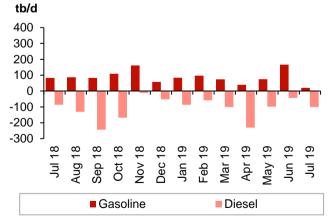
Diesel fuel dipped by around 0.10 mb/d in July, or more than 3% y-o-y, continuing its sluggish performance in 2019. The diesel fuel slowdown is a reflection of weaker manufacturing activities, as well as a reduction in construction and agricultural activities. Fuel oil also decreased during July, losing around 0.03 mb/d from the level recorded in July 2018.

Graph 4 - 7: Changes in China's apparent oil demand, y-o-y change



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

Graph 4 - 8: China's diesel and gasoline demand growth, y-o-y change



Sources: Facts Global Energy, China OGP (Xinhua News Agency), Argus Global Markets, JODI, National Bureau of Statistics, China and OPEC Secretariat. China's 2019 oil demand outlook is slightly lower than last month, which is mainly a reflection of a possible economic slowdown and the implementation of measures aimed at limiting the consumption of transportation fuels. The healthy petrochemical segment and expansions in refining capacity are considered as factors supporting oil demand during the current year. As for 2020, oil demand for transportation and industrial sectors is projected to continue rising, albeit at a slower pace than the current year, in view of slightly lower GDP growth as compared to 2019. The outlook also assumes a continuation in fuel quality programs targeting fewer emissions, and the continuation of fuel substitution with natural gas and coal. These are all factors that need to be monitored closely.

For 2019, **Chinese oil demand** is anticipated to grow by 0.35 mb/d, while oil demand in 2020 is projected to increase by 0.31 mb/d.

### Other Asia

### India

In July 2019, **India's oil demand** flipped into positive territory after declining the previous month, increasing by 0.14 mb/d, or more than 3%, y-o-y. This takes y-t-d oil demand growth, with data from January to July, to a modest 0.11 mb/d, compared to more than 0.30 mb/d of growth during the same period in 2018. Total consumption in July 2019 is now pegged at 4.4 mb/d. In terms of products, the y-o-y increase in consumption for LPG, diesel fuel and gasoline, were slightly counterbalanced by drops in naphtha and jet/kerosene.

Table 4 - 6: India's oil demand, tb/d

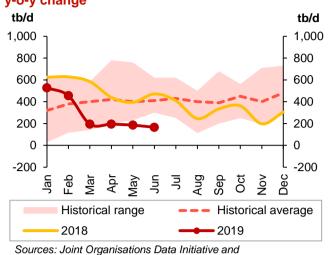
Change 2019/18 **Jul 19** Jul 18 tb/d <u>%</u> LPG 712 776 64 9.0 Naphtha 400 379 -21 -5.3 Gasoline 683 628 55 8.8 Jet/kerosene 219 245 -26 -10.6 Diesel oil 1,717 58 1,774 3.4 Fuel oil 295 272 22 8.2 Other products 319 331 -12 -3.6 140 **Total** 4.444 4.304 3.3

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

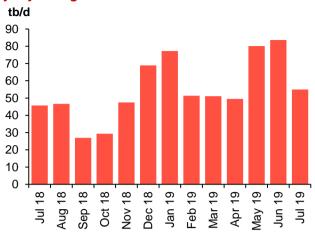
LPG continued its y-o-y growth in July 2019, increasing by 0.06 mb/d, or 9% y-o-y, with total consumption at around 0.78 mb/d. LPG consumption continues to be driven by the residential sector, in response to governmental policies to expand LPG connections to households. Diesel fuel demand recorded its second highest monthly growth in 2019, with consumption increasing by around 0.06 mb/d y-o-y. This was mostly due to an uptick in infrastructure projects, as well as less rainfall than normal at the start of the monsoon season. Total diesel fuel consumption was at 1.8 mb/d.

Gasoline demand grew more than 0.06 mb/d y-o-y, or 9%, despite the continued weakness in passenger vehicle sales. In July 2019, passenger vehicle sales data for India's top five manufacturers showed a decline of more than 30% y-o-y. This marks the largest decline in around 20 years. Demand for both naphtha and jet/kerosene dropped by more than 0.02 mb/d, with the latter being impacted by the substitution of other light distillates in households.

# Graph 4 - 9: Other Asia's oil demand, y-o-y change



Graph 4 - 10: India's gasoline demand, y-o-y change



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

### Indonesia

OPEC Secretariat.

In **Indonesia**, June 2019 data shows a steady increase of around 1.0% y-o-y, almost matching May's growth. Most of the expansion appeared in the lighter part of the barrel, with rising requirements for gasoline, LPG and diesel fuel, while heavy distillates showed moderate increases.

### **Thailand**

Oil demand in **Thailand** recorded marginal y-o-y growth in June 2019. Gains in diesel fuel and gasoline were offset by declines in light distillates – LPG and naphtha – that imply a slowdown in the petrochemical sector.

Other Asia's oil demand growth in 2019 is anticipated to be around 0.11 mb/d lower than the 2018 growth level. In 2020, assumptions are focused on higher GDP growth than the current year and stable retail prices. India is anticipated to be the main contributor to growth, with smaller contributions from Indonesia, Thailand, Pakistan, Vietnam and Singapore. There is anticipated to be a smaller impact of the displacement of oil in the power generation sector, as well as other sectors, compared to previous years. Middle distillates, followed by gasoline, are expected to be the products leading oil demand next year.

Other Asia's oil demand is anticipated to grow by 0.32 mb/d y-o-y in 2019, while in 2020, it is projected to rise by 0.37 mb/d.

# **Latin America**

### **Brazil**

In **Brazil**, total oil demand accelerated during the month of July 2019 after witnessing a monthly y-o-y decline in June.

Product demand grew by just below 0.16 mb/d, or around 6% y-o-y. With this level the y-t-d data indicates oil demand growth of around 0.09 mb/d from January to July 2019. This compares to a decline of around 0.01 mb/d during the same period in 2018. The increased in oil requirements was despite the slower than expected economic activities, compared to last year. The pace of transportation fuel consumption increased in July 2019 with both ethanol and gasoline increasing by 12% and 8%, respectively. This is in line with improving vehicle sales, which showed an increase of around 11% in June and July 2019.

Table 4 - 7: Brazil's oil demand\*, tb/d

		Change 2019/18				
	<u>Jul 19</u>	<u>Jul 18</u>	tb/d	<u>%</u>		
LPG	248	232	16	7.0		
Naphtha	147	146	1	0.7		
Gasoline	655	609	47	7.7		
Jet/kerosene	124	131	-7	-5.4		
Diesel oil	1,052	1,011	42	4.1		
Fuel oil	80	74	6	8.5		
Other products	499	447	52	11.6		
Total	2,805	2,648	157	5.9		

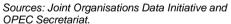
Note: \* = Inland deliveries.

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

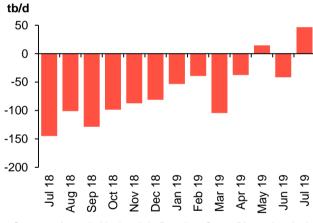
Y-t-d data for the two products highlights significant increases of more than 20% for ethanol, while gasoline recruitments exhibit a decline of 5%. This is largely attributed to the retail price difference, which favoured ethanol over gasoline in most months of the year.

Diesel fuel was also higher by 0.04 mb/d y-o-y, amid a slight recovery in industrial activities and improvements in trucking activities. On the other hand, jet/kerosene recorded a decline of around 5% y-o-y.

Graph 4 - 11: Latin America oil demand, y-o-y change tb/d tb/d 600 600 400 400 200 200 0 0 -200 -200 -400 -400 Dec Jan Historical range Historical average 2018 2019



# Graph 4 - 12: Brazil's gasoline demand, y-o-y change



Sources: Agencia Nacional do Petroleo, Gas e Biocombustiveis of Brazil, Joint Organisations Data Initiative and OPEC Secretariat.

# **Argentina**

In **Argentina**, oil demand continued its weak performance, which is in line with an economic slowdown. June 2019 oil demand growth was lower by 0.05 mb/d or more than 7% y-o-y. This is the tenth consecutive monthly decline and the thirteenth time in the last 14 months. LPG, diesel fuel, gasoline and fuel oil all posted declines.

Looking ahead, uncertainties for 2019 **oil demand growth in Latin America** are currently skewed downward because of economic turmoil in a number of the region's countries. As such, oil demand projections for 2019 have been adjusted lower for the remainder of 2019. In 2020, oil demand growth is anticipated to slightly improve over the 2019 growth levels, driven by expected improving economic activities. Brazil is projected to by the main contributor, with transportation fuels expected to lead oil demand growth, followed by construction and industrial fuels.

Latin American oil demand is expected to rise by 0.04 mb/d in 2019 and by 0.07 mb/d in 2020.

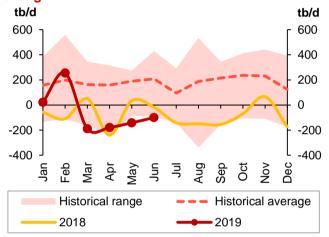
### Middle East

### Saudi Arabia

In Saudi Arabia, oil demand in July returned to growth after four consecutive months of y-o-y declines.

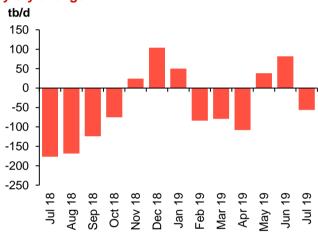
Oil demand increased by 0.13 mb/d during July 2019 with total consumption reaching 2.6 mb/d. However, y-t-d data hints towards a decline of 0.06 mb/d with all products except fuel oil showing y-o-y losses. In July 2019, most of the products saw reasonable increases, with the exception of direct crude oil for burning which declined. Direct crude oil for burning weakened by around 0.05 mb/d, which translates to a drop of more than10% y-o-y, as displacement programs in the power generation sector continued to impact crude oil demand. Jet fuel was on the rise, registering an increase of more than 0.08 mb/d y-o-y, in line with seasonal norms and ahead of the start of the Hajj season.

Graph 4 - 13: Middle East oil demand, y-o-y change



Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

Graph 4 - 14: Saudi Arabia's crude direct use, y-o-y change



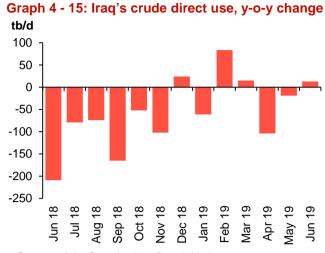
Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

Gasoline also improved in July 2019 after four-consecutive monthly declines. The product posted around 0.03 mb/d of gains, supported by an uptick in driving during the summer holidays. Diesel fuel and fuel oil requirements showed positive momentum in July 2019 as both products increased by around 0.03 mb/d. This is in line with improved industrial activities that promote additional diesel fuel demand and the increases use of air conditioning usage during the summer season, which intensifies fuel oil consumption in the power generation sector.

### Iraq

In July 2019, **Iraq's oil demand growth** fell by 0.05 mb/d y-o-y, with total product consumption now pegged at 0.69 mb/d. This is the fourth consecutive monthly decline. Demand for transportation fuels had mixed trends while gasoline and diesel fuel requirements increased y-o-y, jet/kerosene demand fell. The heavy distillates, which include fuel oil and direct crude oil for the purpose of burning, have declined the most during the month of July 2019. Looking forward, uncertainties in oil demand projections are currently tilted downward mainly as a result of economic restructuring programs and geopolitical concerns.

For 2020, Middle East oil demand growth is anticipated to gain momentum over 2019 levels, mainly as a result of assumed improvements in the economy. Saudi Arabia is expected to be the main contributor to growth, with transportation fuels – gasoline and diesel fuel –, petrochemical feedstock, construction fuels and crude oil for direct use anticipated to be the products leading oil demand growth. On the downside, geopolitical concerns may have a negative impact.



Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

For 2019, **Middle East oil demand** is projected to increase slightly, while oil demand in 2020 is anticipated to rise by 0.07 mb/d.

# **World Oil Supply**

The non-OPEC oil supply growth forecast for 2019 was revised up by 10 tb/d from the previous monthly report, representing y-o-y growth of 1.99 mb/d. This slight change is attributed to upward revisions in oil production in Russia, Kazakhstan, Australia and Canada, which outpaced the downward revision in the US oil supply forecast. While oil production in Canada in 2Q19 rose as the government of Alberta eased its mandatory production adjustments, US crude oil output fell for a second straight month in June, on the back of strict capital discipline and lower rig counts, which led to a downward revision in this year's forecast and the next. The main drivers for growth in 2019 are the US with 1.8 mb/d, followed by Brazil, China, the UK, Australia and Canada, while Mexico and Norway are projected to see the largest declines.

The non-OPEC oil supply growth forecast for 2020 was revised down by 136 tb/d from last month's assessment and is now projected to grow by 2.25 mb/d y-o-y. This change is mainly due to the large downward revision in the US oil supply forecast. The US, Brazil, Norway, Russia, Canada, Kazakhstan and Australia are expected to be the main growth drivers for next year, while Mexico, Indonesia, Egypt, the UK and Colombia are forecast to see the largest declines. The 2020 non-OPEC supply forecast remains subject to many factors: oil price movements; capital spending discipline, particularly in the US; infrastructure debottlenecking in North America; drilling and completion (D&C) costs and level of activities; unplanned outages; delayed start-ups; and the duration of unexpected maintenance.

**OPEC NGLs production** in 2019 and 2020 is expected to grow by 0.07 mb/d and 0.03 mb/d, respectively, to average 4.84 mb/d and 4.87 mb/d.

In August, **OPEC crude oil production** increased by 136 tb/d to average 29.74 mb/d, according to secondary sources. **Non-OPEC supply, including OPEC NGLs**, rose by 0.70 mb/d m-o-m, to average 69.50 mb/d, up by 1.48 mb/d y-o-y.

As a result, preliminary data indicates that **global oil supply** increased in August by 0.83 mb/d m-o-m to average 99.24 mb/d.

Table 5 - 1: Non-OPEC supply forecast comparison in 2019-2020\*, mb/d

		Change		Change
Region	<u>2019</u>	<u>2019/18</u>	<u>2020</u>	<u>2020/19</u>
OECD Americas	25.76	1.75	27.28	1.51
OECD Europe	3.78	-0.05	3.95	0.17
OECD Asia Pacific	0.48	0.07	0.55	0.07
Total OECD	30.02	1.76	31.77	1.75
Other Asia	3.46	-0.09	3.43	-0.03
Latin America	5.38	0.18	5.64	0.26
Middle East	3.21	0.00	3.24	0.03
Africa	1.58	0.06	1.60	0.02
Total DCs	13.62	0.15	13.91	0.28
FSU	14.26	-0.03	14.43	0.17
Other Europe	0.12	0.00	0.11	-0.01
China	4.09	0.08	4.09	0.00
Non-OPEC production	62.12	1.96	64.32	2.20
Processing gains	2.28	0.03	2.33	0.05
Non-OPEC supply	64.40	1.99	66.65	2.25

Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

# Monthly revisions to non-OPEC supply growth forecast

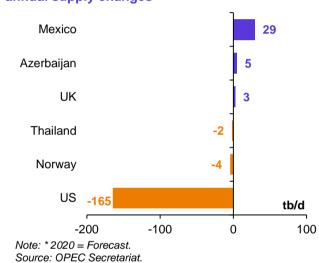
**Non-OPEC supply in 2019** is forecast to grow y-o-y by 1.99 mb/d, revised up by 10 tb/d from the previous month's assessment, and is expected to average 64.40 mb/d for the year.

The US supply growth forecast was revised down by 65 tb/d compared to last month's assessment due to lower-than-forecast supply for 2Q19 and downward revisions in the supply forecast for 3Q19 and 4Q19. Canada's oil production was revised up by 23 tb/d on a yearly basis, as production levels in 2Q19 exceeded the supply forecast for the quarter which had been based on the mandatory production cuts by the government of Alberta. In OECD Americas, Mexico's oil supply forecast for 2019 was also revised up by a minor 6 tb/d following indications of good production performance in July. Australia's supply forecast was also revised up by 8 tb/d due to incremental production from new projects. In the FSU, higher oil output in Russia in August led to an upward revision in 3Q19 with supplies now expected to rise by 13 tb/d for 2019. In Kazakhstan, production did not contract as much as previously projected because of reduced maintenance outages (*Graph 5 - 1*).

Graph 5 - 1: Monthly oil market report Sep 19/Aug 19 revisions in 2019\* annual supply changes

Kazakhstan 25 Canada Russia 13 Australia Mexico UK -3 Azerbaijan -5 US -65 tb/d -100 -50 0 50 Note: \* 2019 = Forecast. Source: OPEC Secretariat.

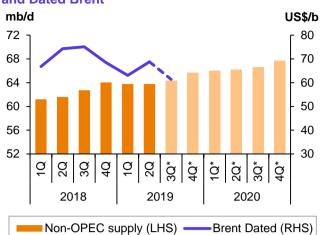
Graph 5 - 2: Monthly oil market report Sep 19/Aug 19 revisions in 2020\* annual supply changes



**Non-OPEC supply in 2020** is forecast to grow by 2.25 mb/d, revised down by 0.14 mb/d from the previous month's assessment, and is expected to average 66.65 mb/d for the year.

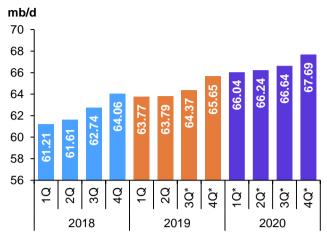
US oil supply accounts for the main downward revision for the next year. This follows the downturn in drilling and completion (D&C) activities in all regions – particularly in the Permian Basin that faced pipeline constraints and a reduction in capital spending, mainly by independent oil companies. The US supply growth forecast was revised down by 165 tb/d to 1.54 mb/d, for an average of 20.03 mb/d in 2020, with a decline projected mainly for crude oil rather than for NGLs. Part of this downward revision is offset by an upward revision of 29 tb/d made for Mexico's oil supply forecast in 2020 (Graph 5 - 2).

**Graph 5 - 3: Non-OPEC quarterly liquids supply and Dated Brent** 



Note: \*3Q19-4Q20 = Forecast. Source: OPEC Secretariat.

**Graph 5 - 4: Non-OPEC quarterly oil supply** 



Note: \* 3Q19-4Q20 = Forecast. Source: OPEC Secretariat.

# Non-OPEC oil supply in 2019 and 2020

Table 5 - 2: Non-OPEC oil supply in 2019\*, mb/d

							Change :	2019/18
	<u>2018</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	Growth	<u>%</u>
Americas	24.02	25.01	25.56	25.91	26.56	25.76	1.75	7.27
of which US	16.69	17.78	18.32	18.63	19.24	18.50	1.80	10.81
Europe	3.83	3.84	3.60	3.73	3.95	3.78	-0.05	-1.38
Asia Pacific	0.41	0.43	0.48	0.49	0.51	0.48	0.07	16.75
Total OECD	28.26	29.29	29.64	30.12	31.02	30.02	1.76	6.23
Other Asia	3.55	3.51	3.45	3.45	3.43	3.46	-0.09	-2.60
Latin America	5.19	5.17	5.25	5.48	5.60	5.38	0.18	3.56
Middle East	3.21	3.21	3.22	3.20	3.20	3.21	0.00	-0.07
Africa	1.52	1.54	1.55	1.59	1.62	1.58	0.06	3.89
Total DCs	13.47	13.43	13.47	13.73	13.86	13.62	0.15	1.11
FSU	14.29	14.55	14.16	14.07	14.28	14.26	-0.03	-0.20
of which Russia	11.35	11.53	11.36	11.39	11.34	11.40	0.06	0.51
Other Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.00	-1.15
China	4.02	4.10	4.13	4.05	4.10	4.09	0.08	1.90
Total "Other regions"	18.43	18.77	18.41	18.24	18.50	18.48	0.05	0.25
Total non-OPEC								
production	60.16	61.49	61.51	62.09	63.37	62.12	1.96	3.25
Processing gains	2.25	2.28	2.28	2.28	2.28	2.28	0.03	1.24
Total non-OPEC supply	62.41	63.77	63.79	64.37	65.65	64.40	1.99	3.18
Previous estimate	62.41	63.77	63.72	64.16	65.88	64.39	1.97	3.16
Revision	0.00	0.00	0.07	0.20	-0.23	0.01	0.01	0.02

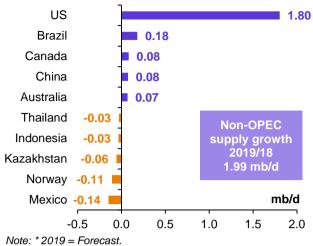
Note: \* 2019 = Forecast.

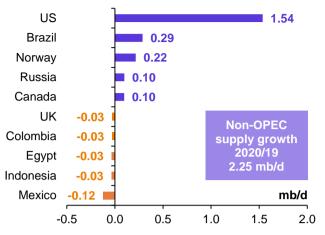
Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

**Graph 5 - 5: Annual supply changes for selected countries in 2019\*** 







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

Note: \*2019 = Forecast. Source: OPEC Secretariat.

Table 5 - 3: Non-OPEC oil supply in 2020\*, mb/d

							Change 20	20/19
	<u>2019</u>	<u>1Q20</u>	<u>2Q20</u>	<u>3Q20</u>	<u>4Q20</u>	<u>2020</u>	<u>Growth</u>	<u>%</u>
Americas	25.76	26.79	27.07	27.48	27.76	27.28	1.51	5.87
of which US	18.50	19.43	20.02	20.23	20.45	20.03	1.54	8.31
Europe	3.78	3.98	3.83	3.85	4.13	3.95	0.17	4.47
Asia Pacific	0.48	0.54	0.53	0.56	0.56	0.55	0.07	15.06
Total OECD	30.02	31.30	31.42	31.90	32.46	31.77	1.75	5.84
Other Asia	3.46	3.42	3.44	3.43	3.44	3.43	-0.03	-0.83
Latin America	5.38	5.62	5.59	5.60	5.74	5.64	0.26	4.81
Middle East	3.21	3.20	3.24	3.25	3.27	3.24	0.03	0.99
Africa	1.58	1.61	1.60	1.59	1.59	1.60	0.02	1.33
Total DCs	13.62	13.85	13.86	13.87	14.04	13.91	0.28	2.08
FSU	14.26	14.33	14.43	14.35	14.63	14.43	0.17	1.21
of which Russia	11.40	11.35	11.50	11.51	11.64	11.50	0.10	0.86
Other Europe	0.12	0.12	0.12	0.11	0.11	0.11	-0.01	-4.97
China	4.09	4.11	4.07	4.07	4.12	4.09	0.00	-0.04
Total "Other regions"	18.48	18.56	18.62	18.53	18.86	18.64	0.16	0.89
Total non-OPEC								
production	62.12	63.71	63.91	64.31	65.36	64.32	2.20	3.54
Processing gains	2.28	2.33	2.33	2.33	2.33	2.33	0.05	2.37
Total non-OPEC supply	64.40	66.04	66.24	66.64	67.69	66.65	2.25	3.50
Previous estimate	64.39	66.15	66.08	66.69	68.18	66.78	2.39	3.71
Revision	0.01	-0.12	0.16	-0.05	-0.49	-0.13	-0.14	-0.21

Note: \* 2019-2020 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

## **OECD**

Following robust growth of 2.57 mb/d in 2018, **OECD oil supply in 2019** is forecast to grow by 1.76 mb/d to average 30.02 mb/d, representing a downward revision of 25 tb/d compared to last month's assessment.

For **2020**, yearly growth of 1.79 mb/d is anticipated for OECD oil supply, to average 31.77 mb/d, representing a downward revision of 147 tb/d in y-o-y supply growth compared with last month's assessment. OECD Americas, Europe and Asia Pacific are forecast to grow next year by 1.50 mb/d, 0.17 mb/d and 0.07 mb/d, respectively.

## **OECD Americas**

### US

**US liquids output in June (excluding processing gains)** was steady m-o-m to average 18.36 mb/d, up by 1.98 mb/d y-o-y, while crude oil output dropped by 33 tb/d m-o-m to average 12.08 mb/d, higher by 1.43 mb/d y-o-y. Production of NGLs in June was down by 32 tb/d m-o-m to average 4.81 mb/d, higher by 0.48 mb/d y-o-y. Preliminary data shows that the output of other non-conventional liquids, mainly ethanol, was up in June by 71 tb/d m-o-m to average 1.48 mb/d, higher by 70 tb/d compared to a year ago.

The EIA's latest US monthly production information showed a decrease of 33 tb/d for crude oil production (including lease condensate) to average 12.08 mb/d in June 2019 compared to May, contrary to the weekly data, which would have suggested a m-o-m increase of 127 tb/d. Production in the federal offshore Gulf of Mexico (GoM) was almost flat at 1.91 mb/d.

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

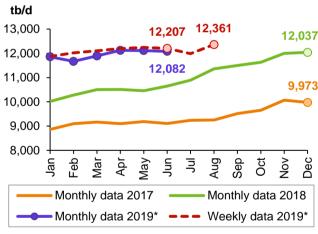
Change **State** May 19 Jun 19 Jun 19/May 19 Alaska 4.969 4,982 13 Colorado 1.911 1,909 -2 Oklahoma 899 885 -14 **New Mexico** 1,367 1,403 36 North Dakota 497 516 19 Federal Offshore -Gulf of Mexico (GoM) 605 547 -58 474 455 -19 Texas Total US crude oil

12,115 12,082

Sources: US EIA and OPEC Secretariat.

production

Graph 5 - 7: US monthly crude oil production in 2017-2019 vs. weekly forecast in 2019



Note: \*2019 = Forecast.

Sources: US EIA and OPEC Secretariat.

In June, crude production in Texas increased by 13 tb/d m-o-m to average 4.98 mb/d. In contrast, oil output in neighbouring New Mexico fell by 14 tb/d to average 0.89 mb/d. Crude and condensate output in Colorado and North Dakota rose by 19 tb/d and 36 tb/d, respectively, to average 0.52 mb/d and 1.4 mb/d. The US crude and condensate production for 1H19 averaged 11.96 mb/d.

-33

Independent oil and gas producers who are active in the US shale industry are cutting spending and pacing their drilling plans for the rest of the year, according to some reports, while peers and oil majors continue to increase production. Investors continue to ask producers to maintain operations within cash flow and boost returns. The unrelenting pressure may be yielding results. The second quarter was the first on record where shale operators achieved positive cash flow — a surplus after paying for capex, Rystad Energy says. Results show that out of 40 US shale oil firms, 35% balanced their spending with cash flows and had an accumulated surplus of \$110mn.

According to independent sources, Pioneer Natural Resources has lowered its 2019 capital expenditure (capex) guidance to \$3.05bn-\$3.25bn from \$3.1bn-\$3.4bn after completing its transition to a pure-play operator focused entirely on the Permian Basin in Texas and New Mexico. Whiting Petroleum, a key operator in North Dakota's Bakken shale, says it is reducing its workforce by 33% in response to volatile prices and natural gas infrastructure constraints. The firm will stick to its full-year capex guidance of \$800mn-\$840mn, but expects spending to fall significantly in the fourth quarter. Concho Resources similarly expects spending to fall in 2H19 as it brings fewer wells on line. It has adjusted down its full-year oil output growth target to 22%-26% for 2019. Concho's second quarter oil production was approximately 206 tb/d, a 44% increase on the year. With regard to the gas production and impact on NGLs output, large gas producers such as Chesapeake, Range Resources and Cabot Oil and Gas will pursue more measured growth. Chesapeake will halt drilling in the Haynesville shale, a gas-bearing formation in eastern Texas and northern Louisiana, and slow development of the Marcellus shale in Pennsylvania and surrounding states to keep output flat.

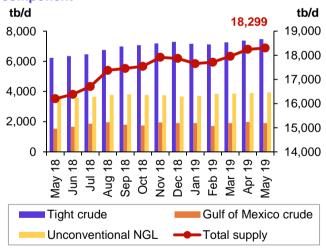
**US crude oil production in 2019** is estimated to grow by 1.22 mb/d y-o-y to average 12.21 mb/d. Weak production performance in Texas, New Mexico, Oklahoma and Alaska in June, combined with lower than expected production in the first five months of the year, has necessitated a downward revision of the crude production forecast for 2019 by 0.09 mb/d to average 12.21 mb/d. The share of tight crude, out of the forecast growth of 1.22 mb/d in 2019, is projected at 1.21 mb/d, for an average of 7.71 mb/d. The GoM is projected to grow by 0.12 mb/d in 2019, averaging 1.88 mb/d and conventional crude (non-shale) output is projected to decline by 0.11 mb/d, to average 2.62 mb/d.

A further slowdown in US oil production is likely as shale producers, under pressure from their investors, continue to cut spending, in particular for exploration and production (E&P). 2H19 US crude oil production is projected to average 12.46 mb/d, higher by 0.50 mb/d versus 1H19 and compared to 11.57 mb/d a year earlier. The combination of independent shale oil and gas producers cutting spending and pacing their drilling plans for the rest of the year, and average WTI prices which fell by approximately \$8/b in 1H19 compared to the average price of \$65.13/b in 2018, will weigh on US production. US crude oil growth is forecast to grow by about 1.1 mb/d in 2020, compared to total annual growth of about 1.2 mb/d in 2019.

**US crude oil production** in 4Q19 is expected to soar, averaging 12.70 mb/d, following the opening of new pipelines leading from the Permian Basin to the US Gulf Coast. Crude output by the end of the year is forecast at 12.85 mb/d and US liquids production is likely to stand at 19.33 mb/d in December 2019.

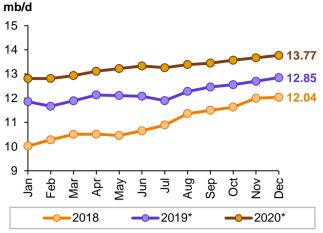
US crude oil production in 2020 is likely to grow only by 1.07 mb/d y-o-y to average 13.28 mb/d, revised down by 0.26 mb/d. Despite the opening of new pipelines from the Permian Basin, overall tight crude growth is forecast at 1.11 mb/d y-o-y for next year to average 8.82 mb/d. The anticipated surge in Permian production will be offset by the need for capital discipline in other regions, particularly those regions with a marginal break-even, which will impact D&C activities leading to a slowdown in y-o-y growth in those areas. Production in the GoM is likely to grow by 0.04 mb/d y-o-y to average 1.92 mb/d. Crude production from conventional reservoirs will decline by 0.08 mb/d y-o-y to average 2.54 mb/d.

Graph 5 - 8: US monthly liquids supply by key component



Source: US EIA and OPEC Secretariat.

Graph 5 - 9: US monthly crude oil supply



Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

Graph 5 - 10: US total liquids supply quarterly



Note: \* 3Q19-4Q20 = Forecast. Sources: US EIA and OPEC Secretariat.

**US liquids supply in 2019** is forecast to average 18.50 mb/d, representing y-o-y growth of 1.80 mb/d. This is down 0.07 mb/d from the previous month's assessment due to lower-than-expected crude output in 2Q19 and the downward revision in the supply forecast for 2H19, particularly for 4Q19.

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

			Change		Change		Change
	<u>2017</u>	<u>2018</u>	<u>2018/17</u>	<u>2019*</u>	<u>2019/18</u>	<u>2020*</u>	2020/19
Tight crude	4.96	6.50	1.54	7.71	1.21	8.82	1.11
Gulf of Mexico crude	1.68	1.76	0.08	1.88	0.12	1.90	0.02
Conventional crude oil	2.71	2.73	0.02	2.62	-0.11	2.56	-0.06
Unconventional NGLs	3.02	3.58	0.56	4.11	0.53	4.54	0.43
Conventional NGLs	0.76	0.77	0.01	0.80	0.03	0.83	0.03
Biofuels + Other liquids	1.27	1.35	0.08	1.38	0.02	1.38	0.01
US total supply	14.40	16.69	2.29	18.50	1.80	20.03	1.54

Note: \* 2019-2020 = Forecast.

Sources: US EIA, Rystad Energy and OPEC Secretariat.

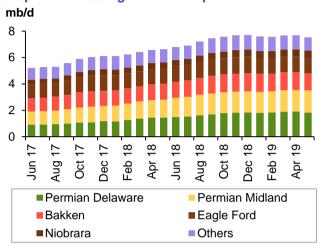
**US liquids supply in 2020** is forecast to average 20.03 mb/d, representing y-o-y growth of 1.54 mb/d. This is down 0.16 mb/d from the previous month's assessment due to downward revision in the supply forecast for the next year, mainly due to higher base declines in the US onshore crude output. It is also lesser y-o-y growth anticipated for the NGLs output at 0.46 mb/d in comparison with the current year. Biofuels and other liquids are also expected to grow in total by 0.01 mb/d to 1.38 mb/d in 2020.

Table 5 - 6: US tight oil production growth, mb/d

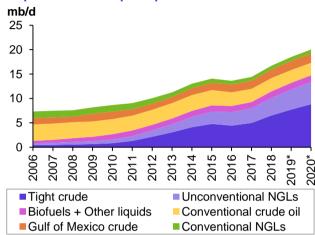
Shale play	<u>2018</u>		<u>2019*</u>		<u>2020*</u>		
		Ү-о-у		Y-o-y		Y-o-y	
tb/d	Production	change	Production	change	Production	change	
Permian tight	2.80	0.96	3.56	0.76	4.36	0.80	
Bakken shale	1.25	0.20	1.45	0.20	1.57	0.12	
Eagle Ford shale	1.18	0.09	1.25	0.07	1.30	0.05	
Niobrara shale	0.46	0.12	0.54	0.08	0.60	0.06	
Other tight plays	0.80	0.17	0.91	0.11	0.99	0.08	
Total	6.50	1.54	7.71	1.21	8.82	1.11	

Note: \* 2019-2020 = Forecast. Source: OPEC Secretariat. The ramp-up of throughput on two new pipelines — Cactus II and EPIC — is expected to boost crude oil production from the Permian. Roughly 2 mb/d of new pipeline capacity was expected to come online between August and the end of 2019. Reuters reported on 15 August that EPIC Midstream Holdings Inc. began shipping crude oil through its 400 tb/d EPIC interim crude line from the Permian Basin to various terminals in Corpus Christi, Texas, on the US Gulf Coast. EPIC is the second pipeline operator this year to open a major line from the Permian to the Corpus Christi area. It followed the start of initial operations on the Plains All American Pipeline LP's 670 tb/d Cactus II in early August. These two pipelines, with a combined capacity of up to 1.07 mb/d, started operations in August, easing an inland bottleneck by funnelling oil to the South Texas export hub. Permian Basin output rose to 4.35 mb/d in August from 3.91 mb/d in January, according to the US Department of Energy.

Graph 5 - 11: US tight crude output breakdown



**Graph 5 - 12: US liquids production breakdown** 



Note: \* 2019-2020 = Forecast.

Sources: US EIA, Rystad Energy and OPEC Secretariat.

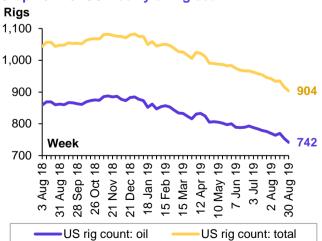
Souces: US EIA and OPEC Secretariat.

For 2020, US tight crude and unconventional NGLs are forecast to continue to dominate non-OPEC supply growth but at slower pace compared to 2019. Production in the Permian Basin will surge following infrastructure debottlenecking. However, D&C slowdowns in other regions due to capital discipline and at the same time the higher based decline in all regions will offset the sizable growth in the Permian.

### US rigs, wells and drilled-but-uncompleted wells (DUCs)

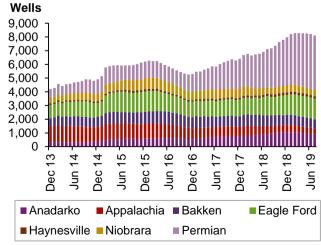
The overall **US rig count** declined by 144 units, or 13.7%, y-o-y to 904 rigs in the week ending 30 August. Out of the active 904 rigs, 876 units were onshore and 28 units were offshore. US oil rigs dropped by 120 units y-o-y to average 742 rigs.

Graph 5 - 13: US weekly oil rig count



Sources: Baker Hughes and OPEC Secretariat.

Graph 5 - 14: US DUCs count by shale play



Sources: US EIA and OPEC Secretariat.

US drillers cut 12 units of **oil rigs** in the week to 30 August, the deepest cut since a week in April, Baker Hughes reported. The total count was down to 742 rigs, from 862 active rigs in the same week a year ago. The oil rig count, an early indicator of future output, has declined over the past eight months as independent exploration and production companies cut spending on new drilling as they focus more on earnings growth instead of increased output. The oil rig count in the Permian Basin stood at 429 rigs in the week ending 30 August, down by 57 units y-o-y, and lower by 5 units w-o-w. In other major basins, the Eagle Ford oil rig count dropped by 11 units y-o-y to 67 rigs, while in Williston and DJ-Niobrara the oil rig count declined by 1 unit each to average 51 and 23 oil rigs, respectively.

With regard to **drilling and completion (D&C)** in all US regions, 1,311 wells were spudded in July, down by 31 wells m-o-m, while 1,411 wells were completed in the same month, according to the EIA's drilling productivity report (DPR).

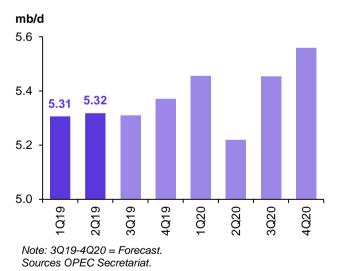
Number of **drilled but uncompleted wells (DUCs)** dropped by 100 wells m-o-m to 8,108 DUCs in July. DUCs count in Permian rose by 9 units m-o-m to 3,999 wells (*Graph 5 - 14*).

### Canada

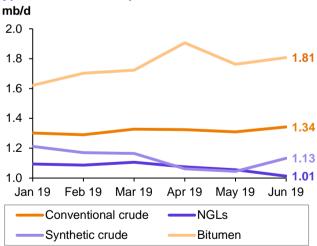
Canadian heavy crude production has faltered since January 2019 under output constraints imposed by the Alberta provincial government to reduce stockpiles that had grown because of limited export capacity. Curtailments led to Western Canada Select prices rising by 15% in 2Q19 versus 1Q19. The Alberta production cuts have decreased from the original 325 tb/d in January 2019 to 175 tb/d for August. This will fall further to 150 tb/d in September. Oil sands output increased to 3.71 mb/d in July and further increases of 25 tb/d for August and September each should bring production to 3.76 mb/d in September.

Canada's liquids supply in May 2019 dropped by 0.20 mb/d m-o-m to average 5.21 mb/d, though it was 0.16 mb/d higher than a year earlier. According to official data, non-conventional oil output decreased by 161 tb/d m-o-m to average 2.85 mb/d in May, though higher by 0.01 mb/d y-o-y. Conventional oil output fell by 15 tb/d to average 1.33 mb/d. NGLs output in May was also down by 20 tb/d to average 1.05 mb/d. Preliminary production data shows that Canadian liquids output recovered in June by 0.13 mb/d to average 5.34 mb/d.

**Graph 5 - 15: Canada quarterly liquids supply** 



**Graph 5 - 16: Canada monthly liquids output by type after mandated production cut** 



Sources: National Energy Board and OPEC Secretariat.

Mining production totalled 1.38 mb/d during 2Q19, an increase of 41 tb/d from 1Q19. Suncor was the main driver for the increase, producing 57 tb/d q-o-q of additional volume across all mining operations. The output surge in mining was primarily due to planned turnarounds and maintenance on in-situ assets, leaving mining operations to fill the gap. With regard to the upgraders, utilisation was strong in 2Q19, with Suncor reporting 86% utilisation at its base operation, down from 1Q19 due to planned maintenance, and 93% at Syncrude, which has been plagued by operational issues over the past few quarters. At CNRL's operations, there was an overall decrease in production due to unplanned maintenance at Horizon, and repairs at the Scotford upgrader following the fire in 1Q19. Although oil production in Canada in 2Q19 during upgrader maintenance

dropped by as much as seen in the same period a year earlier, the easing of the mandatory production cuts in Alberta resulted in much higher-than-expected production for the quarter.

The \$20-30/b decline in international oil prices in late 2018 was a shock to Canada's oil trade. Lack of egress capacity and a shutdown of refineries in the US forced the price paid for Western Canada Select (WCS) to fall to nearly \$15 in November. Since then, these refineries have re-opened and international oil prices have rebounded. The price of Western Canada Select has more than made up for lost ground and is now generally above levels seen in 2016-17. This suggests that the impact of the decline in oil prices may not be as sharp for Canada, according to an analysis by Scotiabank in January 2019.

Following the higher-than-expected oil output in 2Q19, compared to the forecast based on Alberta's mandatory production cut, **Canada's oil supply in 2019** was revised up by 23 tb/d to an average of 5.33 mb/d, representing growth of 0.08 mb/d, y-o-y.

For **2020**, Canadian oil production is forecast to grow by 0.1 mb/d to average 5.42 mb/d. Enbridge's Line 3 project has already been pushed to the second half of 2020, with Husky reportedly reducing spending in Western Canada until sufficient pipeline capacity becomes available.

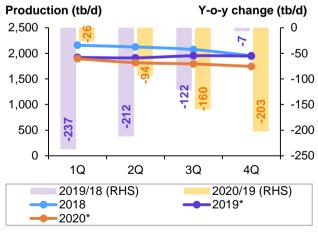
### **Mexico**

**Mexico's preliminary average liquids output in July 2019** shows a decline of 20 tb/d m-o-m to average 1.89 mb/d, representing a significant drop of 0.21 mb/d y-o-y. Crude oil production was down by 18 tb/d to average 1.65 mb/d, lower by 170 tb/d y-o-y, while NGLs output fell slightly, by 1 tb/d m-o-m, to 237 tb/d.

Since 2005, when Mexico liquids production peaked at 3.77 mb/d, the output has declined steadily to average 1.91 mb/d in 2Q19. Pemex has begun to implement its planned field development to raise output to 2.6 mb/d in 2024 through operations at 22 oil fields. The company's first target is to again reach the crude oil production level of June 2018 of 1.83 mb/d, by the end of 2019.

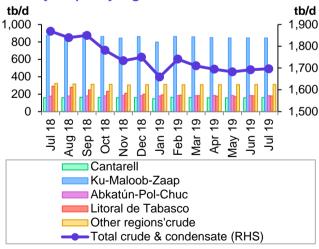
Early last month Mexican contractor Grupo R's newest jack-up rig Cantarell IV spudded the Xikín-32 well, the first offshore drilling programme approved by the new administration of PEMEX Exploration and Production. Xikín is the first of 16 offshore fields PEMEX plans to increase its oil production. Eni has produced its first oil from the Miztón field in the shallow water of Campeche Bay offshore Mexico. Eni is the first international operator to produce oil offshore Mexico following the country's energy reform.

**Graph 5 - 17: Mexico's quarterly liquids supply** 



Note: \* 2019-2020 = Forecast. Source: OPEC Secretariat.

Graph 5 - 18: Mexico's crude and condensate monthly output by region



Sources: Pemex and OPEC Secretariat.

The oil is being transferred through a multiphase subsea pipeline to an onshore reception plant in Sanchez Magallanes and from there to Pemex's San Ramón plant for treatment. Early production started from the Miztón 2 well on the Miztón field in Area 1 in Campeche Bay in early July. This was the initial development from the concession which also contains the Amoca and Tecoalli fields: total in-place resources are estimated at 2.1 billion barrels of oil equivalent (boe) (90% oil). Eni expects the early production phase to deliver up to 15 tb/d of oil with full-field production to begin in early 2021 via an FPSO, building to a peak of

100 tboe/d. Initial production was expected from the Xikín field in August and from additional wells drilled at the mature Xanab, Ayatsil and Mallob oil fields.

Despite the start-up of production in Mexico's new oil fields in 2H19 and following upward revisions in the 3Q19 and 4Q19, liquids supply growth is now forecast to contract by 0.14 mb/d, revised up by 0.01 mb/d, while production remains unchanged to average 1.93 mb/d in 2019.

**Mexico's oil supply growth forecast for 2020**, despite seeing an upward revision of 0.03 mb/d following the reassessment of future supply based on possible new incremental production, is forecast to decline further by 0.12 mb/d to average 1.81 mb/d.

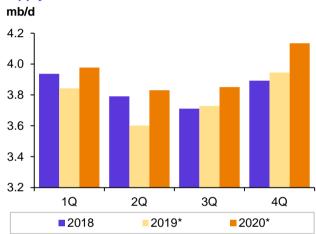
# **OECD Europe**

**OECD Europe's preliminary oil supply in July** increased by 0.35 mb/d m-o-m to average 3.79 mb/d, but was down by 0.14 mb/d y-o-y. The incremental production was due to higher m-o-m oil output in Norway after fields that were closed for maintenance resumed production.

For **2019**, OECD Europe's oil supply is forecast to see a contraction of 0.05 mb/d to average 3.78 mb/d, following growth of 0.01 mb/d in 2018. The projected increase of 0.06 mb/d for the UK is expected to be offset by production declines in other countries, particularly Norway. North Sea oil production is forecast to see a gradual ramp up from 4Q19 onward, owing to the start-up of the giant Norwegian Johan Sverdrup field.

The outlook for **2020** calls for total growth of 0.17 mb/d y-o-y and average oil supply of 3.95 mb/d. While Norway's output is forecast to grow by 0.22 mb/d, production in the UK and Denmark is projected to decline by 0.03 mb/d and 0.02 mb/d, respectively.

**Graph 5 - 19: OECD Europe quarterly liquids supply** 



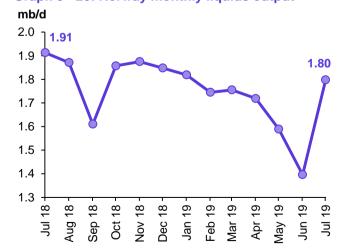
Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

# **Norway**

Heavy maintenance in June led to the lowest historical liquids production of 1.40 mb/d since Norway's production peaked in 2001. **Norwegian liquids supply in July** recovered by 0.40 mb/d mo-m to average 1.80 mb/d, 40 tb/d higher than the NPD's forecast. However, this was lower by 115 tb/d, y-o-y.

Production was affected in the Ekofisk Complex in both Norway and the UK, but was heavier on the Norwegian side because of the three-year cycle of the most intrusive work. The Ekofisk reservoir consists of Cod, Ekofisk, West Ekofisk, Tor, Albuskjell, Eldfisk, Edda and Embla oil fields. The Ekofisk Centre is a vast complex of platforms and structures that also serves as a transportation hub for surrounding fields such as Valhall, Hod. Gyda, Ula, Statfjord, Heimdal, Tommeliten and The whole Gullfaks. complex consists of 29 platforms.

Graph 5 - 20: Norway monthly liquids output

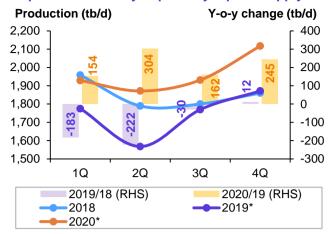


Source: OPEC Secretariat.

Crude oil output in July recovered to average 1.45 mb/d, higher by 391 tb/d m-o-m, while reported NGLs and condensate output averaged 326 tb/d and 25 tb/d, respectively. Natural gas liquids increased every year between 2010 and 2017, but fell by 16 tb/d in 2018 y-o-y to 334 tb/d and are on track to lose another 11 tb/d this year.

Norway's 1H19 production forecast was disappointing due to heavy maintenance, natural declines in mature fields and lack of new production. There was just one new field start upthe Oda field on 16 March 2019. However, production in 2H19 is forecast to grow by 0.14 mb/d compared to 1H19. Aker BP's Skogul field is ready to start up, while three Equinor fields are also scheduled for start-up before year's end. Oil production from Trestakk in the Norwegian Sea,

Graph 5 - 21: Norway's quarterly liquids supply



Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

with recoverable resources estimated at 76 mb of oil, started on 16 July after final testing process, through five tied-back wells to the Åsgard FPSO. Peak production is forecast to be about 44 tb/d of oil, and the field is expected to produce for 12 years, according to Equinor. Utgard field is possibly expected to start up in September and the giant Johan Sverdrup, is expected in October or November. Nevertheless, Norway's total liquids output is expected to contract by 0.11 mb/d to average 1.74 mb/d in 2019. The annual decline rate for liquids supply in 1H19 was 10.7% compared to the same period a year earlier.

For **2020**, Norway's liquids supply growth was revised up by 14 tb/d and is now expected to grow by 0.22 mb/d to average 1.96 mb/d, which is approximately the level of average liquids output in 2017. Johan Sverdrup will account for 50% of the new production. In addition, 20% of the new production will come from the ramp up of the Valhall and Oseberg projects and the start-up of Njord, Yme, and Martin Linge. Maintenance is scheduled for 2Q20 and again for 4Q20.

### UK

**UK crude oil output in July 2019** was down by 50 tb/d to average 0.97 mb/d and was lower by 24 tb/d mb/d y-o-y. NGLs output rose slightly by 4 tb/d to average 104 tb/d. Consequently, liquids output in July fell m-o-m by 0.05 mb/d to average 1.11 mb/d and was lower by 0.04 mb/d y-o-y.

Equinor began oil production from the Mariner field in the East Shetland basin in the UK North Sea on 15 August 2019. Peak production is expected to reach 70 tb/d with total recoverable oil of 300 mb over the next 30 years. The initial capacity at peak was announced before at 55 tb/d.

As a result of reduced Forties loading of 0.25 mb/d in August — the consequence of unplanned restrictions on the pipeline system and outages — it is expected that peak oil production will increase with a new heavy crude stream. Mariner has been one of the UK's largest industrial projects in recent years with total investments of over \$7.7 billion.

**Graph 5 - 22: UK monthly liquids output** 

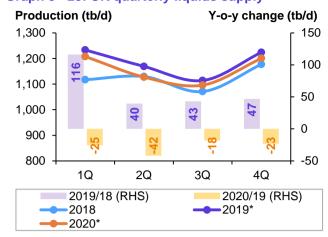


Source: OPEC Secretariat.

For **2019**, UK liquids supply growth is forecast at 0.06 mb/d, a slower pace compared to a year ago at, and remains unchanged m-o-m to average at 1.18 mb/d.

For **2020**, taking into account the growth from new projects – Mariner, Clair, Lancaster and the start-up of Liberator – and expected declines at other fields, UK oil supply is forecast to see an overall contraction of 0.03 mb/d, to average 1.16 mb/d. The main projects in decline include Buzzard, Elgin/Franklin, Golden Eagle Area, Western Isles, Greater Catcher and ETAP. These will account for more than 40% of the total UK decline in 2020. Maintenance is expected to occur in 2Q20 and 3Q20.

Graph 5 - 23: UK quarterly liquids supply



Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

### **OECD Asia Pacific**

Preliminary **Australian crude and condensate production** was flat at 0.36 mb/d in July, higher by 0.08 mb/d y-o-y. At the same time, NGLs output rose by 13 tb/d to 62 tb/d, and resulting total liquids production rose y-o-y by 92 tb/d to 424 tb/d, the highest since June 2014, as LNG projects ramped up.

Woodside Energy started the \$1.9-billion Greater Enfield project which produced its first oil through the Ngujima-Yin FPSO offshore Western Australia. The Greater Enfield project was approved in 2016 with plans to develop the Laverda Canyon, Norton over Laverda, and Cimatti oil accumulations through a 31-km subsea tieback to the Ngujima-Yin FPSO, located over the Vincent field, 50 km offshore Exmouth.

The project scope included a major refit of the Ngujima-Yin FPSO, which was completed at the Keppel Tuas Shipyard in Singapore. The FPSO returned to waters off the North West Cape on 5 May 2019, and production from the Vincent wells resumed on 4 July 2019.

The installation of subsea infrastructure has been completed, with all 12 development wells now also complete. Woodside is targeting annual production of about 100 mboe in 2020.

# **Developing Countries (DCs)**

**Total Developing Countries' (DCs) oil supply for 2019** is expected to grow by 0.15 mb/d y-o-y to average 13.62 mb/d, unchanged from the previous assessment. Latin America and Africa are forecast to see y-o-y growth of 0.18 mb/d and 0.06 mb/d, respectively reaching averages of 5.38 mb/d and 1.58 mb/d. While oil production in Other Asia will decline by 0.09 mb/d y-o-y to average 3.46 mb/d, mainly in Indonesia (-0.03 mb/d), Thailand (-0.03 mb/d), Vietnam (-0.02 mb/d), India (-0.02 mb/d) and Malaysia (-0.02 mb/d), while oil production in the Middle East is expected to remain unchanged y-o-y at 3.21 mb/d.

Table 5 - 7: Developing countries' liquids supply, mb/d

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
2018	13.45	13.53	13.40	13.51	13.47	0.08
2019*	13.43	13.47	13.73	13.86	13.62	0.15
2020*	13.85	13.86	13.87	14.04	13.91	0.28

Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

For **2020**, oil supply in DCs is expected to increase by 0.28 mb/d to average 13.91 mb/d, unchanged m-o-m, driven by higher production in Brazil.

### **Latin America**

### **Brazil**

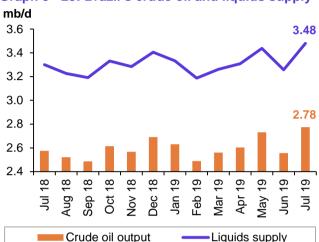
Following heavy maintenance leading to a decline of 174 tb/d in June 2019m-o-m, **Brazil's crude and condensate output** rose by 218 tb/d compared to the previous month to average 2.775 mb/d in July. This not only compensated for the decline in June, but also led to higher output of 44 tb/d compared to May 2019, because of incremental production from the Búzios field in the Santos Basin. Oil output from the Santos presalt region led the crude growth, rising to a record high of 1.73 mb/d, up by 0.28 mb/d y-o-y, of which 0.26 mb/d was produced in Búzios. July crude production was up by 200 tb/d y-o-y.

Graph 5 - 24: Brazil's quarterly liquids supply



Note: \* 3Q19-4Q20 = Forecast. Sources: National Agency of Petroleum, Natural Gas and Biofuels: and OPEC Secretariat.

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



Source: OPEC Secretariat.

Brazilian state-run oil company Petrobras posted a long-awaited production boost in July after a disappointing June, as it ramped up production in the promising offshore pre-salt region. Previously, Petrobras had reported the production of 2.76 mb/d of oil equivalent in July, up from 2.63 mb/d in 2Q19 and hitting a record of 3 mb/d of oil equivalent on 28 July. Output of NGLs in July was also up by a slight 2 tb/d to average 99 tb/d, while biofuels output was unchanged m-o-m at 603 tb/d. In terms of total liquids, oil supply in July averaged 3.48 mb/d, an increase of 0.22 mb/d m-o-m, higher by 0.18 mb/d y-o-y.

Crude oil output is projected to grow by between 0.32-0.36 mb/d in 2H19 vs 1H19. This expectation is based on approved production plateau in P-74 FPSO at full capacity and rising oil output in P-75 by 32 tb/d in July. It also assumes full planned production to materialise in the Búzios and Lula fields. Moreover, the P-68 FPSO is also expected to start production from the Berbgao/Sururu oil field by the end of this year. If all this planned production materializes, Brazil's liquids supply in **2019** is forecast to grow by 0.18 mb/d y-o-y to average 3.48 mb/d, unchanged from the previous month's assessment.

For 2020, y-o-y growth of 0.29 mb/d for an average of 3.77 mb/d is forecast, also unchanged from last month's assessment. More than 80% of the estimated additional output from new projects is expected to come from the Búzios (x-Franco), Lara and Lula. This will be partially offset by a forecast 0.12 mb/d of natural decline, more than half of which will be due to mature fields such as Parque das Baleia, Marlim Sul (South), Roncador, Mero (Libra NW) and Marlim Leste.

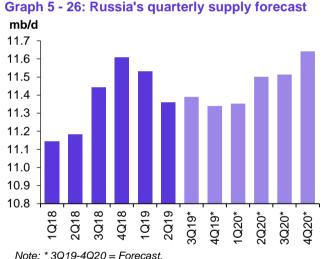
### **FSU**

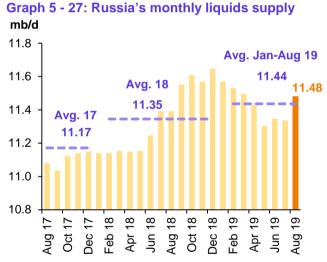
**FSU oil supply in 2019** is forecast to see a contraction of 0.03 mb/d y-o-y to average 14.26 mb/d, revised up from last month's assessment. Russia's oil supply is expected to increase by 0.06 mb/d y-o-y to average 11.40 mb/d, while oil output is likely to decline in Kazakhstan, Azerbaijan and FSU others by 0.06 mb/d, 0.01 mb/d and 0.02 mb/d, respectively.

For **2020**, FSU oil supply is forecast to grow by 0.17 mb/d y-o-y and average 14.43 mb/d. Oil production in Russia is expected to rise by 0.10 mb/d to average 11.50 mb/d, assuming that production remains adjusted to 11.34 mb/d in 1Q20. The idea of opening up Russia's Arctic offshore to non-state firms – Rosneft and Gazprom – reportedly remains on the agenda, with plans for legislation defining new rules on access to remaining undistributed reserves. Oil supply in Kazakhstan is likely to grow by 0.09 mb/d, while remaining unchanged in Azerbaijan compared to 2019 and falling by 0.02 mb/d in FSU others.

### Russia

Russian liquids supply in August 2019 rose by 0.14 mb/d m-o-m to average 11.48 mb/d, up by 0.09 mb/d y-o-y. This followed debottlenecking of production restrictions due to contamination in the Druzhba pipelines. Production ramp-ups from the Rosneft-operated fields that opened last year, such as Russkoye, Srednebotuobinskoye phase-2 and Tagulskoye, as well as Lukoil's Filanovsky phase-2 and also Gazprom Neft-operated Novoportovskoye phase-2, have been the main sources of new incremental output in 2019 that could also offset parts of natural declines in mature fields. Rosneft's crude and condensate production in August rose by 1.68% y-o-y to average 3.99 mb/d. The other Russian majors saw production decline compared to a year earlier. Russia's main priority in the upstream sector is to develop new projects over the next five years to compensate for declines in mature fields.





Sources: Nefta Compass and OPEC Secretariat.

The August 2019 production level has necessitated the 3Q19 to be revised up to 11.39 mb/d. Taking this into account, **Russia's oil supply in 2019** is forecast to grow by 0.06 mb/d to average 11.40 mb/d. For **2020**, growth of 0.10 mb/d is anticipated to average 11.50 mb/d.

# Caspian

#### Kazakhstan

Source: OPEC Secretariat.

**Kazakhstan's liquids output** in **July** was down marginally by 0.01 mb/d m-o-m to average 1.89 mb/d, higher y-o-y by 0.05 mb/d. Crude oil output was flat at 1.62 mb/d, according to direct communication.

However, oil production in 2H19 is expected to be lower by 0.07 mb/d compared to 1H19 because of seasonal maintenance in August and September in the Tengiz field. Oil output from Tengiz and the Karachaganak oil fields in July was reported at 0.6 mb/d and 0.24 mb/d, respectively.

Average crude oil output from the Kashagan field produced by the North Caspian Operating Consortium (NCOC) rose by 9 tb/d m-o-m to average 354 tb/d in July, higher by 0.07 mb/d y-o-y. The NCOC plans to boost production in Kashagan through gas injection in order to ramp up production to as high as 470 tb/d.

Oil supply in Kazakhstan is expected to decline by 0.06 mb/d to average 1.76 mb/d in **2019**, revised up by 25 tb/d, while it is forecast to grow by 0.09 mb/d y-o-y to average 1.85 mb/d in **2020**, mainly as a result of the Kashagan ramp-up.

Graph 5 - 28: Kazakhstan's quarterly liquids output



Note: \* 3Q19-4Q20 = Forecast. Source: OPEC Secretariat.

### **Azerbaijan**

Azerbaijan's liquids output in July increased by 0.01 mb/d m-o-m to average 0.80 mb/d. Crude oil output was up by 9 tb/d m-o-m to average 696 tb/d. Oil production in 3Q19 is likely to remain at 0.80 mb/d as maintenance ended in BP's platform in 2Q19. However, maintenance is planned for another BP platform in Western Chirag in October 2019.

For **2019**, oil supply in Azerbaijan, following a downward revision by 20 tb/d in 4Q19, is expected to average 0.79 mb/d, representing a contraction of 0.01 mb/d.

For **2020**, production is forecast to remain unchanged, averaging 0.79 mb/d.

Graph 5 - 29: Azerbaijan's quarterly liquids supply



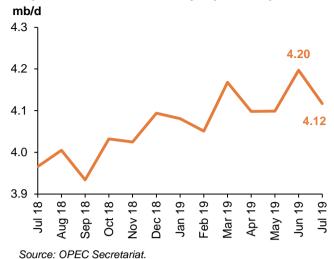
Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

## China

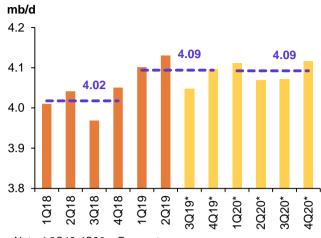
China's liquids production in July 2019, following m-o-m growth of 0.10 mb/d in June, declined by 0.08 mb/d to average 4.12 mb/d, according to official data. This was up by 0.15 mb/d y-o-y. Crude oil production in July fell by 82 tb/d m-o-m to 3.84 mb/d, which was higher by 104 tb/d y-o-y. Year-to-date average growth of 0.05 mb/d was driven by incremental production in Xinjiang province, where production has risen since the beginning of the year. Preliminary August production data indicates marginal decline of 0.05 mb/d following Typhoon Lekima. China's liquids production in 2019 is expected to grow by 0.08 mb/d to average 4.09 mb/d, unchanged from the previous month's assessment. This assessment assumes maintenance and possible flooding in 3Q19 may impact oil output by a maximum of 0.08 mb/d q-o-q, for an anticipated average of 4.05 mb/d.

For **2020**, oil production in China is forecast to remain stagnant at 4.09 mb/d. Following the government policy of increasing domestic crude oil production capacity, CNPC and Sinopec signed a joint research framework agreement in July to facilitate collaboration in upstream exploration in the Tarim, Sichuan and Junggar Basins. However, oil production in the next years will depend on foreign investor spending in the upstream sector amid the US-China trade dispute.

Graph 5 - 30: China's monthly liquids output



Graph 5 - 31: China's quarterly liquids output



Note: \* 3Q19-4Q20 = Forecast. Source: OPEC Secretariat.

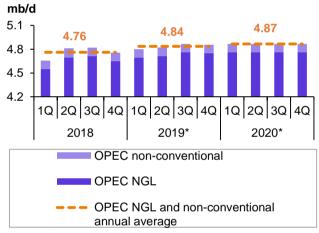
# **OPEC NGLs and non-conventional oils**

**OPEC NGLs and non-conventional liquids in 2019** are forecast to grow by 0.07 mb/d to average 4.84 mb/d, unchanged from last month's assessment.

Preliminary production data in **August 2019** showed steady output, averaging 4.84 mb/d, compared to a month earlier, with a remarkable decrease of 0.20 mb/d y-o-y.

For **2020**, the preliminary forecast indicates minor growth of 0.03 mb/d to average 4.87 mb/d.

**Graph 5 - 32: OPEC NGL and non-conventional liquids output** 



Note: \*2019-2020 = Forecast. Sources: OPEC Secretariat.

Table 5 - 8: OPEC NGL + non-conventional oils, mb/d

	Change							Change	
	<u>2018</u>	<u>2019</u>	<u>19/18</u>	<u>1Q20</u>	<u>2Q20</u>	<u>3Q20</u>	<u>4Q20</u>	<u>2020</u>	<u>20/19</u>
Total OPEC	4.76	4.84	0.07	4.87	4.87	4.87	4.87	4.87	0.03

Note: 2019-2020 = Forecast. Source: OPEC Secretariat.

# **OPEC crude oil production**

According to secondary sources, total **OPEC-14 preliminary crude oil production** averaged 29.74 mb/d in August, higher by 136 tb/d m-o-m. Crude oil output increased mostly in Saudi Arabia, Nigeria, Iraq and the UAE, while it declined mainly in Venezuela, Iran, I.R., Libya, Kuwait and Algeria.

Table 5 - 9: OPEC crude oil production based on secondary sources, tb/d

	<u>2017</u>	<u>2018</u>	<u>4Q18</u>	<u>1Q19</u>	<u>2Q19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	<u>Aug/Jul</u>
Algeria	1,047	1,042	1,055	1,026	1,019	1,005	1,027	1,016	-11
Angola	1,634	1,505	1,496	1,443	1,420	1,403	1,395	1,394	-1
Congo	252	317	318	326	334	337	325	318	-7
Ecuador	530	519	517	526	529	527	535	537	1
Equatorial									
Guinea	133	125	114	115	114	115	121	120	-1
Gabon	200	187	188	209	210	221	204	206	2
Iran, I.R.	3,813	3,553	2,982	2,725	2,407	2,260	2,218	2,194	-24
Iraq	4,446	4,550	4,669	4,631	4,702	4,713	4,736	4,779	43
Kuwait	2,708	2,745	2,774	2,715	2,694	2,674	2,670	2,653	-17
Libya	811	951	1,056	965	1,154	1,118	1,078	1,056	-21
Nigeria	1,658	1,718	1,739	1,736	1,781	1,808	1,780	1,866	86
Saudi Arabia	9,954	10,311	10,749	10,019	9,769	9,829	9,687	9,805	118
UAE	2,916	2,986	3,236	3,066	3,063	3,070	3,074	3,085	11
Venezuela	1,911	1,354	1,191	975	776	785	755	712	-43
Total OPEC	32,014	31,864	32,084	30,478	29,972	29,865	29,605	29,741	136

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

Source: OPEC Secretariat.

Table 5 - 10: OPEC crude oil production based on direct communication, tb/d

	<u>2017</u>	<u>2018</u>	<u>4Q18</u>	<u>1Q19</u>	<u>2Q19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	<u>Aug/Jul</u>
Algeria	1,059	1,040	1,067	1,027	1,017	1,006	1,032	1,019	-13
Angola	1,632	1,473	1,434	1,421	1,424	1,418	1,259	1,328	69
Congo	263	323	326	343	340	337	338		
Ecuador	531	517	516	529	531	531	541	550	9
Equatorial									
Guinea	129	120	112	108	114	114	111	106	-5
Gabon	210	193	206	214	225	225	224		
Iran, I.R.	3,867								
Iraq	4,469	4,410	4,460	4,540	4,565	4,600	4,620	4,650	30
Kuwait	2,704	2,737	2,755	2,712	2,681	2,643	2,652	2,605	-47
Libya									
Nigeria	1,536	1,602	1,631	1,689	1,721	1,802	1,827	1,905	78
Saudi Arabia	9,959	10,317	10,790	10,053	9,752	9,782	9,580	9,789	209
UAE	2,967	3,008	3,285	3,055	3,050	3,046	3,068	3,065	-3
Venezuela	2,035	1,510	1,470	1,289	1,045	1,047	906	933	27
Total OPEC									

Notes: .. Not available.

Totals may not add up due to independent rounding.

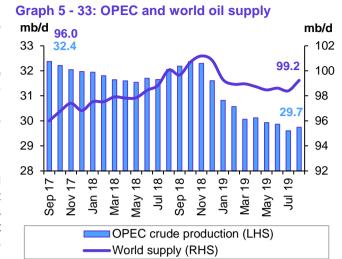
Source: OPEC Secretariat.

# World oil supply

Preliminary data indicates that **global oil supply in August** increased by 0.83 mb/d m-o-m to average 99.24 mb/d, compared to the previous month.

Non-OPEC supply (including OPEC NGLs) increased by 0.70 mb/d m-o-m to average 69.50 mb/d in August, higher by 1.48 mb/d y-o-y. Preliminary incremental production in August was mainly driven by the US, Canada, Malaysia, Brazil and Russia.

The share of OPEC crude oil in total global production declined by 0.1% to 30.0% in August 2019 compared to 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.



Source: OPEC Secretariat.

# **Product Markets and Refinery Operations**

**Global product markets** showed an overall mixed market performance in August, with a notable downturn in the naphtha and fuel oil markets.

In the **US**, product markets suffered great losses, as all products across the barrel weakened, with the sharpest downturn felt at the top and bottom of the barrel, pressured by higher product output in the region, which placed product prices under pressure over the month.

In **Europe**, middle distillates continued to perform positively, supported by healthy demand amid higher product imports over the month, which offset weakening at the top and bottom of the barrel and provided a slight improvement in refining margins.

**Asian** product markets lost ground, pressured by weaker fundamentals and a deterioration in high-sulphur fuel oil (HSFO) markets, as buying interest from the bunker sector declined in August and weighed on HSFO prices, and ultimately, refining margins.

# **Refinery margins**

**US** refinery margins fell in August, affected by greater refined product output, which led to a build in product stocks and put pressure on product prices over the month. Moreover, the end of the driving season brought additional negative sentiment to US product markets, as preparations took place for the switch to winter-grade gasoline, and expectations of lower transport fuel requirements in the near term further weighed on product prices, leading to weaker product cracks.

All products suffered losses in August, however the sharpest downturn took place in the fuel oil segment. Higher fuel oil availability and lower requirements from the bunker sector caused fuel oil cracks to plunge from the strong positive levels recorded in the previous month, deeply into negative territory, losing \$10.88/b m-o-m. US refinery margins for WTI averaged \$14.19/b in August, down by \$4.37 m-o-m and lower by \$1.92 y-o-y.

Graph 6 - 1: Refining margins US\$/b US\$/b 20 20 15 15 10 10 5 5 0 Mar 19 May 19 Jun 19 19 9 , gn√ Dec WTI (US Gulf) Brent (Rotterdam) Oman (Singapore)

Sources: Argus Media and OPEC Secretariat.

Refinery margins in **Europe** exhibited a slightly positive performance in contrast to what was observed in the other main trading hubs, as product markets across the barrel, with the exception of naphtha, managed to gain some ground on the back of strong exports, despite stronger refinery runs. Refinery margins for Brent in Europe averaged \$7.75/b in August, slightly up by 9¢ compared with a month earlier, but down by \$1.21 y-o-y.

**Asian** refinery margins declined from multi-month record highs recorded the previous month, pressured by a rise in product output, as refineries in the region returned from peak refinery maintenance season and refinery runs started to increase for the first time after declines witnessed in recent months. Refinery margins for Oman in Asia lost \$2.62 m-o-m to average \$4.70/b in August, and were lower by \$3.28 y-o-y.

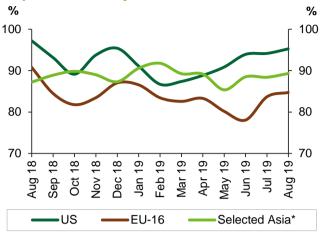
# **Refinery operations**

In the **US**, refinery utilization rates increased in August, averaging 95.26%, which corresponds to a throughput of 18.20 mb/d. This represents a rise of 1.1 pp or 490 tb/d compared with the previous month. Y-o-y, the August refinery utilization rate was down by 1.95 pp, with throughputs up by 223 tb/d.

**European** refinery utilization averaged 84.74% in August, corresponding to a throughput of 10.50 mb/d. This is a m-o-m rise of 1.0 pp, or 130 tb/d. Y-o-y, utilization rates decreased by 6.02 pp and throughputs were down by 751 tb/d.

In **selected Asia** — comprising Japan, China, India and Singapore — refinery utilization rates rose, averaging 89.32% in August, corresponding to a throughput of 25.09 mb/d. Compared with the previous month, throughputs were up by 0.9 pp and 260 tb/d. Meanwhile, y-o-y they were up by 1.13 pp or 1.12 mb/d.

Graph 6 - 2: Refinery utilization rates



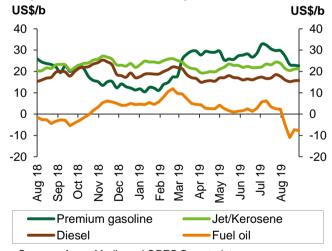
Note: \* Includes Japan, China, India and Singapore Sources: EIA, Euroilstock, PAJ and Argus Media.

#### **Product markets**

#### **US** market

US gasoline cracks saw considerable losses, pressured by stronger gasoline output, which resulted in a rise in total US gasoline inventory levels in the first and third weeks of the month. In addition, ongoing preparations are underway for the winter-grade gasoline switch in September, as the last summer-grade contracts approach termination. and summer grade gasoline stocks are intentionally being depleted. Winter grade specifications allow for lower blending volumes of octane-boosting components in the final gasoline pool. Gasoline prices declined by \$9.22/b, pressuring the gasoline crack. In addition, lower export opportunities to Europe in August further contributed to the poor performance in gasoline crack spreads, which lost \$6.55 m-o-m to average \$24.49/b in August, but were up by 88¢ v-o-v.

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



Sources: Argus Media and OPEC Secretariat.

The USGC **jet/kerosene crack spread** lost some ground, pressured by a rise in US jet fuel during the first week of the month of August. Softening bullishness, as the end of the summer peak air travel season approaches, likely provided additional pressure emerging from expectations of slower demand from the aviation sector in the months ahead. The US jet/kerosene crack spread against WTI averaged \$21.25/b, down by \$2.26 m-o-m and lower by 16¢ y-o-y.

US **gasoil crack spreads** performed negatively, affected by a pick-up in diesel production that contributed to a stock build in inventory levels for some of the weeks during the month. Simultaneously, bullish sentiment, caused by the impending IMO 2020 implementation date and the resulting rise in demand for compliant marine fuels as ship owners and traders prepare for the fuel shift continue to provide some support, helping

to limit losses in August. The US gasoil crack spread averaged \$15.84/b, down by \$1.59 m-o-m and \$1.30 y-o-y.

The US **fuel oil crack spread** deteriorated, as fuel oil prices declined by a hefty \$13.55/b in August. This was due to higher fuel oil availability amid stronger refinery runs and lower demand from the bunker sector. In August, the US fuel oil crack spread averaged minus \$6.82/b, down by \$10.88 m-o-m and \$3.68 y-o-y.

#### **European market**

Gasoline crack spreads strengthened slightly, supported by higher deliveries to Africa despite lower domestic consumption and lower exports to the US. Healthy gasoline inventory levels in the US, the approaching end of the holiday driving season in both there and in Europe, as well as already observed strong refinery runs, should keep gasoline exports and cracks under pressure in the near term.

The gasoline crack spread averaged \$18.81/b in August, up by 39¢ m-o-m but down by \$3.56 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent US\$/b US\$/b 30 30 15 15 0 0 -15 -15 -eb 19 , 20 Jan Ö Premium gasoline Jet/Kerosene Gasoil Fuel oil

Sources: Argus Media and OPEC Secretariat.

**Jet/kerosene** crack spreads also performed strongly, well supported by solid regional demand from the aviation sector, as air travel activities were healthy. Looking ahead, European jet/kero markets could see some pressure as demand declined in line with seasonal trends, while the global balance grew on the back of stronger refinery runs. The Rotterdam jet/kerosene crack spread averaged \$18.23/b, up by \$1.04 m-o-m and higher by \$2.91 y-o-y.

European **gasoil** crack spreads strengthened in August, showing their strongest positive performance in the European product market. Bullish sentiment took place due to IMO 2020-related optimism, which suggests a pick-up in diesel buying interest to help meet the demand for bunker fuels. The gasoil crack spread averaged \$16.61/b, higher by \$1.98 m-o-m and by 76¢ y-o-y.

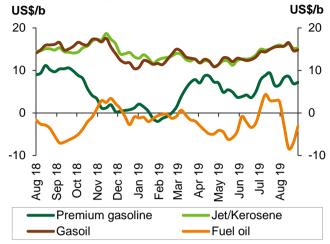
At the bottom of the barrel, **fuel oil 3.5% crack spreads** in Rotterdam showed sharp losses caused by weaker fundamentals, as demand declined and the regional fuel oil balance got longer compared with the previous month. In Europe, fuel oil cracks averaged minus \$15.41/b in August, losing \$7.69 m-o-m and \$5.36 y-o-y.

#### **Asian market**

The **Asian gasoline 92** crack spread against Dubai moved slightly higher, supported by healthy exports despite a rise in product output, as refineries ramped up operations following peak refinery maintenance season. The Singapore gasoline crack spread against Oman averaged \$7.67/b in August, down by 23 ¢ m-o-m and by minus \$2.30 y-o-y.

Singapore **naphtha crack spreads** declined for the second consecutive month as lacklustre demand witnessed the previous month was exacerbated, and ample petrochemical feedstock supplies were linked to higher refinery runs in the region, following the end of peak scheduled turnarounds. The Singapore naphtha crack spread against Oman averaged minus \$8.18/b, having declined by 65¢ m-o-m, and \$7.47 v-o-v.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus Media and OPEC Secretariat.

In the middle of the barrel, **jet/kerosene** crack spreads in Asia trended slightly upward on the back of firm fundamentals, as regional jet fuel consumption remained well sustained. However, as the holiday season in Europe comes to an end, a narrowing of the arbitrage window to Europe can be expected, which could exert pressure on Asian jet/kerosene markets in the near term. The Singapore jet/kerosene crack spread against Oman averaged \$15.69/b, up by 47¢ m-o-m and 85¢ y-o-y.

The Singapore **gasoil crack spread** in August moved slightly upward on the back of stronger exports, particularly to Africa, despite weaker pull from the Middle East and Europe. Moreover, higher gasoil availability in the US led to higher exports, which weighed further on Asian diesel markets. The Singapore gasoil crack spread against Oman averaged \$16.12/b, up by 88¢ m-o-m and by 66¢ y-o-y.

The Singapore **fuel oil crack spread** reversed trends and plummeted from the record highs witnessed the previous month, eroding the high sulphur fuel oil market structure into the steep backwardation registered in July. A rise in refinery fuel oil output, as refineries returned from peak maintenance season in Asia, eliminated the market tightness recorded in the recent past, which weighed on Asian fuel oil cracks. HSFO prices in Singapore saw a hard fall in the first week of August, losing \$11.64/b to average \$54.44/b. The negative performance in fuel oil cracks was further exacerbated by a reduction in crude prices during the same time period.

Ongoing preparations for the marine fuel shift should continue to encourage further reductions in fuel oil supplies with a tightening market possibly supporting prices. Singapore fuel oil cracks against Oman averaged minus \$4.44/b, down by \$7.31 m-o-m and \$1.09 v-o-v.

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

<u>Event</u>	Time frame	<u>Asia</u>	<u>Europe</u>	<u>us</u>	<u>Observations</u>
Peak autumn maintenance season	Sep 19 – Oct 19	↑ Some positive impact on product markets	↑ Some positive impact on product markets	↑ Some positive impact on product markets	Declines in product outputs should slow down growth in product inventory levels, thus supporting prices as well as product cracks.
End of driving and peak travelling season	Sep 19	◆ Some negative impact on product markets	<ul> <li>✓ Some negative impact on product markets</li> </ul>	Some negative impact on product markets	Road and aviation transport fuel cracks may come under pressure in the coming months.
Monsoon season	Jun 19 – Oct 19		-	-	Gasoil markets in India are expected to come under pressure as seasonal rains curtail agricultural activities.
Lower heavy crude availability	Mid-term	↑ Some positive impact on product markets	↑ Some positive impact on product markets	↑ Some positive impact on product markets	May support prices of heavier products and cracks.
Preparations for IMO 2020	May 19 – Dec 19	↑ Some positive impact on product markets (short term)	↑ Some positive impact on product markets (short term)	↑ Some positive impact on product markets (short term)	Refineries are expected to include plant upgrades during this year's refinery maintenance season to accommodate upcoming IMO regulations. This could lead to pressure on crude intake and declines in product availability.
CDU additions	May 19 – Dec 19		▶ Negative impact on product markets	◆ Negative impact on product markets	An overall increase in product output is to be expected and could further exacerbate the oversupply environment, leading to trade flow rearrangements or a reduction in exports as more nations head towards self-sufficiency.

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Re	Refinery throughput, mb/d					itilization, % Change <u>Aug 19</u> <u>Aug/Jul</u>		
				Change				Change	
	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	<u>Aug/Jul</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug/Jul	
US	17.67	17.70	18.20	0.49	93.93	94.16	95.26	1.1 pp	
Euro-16	9.68	10.37	10.50	0.13	78.07	83.69	84.74	1.0 pp	
France	0.90	1.05	1.07	0.02	63.87	74.54	76.14	1.6 pp	
Germany	1.75	1.84	1.85	0.01	79.84	83.96	84.63	0.7 pp	
Italy	1.37	1.25	1.08	-0.17	66.96	61.00	52.58	-8.4 pp	
UK	0.98	1.04	1.07	0.03	75.19	79.57	82.09	2.5 pp	
Selected									
Asia*	24.86	24.83	25.09	0.26	88.51	88.41	89.32	0.9 pp	

Note: \* Includes Japan, China, India and Singapore.

Sources: EIA, Euroilstock, Petroleum Association of Japan and OPEC Secretariat.

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

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>3Q18</u>	<u>4Q18</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>
Total OECD	37.43	38.13	37.99	38.89	37.89	37.27	37.13	38.49
OECD Americas	18.78	19.09	19.30	19.79	19.14	18.36	19.00	19.78
of which US	16.51	16.88	17.32	17.68	17.33	16.46	17.13	17.88
OECD Europe	11.91	12.24	11.99	12.44	11.92	12.06	11.68	12.15
of which:								
France	1.14	1.17	1.10	1.21	1.15	1.12	0.98	1.07
Germany	1.93	1.91	1.80	1.78	1.65	1.76	1.70	1.64
Italy	1.30	1.40	1.35	1.37	1.35	1.24	1.33	1.11
UK	1.09	1.10	1.06	1.14	1.14	1.08	1.03	1.09
OECD Asia Pacific	6.75	6.80	6.70	6.66	6.82	6.85	6.45	6.56
of which Japan	3.28	3.22	3.11	3.07	3.20	3.19	2.94	2.99
Total Non-OECD	41.41	42.23	43.44	43.54	43.82	43.74	43.31	44.27
of which:								
China	10.77	11.35	12.03	12.10	12.25	12.63	12.66	12.78
Middle East	6.93	7.04	7.26	7.34	7.46	7.17	7.12	7.24
Russia	5.58	5.59	5.72	5.81	5.73	5.71	5.38	5.78
Latin America	4.66	4.52	4.22	4.18	4.08	4.00	4.03	3.97
India	4.68	4.73	4.83	4.78	4.83	5.23	5.02	5.05
Africa	2.20	2.21	2.22	2.24	2.18	2.08	2.15	2.19
Total world	78.84	80.36	81.43	82.43	81.70	81.01	80.44	82.76

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

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

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

				Change	A verage	Year-to-date
		<u>Jul 19</u>	<u>Aug 19</u>	<u>Aug/Jul</u>	<u>2018</u>	<u>2019</u>
US Gulf (Cargoes FOB):						
Naphtha*		57.89	50.02	-7.87	68.51	57.28
Premium gasoline	(unleaded 93)	88.55	79.33	-9.22	85.78	81.23
Regular gasoline	(unleaded 87)	80.39	72.56	-7.83	80.17	74.40
Jet/Kerosene		81.02	76.09	-4.93	85.35	79.69
Gasoil	(0.2% S)	74.94	70.68	-4.26	80.99	74.62
Fuel oil	(3.0% S)	58.44	45.04	-13.40	60.17	58.10
Rotterdam (Barges FoB)	<b>)</b> :					
Naphtha		55.48	49.20	-6.28	66.47	55.43
Premium gasoline	(unleaded 98)	82.33	77.64	-4.69	87.34	80.66
Jet/Kerosene		81.10	77.06	-4.04	86.93	80.23
Gasoil/Diesel	(10 ppm)	78.54	75.44	-3.10	85.94	79.66
Fuel oil	(1.0% S)	59.18	55.69	-3.49	62.33	59.72
Fuel oil	(3.5% S)	56.19	43.42	-12.77	59.04	55.15
Mediterranean (Cargoes	s FOB):					
Naphtha	,	54.42	48.74	-5.68	65.79	54.37
Premium gasoline**		75.46	69.65	-5.81	79.08	71.74
Jet/Kerosene		78.97	75.41	-3.56	85.10	78.05
Diesel		78.12	75.32	-2.80	85.66	79.28
Fuel oil	(1.0% S)	64.77	57.78	-6.99	63.53	62.81
Fuel oil	(3.5% S)	57.84	44.98	-12.86	60.36	56.54
Singapore (Cargoes FO	B):					
Naphtha	•	55.68	50.70	-4.98	67.24	56.32
Premium gasoline	(unleaded 95)	73.61	70.08	-3.53	79.93	71.24
Regular gasoline	(unleaded 92)	71.11	66.55	-4.56	77.66	69.13
Jet/Kerosene		78.43	74.57	-3.86	84.81	77.67
Gasoil/Diesel	(50 ppm)	78.53	75.08	-3.45	84.67	78.13
Fuel oil	(180 cst)	66.08	54.44	-11.64	65.24	62.37
Fuel oil	(380 cst 3.5% S)	65.49	53.70	-11.79	64.74	61.68

Note: \* Barges.

<sup>\*\*</sup> Cost, insurance and freight (CIF).

#### **Tanker Market**

**Dirty vessel spot freight rates** were broadly flat in August as gains in VLCCs were outweighed by declines in average rates for Aframax and Suezmax. A pick up in tonne-mile demand and reduced deliveries supported the VLCC market at the start of the month before slowing activities allowed availability to build, capping gains.

**Clean tanker market spot freight rates** remained under pressure with strong declines west of Suez offsetting an improvement east of Suez. The return of refineries from maintenance reduced the need for interregional trade flows.

# **Spot fixtures**

**Global spot fixtures** edged lower in August, down by around 0.16 mb/d or 1% m-o-m and around 1.37 mb/d or 7% lower than the same month a year ago. Indeed, global spot fixtures have broadly underperformed compared to the previous year, as the seasonal rise in activity was insufficient to offset exiting availability.

Table 7 - 1: Spot fixtures, mb/d

				Change
	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug 19/Jul 19
All areas	19.73	19.79	19.63	-0.16
OPEC	13.17	13.98	13.90	-0.08
Middle East/East	6.79	7.59	8.21	0.62
Middle East/West	1.84	1.77	1.28	-0.49
Outside Middle East	4.55	4.62	4.41	-0.22

Sources: Oil Movements and OPEC Secretariat.

**OPEC spot fixtures** also remained below y-o-y levels. In August, OPEC spot fixtures averaged 13.90 mb/d, marginally lower than the previous month and about 0.27 mb/d or 2% lower y-o-y.

Fixtures from the **Middle East-to-West** averaged 1.28 mb/d in August, representing a drop of 28% m-o-m and 36% y-o-y. The decline in crude flows to North America has been the one of the key contributors to this decrease, as burgeoning US crude supply dampened the need for inflows from outside the region.

In contrast, fixtures on the **Middle East-to-East route** increased 0.62 mb/d or 8% in August to 8.21 mb/d. Annually, fixtures on the route were some 0.35 mb/d or 4% higher than last year's levels. New refinery capacity in China and the return of Asian refineries from maintenance helped support the y-o-y and m-o-m increase.

**Outside of the Middle East** fixtures averaged 4.41 mb/d in August, a decline of 0.22 mb/d or 4.7% from the previous month but an increase of 0.11 mb/d or 2% compared to the same month last year.

## Sailings and arrivals

**OPEC sailings** rose 0.5% m-o-m in August to average 24.72 mb/d, but were down 0.2% y-o-y. Sailings from the Middle East increased 2.5% or 0.44 mb/d m-o-m and gained 1.2% or 0.22 mb/d compared to the same month last year.

In monthly terms, **crude arrivals** in August declined in all regions except West Asia, but showed gains in annual terms in all regions except North America. Arrivals in the Far East declined 0.25 mb/d or 2.7% m-o-m but were 0.13 mb/d or 1.5% higher y-o-y. Arrivals in Europe declined by 0.06 mb/d or around 0.5% m-o-m, but were 0.20 mb/d or 1.7% higher y-o-y. Arrivals in North America declined by 0.06 mb/d or 0.6% m-o-m and fell by a stronger 0.73 mb/d or 6.9% y-o-y. Arrivals in West Asia were flat m-o-m in August at 4.47 mb/d. This partly reflects crude flows to India which have held rather stable so far this year.

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

	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Change Aug 19/Jul 19
Sailings				
OPEC	24.22	24.60	24.72	0.12
Middle East	17.61	17.85	18.28	0.44
Arrivals				
North America	9.83	9.81	9.75	-0.06
Europe	11.97	12.21	12.14	-0.06
Far East	8.88	9.20	8.94	-0.25
West Asia	4.79	4.47	4.47	0.00

Sources: Oil Movements and OPEC Secretariat.

# Dirty tanker freight rates

### **Very large crude carriers (VLCCs)**

**VLCC spot freight rates** rose in August with gains across all routes. **Middle East-to-West** saw an increase of 35% m-o-m to stand at WS27 points in August.

Freight rates registered for tankers operating on the **Middle East-to-East** route rose 30% compared to the previous month, to stand at WS57 points in August.

**West Africa-to-East** also showed gains in August, increasing 24% from a month ago, to average WS58 points.

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

	Size				Change
	1,000 DWT	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug 19/Jul 19
Middle East/East	230-280	44	44	57	13
Middle East/West	270-285	20	20	27	7
West Africa/East	260	45	47	58	11

#### Suezmax

**Suezmax average spot freight rates** fell further in August. The decline came from tankers operating on the West Africa-to-US Gulf Coast (USGC) route, which saw an 5% drop in spot freight rates to average WS57. This was sufficient to outweigh a gain in Northwest Europe-to-USGC rates, which recovered from the losses seen in the previous month, to stand at WS47 points.

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

	Size				Change
	1,000 DWT	<u>Jun 19</u>	<u>Jul 19</u>	Aug 19	Aug 19/Jul 19
West Africa/US Gulf Coast	130-135	65	60	57	-3
Northwest Europe/US Gulf Coast	130-135	47	46	47	2

Sources: Argus Media and OPEC Secretariat.

#### **Aframax**

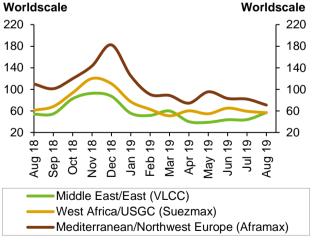
The **Aframax** sector declined further on most routes in August, with only the Caribbean-to-US East Coast managing to avoid a loss, remaining flat at WS75 points. Both the intra-Med and Med-to-Northwest Europe dropped by 13%. The Indonesia-to-East route slipped 5% to average WS88 points.

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

	<b>Size</b> 1,000 DWT	<u>Jun 19</u>	<u>Jul 19</u>	Aug 19	Change Aug 19/Jul 19
Indonesia/East	80-85	98	93	88	-5
Caribbean/US East Coast	80-85	87	75	75	0
Mediterranean/Mediterranean	80-85	89	88	76	-12
Mediterranean/Northwest Europe	80-85	83	82	71	-11

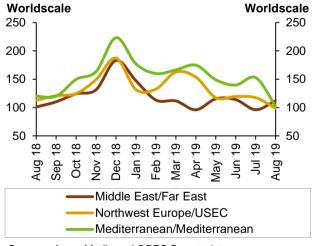
Sources: Argus Media and OPEC Secretariat.

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



Sources: Argus Media and Platts.

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



# Clean tanker freight rates

**Clean spot tanker freight rates** showed diverging trends in August, with West of Suez losses overwhelming smaller gains East of Suez.

Average spot freight rates **West of Suez** declined 28% on average as the return of refineries from maintenance left local product markets well supplied. The **Mediterranean-to-Mediterranean** led losses with a decline of 33% to WS103 points, followed by the **Med-to-Northwest Europe** route which came in a close second with a decline of 32% to WS111. Average rates on the **Northwest Europe-to-US East Coast** route fell 16% to WS99.

To the **East of Suez**, clean tanker freight rates rose around 8% in August from the previous month to WS112, with the **Middle East-to-East** route increasing by 17% to average WS112 points and **Singapore-to-East** route slightly higher at WS131.

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

	<b>Size</b> 1,000 DWT	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Change Aug 19/Jul 19
East of Suez					
Middle East/East	30-35	114	96	112	16
Singapore/East	30-35	136	130	131	1
West of Suez					
Northwest Europe/US East Coast	33-37	120	118	99	-19
Mediterranean/Mediterranean	30-35	140	153	103	-50
Mediterranean/Northwest Europe	30-35	150	163	111	-52

#### **Oil Trade**

Preliminary data indicates that **US** crude oil imports remained stable m-o-m in August, averaging just under 7.0 mb/d. In annual terms, imports were 13%, 1.0 mb/d, lower than in the same period last year. US crude exports averaged 2.8 mb/d in August, a decline of 0.1 mb/d or 5% from the previous month, to stand below the 3 mb/d level reached in June 2019 for the second month in a row. On the products side, US product imports fell by 5% or 0.1 mb/d in August to average just above 2.4 mb/d, while exports stood at 5.2 mb/d, representing an increase of 3% or 0.2 mb m-o-m. As a result, US net product exports have averaged 2.8 mb/d, around 12% or 0.3 mb/d lower than the same month last year.

The latest available data shows **China**'s crude oil imports averaged 9.7 mb/d in July 2019, negligibly higher than the previous month and below the 10.7 mb/d peak seen in April of this year. China's product imports in July averaged 1.3 mb/d, broadly consistent with the previous month's level and an increase of 4% over the same month last year. Product exports from China edged up by 2% m-o-m in July to average 1.4 mb/d. China's net product trade has been broadly balanced so far this year, with exports outpacing imports by 27 tb/d on average.

India's crude imports in July recovered from the previous month's loss, rebounding to average 4.6 mb/d, following a 0.5 mb/d increase m-o-m. India's product imports in July fell by 205 tb/d or 21% m-o-m, to average 775 tb/d, while exports edged up slightly to average 1.3 mb/d in July, representing an increase of 55 tb/d, or 5%, m-o-m. So far this year, India's net product exports have averaged 306 tb/d, some 39% lower than in the same period last year.

**Japan**'s crude oil imports averaged 3.0 mb/d in July, representing an increase of 290 tb/d, or 10%, m-o-m. Product imports to Japan, including LPG, averaged 822 tb/d in July, representing a gain of 17 tb/d, or 2.2%, m-o-m. product exports, including LPG, averaged 625 tb/d in July, representing an increase of 92 tb/d or 17% over the previous month. Japan's net product imports have averaged 285 tb/d so far in 2019, representing a decline of 140 tb/d or 33% compared with the same period last year.

The most recent available data shows **OECD Europe** crude imports averaged 10.8 mb/d in May, reflecting declines of 0.7 mb/d m-o-m and 0.3 mb/d y-o-y. Crude exports averaged 2.1 mb/d in May, slightly lower m-o-m as well as in annual terms. As a result, OECD Europe net crude imports averaged 9.3 mb/d in the first five months of 2019, compared with 9.0 mb/d in the same period in 2018. Meanwhile, net product imports averaged 552 tb/d in the first five months of 2019, compared with 471 tb/d in the same period last year.

#### US

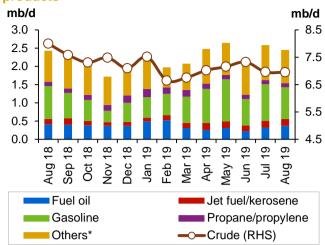
Preliminary data indicates that **US crude oil imports** remained stable m-o-m in August, averaging just under 7.0 mb/d. In annual terms, imports were 13%, 1.0 mb/d, lower than in the same period last year. US crude imports so far in the second half of the year have averaged 6.96 mb/d, compared with 7.96 mb/d in the same period last year, representing a decline of almost 13%.

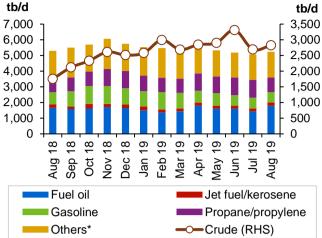
US **crude exports** averaged 2.8 mb/d in August, a decline of 0.1 mb/d or 5% from the previous month, to stand below the 3 mb/d level reached in June 2019 for the second month in a row. Compared with the same period last year, US crude exports so far in the second half of the year have been 46% or 0.9 mb/d higher.

As a result, US **net crude imports** averaged 4.1 mb/d in August, a decline of around 0.1 mb/d from the previous month and a massive 2.1 mb/d lower than the same month last year. Over the first eight months of the year, US net crude imports averaged 4.2 mb/d, compared with 6.1 mb/d for the same period of 2018.

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







Note: \* Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene. Sources: US EIA and OPEC Secretariat.

Note: \* Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene. Sources: US EIA and OPEC Secretariat.

On the product side, US **product imports** fell by 5% or 0.1 mb/d in August to average just above 2.4 mb/d. Product imports into the US in the second half of the year have so far averaged 2.6 mb/d, representing a gain of 10% or 0.2 mb/d compared with the same period last year.

US **product exports** stood at 5.2 mb/d in August, representing an increase of 3% or 0.2 mb m-o-m. So far in 2H19, product exports from the US have averaged 5.2 mb/d, some 6% or 0.3 mb/d lower than in the same period of 2018.

As a result, US **net product exports** averaged 2.8 mb/d in August, around 12% or 0.3 mb/d lower than in the same month last year.

Combined, **net crude and product imports** averaged 1.4 mb/d in August, compared with 3.4 mb/d in August 2018 and 4.4 mb/d in the same month of 2017.

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

				Change
	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug 19/Jul 19
Crude oil	4,020	4,276	4,132	-144
Total products	-3,040	-2,481	-2,776	-295
Total crude and products	981	1,795	1,356	-439

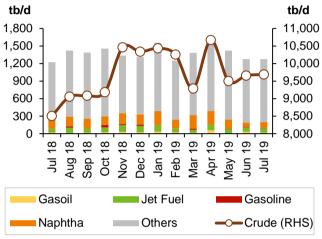
Sources: US EIA and OPEC Secretariat.

#### China

The latest available data shows **China's crude oil imports** averaged 9.7 mb/d in July 2019, negligibly higher than the previous month and below the 10.7 mb/d peak seen in April of this year. So far in 2019, crude imports have averaged 9.9 mb/d, some 0.9 mb/d higher than in the same period of 2018, representing a gain of 10%.

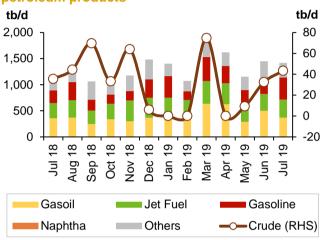
Saudi Arabia remained the **top crude supplier to China** in July, with a share of 17.0% or 1.7 mb/d in imports, following an increase of 12% over the previous month. Russia came in second with 13.8%, followed by Iraq with 10%, Angola with 9.5% and Brazil with 8.8%.

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



Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

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



Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

China's **product imports** in July averaged 1.3 mb/d, broadly consistent with the previous month's level and an increase of 4% over the same month last year. Naphtha imports recovered partly from the previous month's losses to lead gains, while fuel oil and road transportation fuels experienced declines. So far this year, China's product imports have averaged 1.3 mb/d, broadly in line with last year's levels over the same period.

**Product exports** from China edged up by 2% m-o-m in July to average 1.4 mb/d. Gains were led by gasoline exports, which rose by 51%, followed by jet fuel which was up 8%. In the first seven months of the year, China's product exports have averaged 1.4 mb/d, some 8% higher than the same period last year.

Consequently, China's **net product trade** has been broadly balanced so far this year, with exports outpacing imports by 27 tb/d on average.

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

	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	Change Jul 19/Jun 19
Crude oil	9,490	9,625	9,646	21
Total products	269	-174	-141	33
Total crude and products	9,759	9,451	9,505	54

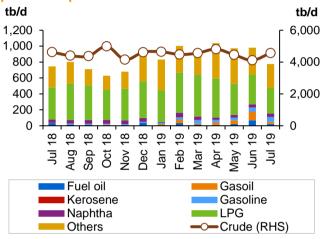
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

#### India

**India's crude imports** in July recovered from the previous month's loss, rebounding to average 4.6 mb/d, following a 0.5 mb/d increase m-o-m. Crude imports were broadly stable compared with the same month last year. So far this year, India's crude oil imports have averaged 4.5 mb/d, also broadly consistent with 2018 levels over the same period.

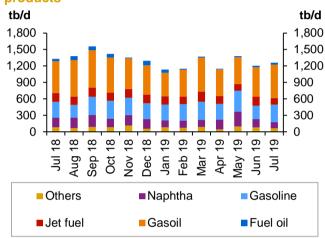
Meanwhile, India's **product imports** in July fell by 205 tb/d or 21% m-o-m, to average 775 tb/d. Diesel and fuel oil imports saw strong declines of 76% and 64% respectively, and naphtha declined 14%. In contrast, gasoline imports rose 19%. Year-to-date, total product imports averaged 4.5 mb/d, some 1% lower than the same period last year.

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



Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

Graph 8 - 6: India's exports of petroleum products



Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

India's **product exports** edged up slightly to average 1.3 mb/d in July, representing an increase of 55 tb/d, or 5%, m-o-m. The increase was mainly supported by road transportation fuels – diesel oil and gasoline – which were 29% and 14% higher m-o-m in July. Year-to-date, India's product exports have averaged 929 tb/d in 2019, compared with 802 tb/d in the first seven months of last year, representing an increase of 16%.

As a result, India's **net product exports** have averaged 306 tb/d so far in the first seven months of this year, some 39% lower than in the same period last year.

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

Total crude and products	4,050	3,893	4,085	192
Total products	-406	-223	-483	-260
Crude oil	4,456	4,115	4,568	452
	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	Change Jul 19/Jun 19

Note: India data table does not include information for crude import and product export by Reliance Industries. Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

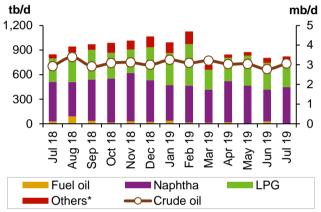
## **Japan**

**Japan's crude oil imports** averaged 3.0 mb/d in July, representing an increase of 290 tb/d, or 10%, m-o-m. So far this year, Japan's crude imports have averaged slightly more than 3 mb/d, some 1.5% higher than the same period last year.

Saudi Arabia was the **top supplier of crude to Japan** in July. Crude imports from Saudi Arabia averaged 1.0 mb/d in July, representing a 33.2% share of total imports, an increase of 10% over the previous month. The UAE held the second spot with just under 30%, followed by Qatar with around 10%.

**Product imports** to Japan, including LPG, averaged 822 tb/d in July, representing a gain of 17 tb/d, or 2.2%, m-o-m. Naphtha and gasoline imports increased by 15% and 43%, respectively, while all other main products showed losses led by fuel oil. So far this year, total product imports have averaged 842 tb/d, representing a 77 tb/d, or 8%, decline compared with the same period last year.

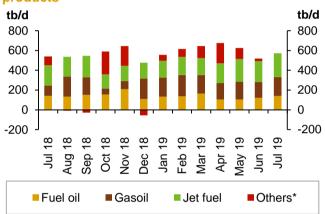
**Graph 8 - 7: Japan's imports of crude and petroleum products** 



Note: \* Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.

Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Graph 8 - 8: Japan's exports of petroleum products



Note: \* Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.

Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Meanwhile, **product exports**, including LPG, averaged 625 tb/d in July, representing an increase of 92 tb/d or 17% over the previous month. The increase in product outflows was led by gasoil and gasoline, as well as fuel oil. In the first seven months of 2019, Japan's product exports averaged 599 mb/d, an increase of almost 12% compared with the same period last year.

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

Total crude and products	3,293	3,064	3,318	254
Total products	250	286	250	-36
Crude oil	3,043	2,778	3,068	290
	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Jul 19/Jun 19</u>
				Change

Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

As a consequence, Japan's **net product imports** have averaged 285 tb/d so far in 2019, representing a decline of 140 tb/d or 33% compared with the same period last year.

## **OECD Europe**

The most recent available data shows **OECD Europe crude imports** averaged 10.8 mb/d in May, reflecting declines of 0.7 mb/d m-o-m and 0.3 mb/d y-o-y. In the first five months of this year, OECD Europe crude imports averaged 11.4 mb/d, representing an increase of 174 tb/d or 2% compared with the same period last year.

**Crude exports** averaged 2.1 mb/d in May, slightly lower m-o-m as well as in annual terms. So far this year, OECD Europe crude exports have averaged 2.2 mb/d, broadly in line with average exports over the same period in 2018.

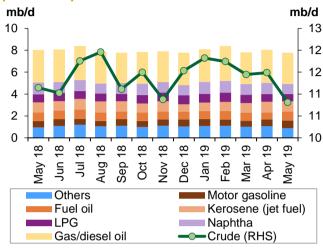
As a result, OECD Europe **net crude imports** averaged 9.3 mb/d in the first five months of 2019, compared with 9.0 mb/d in the same period in 2018.

**Product imports** declined by 264 tb/d, or 3%, to average 7.8 mb/d in May. Naphtha, LPG, kerosene and gasoil were the major contributors to the m-o-m decrease among major products, with declines of between 5-10%. Fuel oil and gasoline imports offset some of the losses, with gains of 32% and 14%, respectively. Over the first five months of 2019, product imports into OECD Europe have averaged 8.0 mb/d, representing a decline of 259 tb/d or 3% higher than in the same period in 2018.

OECD Europe **product exports** declined by 595 tb/d m-o-m in May to average 7.2 mb/d, led by losses in LPG, kerosene, motor gasoline and fuel oil. Among major products, only naphtha saw an increase. So far this year, OECD Europe product exports declined by 431 tb/d or over 5%, compared with the first five months of last year.

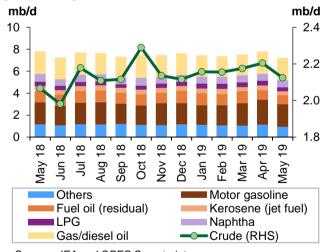
Consequently, OECD Europe **net product imports** averaged 552 tb/d in the first five months of 2019, compared with 471 tb/d in the same period last year.

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



Sources: IEA and OPEC Secretariat.

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



Sources: IEA and OPEC Secretariat.

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

	<u>Mar 19</u>	<u>Apr 19</u>	<u>May 19</u>	Change May 19/Apr 19
Crude oil	9,272	9,284	8,686	-598
Total products	280	241	572	331
Total crude and products	9,552	9,525	9,259	-267

Sources: IEA and OPEC Secretariat.

#### **FSU**

**Total crude oil exports from the Former Soviet Union (FSU)** increased by 266 tb/d m-o-m, or 4%, to average 7.3 mb/d in July 2019. Crude exports through Russian pipelines rose by 171 tb/d, or 4%, m-o-m to average around 4.4 mb/d.

In the **Transneft system**, total shipments from the Black Sea increased by 116 tb/d m-o-m, or 18%, to average 758 tb/d in July. Total Baltic Sea exports fell by 357 tb/d m-o-m, with shipments from Ust-Luga falling by 440 tb/d or 63%, slightly offset by an increase in Primorsk exports, which rose by 82 tb/d. Meanwhile, shipments via the Druzhba pipeline have broadly recovered from the contamination disruptions that began in mid-April, increasing by 396 tb/d to average 946 tb/d in July, approaching the average levels of 997 tb/d seen last year. Meanwhile, Kozmino shipments declined by 27 tb/d m-o-m, or 4% to average 679 tb/d.

In the **Lukoil system**, exports via the Barents Sea declined by 59 tb/d in July, while those from the Baltic Sea continued to average 6 tb/d.

Russia's Far East total exports edged down by 13 tb/d from the previous month to average 323 tb/d.

Central Asia's total exports averaged 225 tb/d, a 29 tb/d or 15% increase over the previous month.

**Black Sea** total exports declined by 82 tb/d m-o-m to average 1.5 mb/d as a result of lower shipments from the Novorossiyk port terminal (CPC) and Supsa port terminal.

In the **Mediterranean**, BTC supplies rose compared with the previous month, increasing by 98 tb/d m-o-m, or 16%, to average 714 tb/d.

**FSU** total product exports increased by 271 tb/d or 10% in July, averaging just under 3.0 mb/d for the month. Gains were seen across the board – particularly in gasoil and fuel oil – with only jet and vacuum gasoil (VGO) seeing losses among the major products.

Table 8 - 6: Recent FSU exports of crude and petroleum products by sources, tb/d

		2018	<u>1Q19</u>	2Q19	<u>Jun 19</u>	<u>Jul 19</u>
Transport avetam			14.10		<u> </u>	<u> </u>
Transneft system	Black Sea total	544	537	646	643	758
Europe	Novorossiysk port terminal - total	544	591	646	643	758
	of which: Russian oil	383	402	459	472	554
	Others	160	192	187	171	204
	Baltic Sea total	1,306	1,381	1,721	1,749	1,391
	Primorsk port terminal - total	758	891	1,010	1,054	1,136
	of which: Russian oil	758	891	1,010	1,054	1,136
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	549	660	711	695	255
	of which: Russian oil	375	490	537	527	93
	Others	173	167	174	168	162
	Druzhba pipeline total	997	730	468	551	946
	of which: Russian oil	965	959	448	527	908
	Others	32	27	21	24	38
Asia	Pacific ocean total	619	644	698	706	679
	Kozmino port terminal - total	619	671	698	706	679
	China (via ESPO pipeline) total	577	618	603	535	579
	China Amur	577	611	603	535	579
Total Russia's o	crude exports	4,043	4,172	4,136	4,183	4,354
	•		·		,	
Lukoil system	Barents Sea total	135	152	130	95	157
Europe & North America		135	141	130	95 95	157
	Varandey offshore platform  Baltic Sea total	7	6	6	95 <b>6</b>	6
Europe	Kalinigrad port terminal	7	6	6	6	6
	Kallingiau port terminal	/	O	O	O	O
Other routes						
Asia	Russian Far East total	371	407	388	337	323
	Aniva Bay port terminal	119	112	114	98	92
	De Kastri port terminal	252	285	274	239	231
	Central Asia total	233	220	233	196	225
	Kenkiyak-Alashankou	233	226	233	196	225
Europe	Black Sea total	1,386	1,502	1,306	1,576	1,494
	Novorossiysk port terminal (CPC)	1,323	1,334	1,247	1,496	1,455
	Supsa port terminal	61	70	59	80	39
	Batumi port terminal	2	0	0	0	0
	Kulevi port terminal	0	0	0	0	0
	Mediterranean Sea total	693	675	649	616	714
	Baku-Tbilisi-Ceyhan (BTC)	693	662	649	616	714
Russian rail						
	Russian rail	32	39	32	28	29
	of which: Russian oil	32	36	32	28	29
	Others	0	0	0	0	0
Total FSU crud	e exports	6,901	7,173	6,880	7,037	7,304
		0,00	1,	3,555	1,001	.,,,,,,,
<u>Products</u>	OP	040	007	044	0.40	040
	Gasoline	212	237	241	240	310
	Naphtha	517	557	505	480	561
	Jet Casail	37	38	44	41	39
	Gasoil	1,006	976	908	861 864	959
	Fuel oil	930	943	913	864	943
	VGO	277	252	236	228	173
Total FSU prod	uct exports	2,980	3,160	2,846	2,714	2,985
Total FSU oil exports		9,881	10,332	9,727	9,751	10,289

Sources: Argus Nefte Transport and Argus Global Markets.

#### **Stock Movements**

Preliminary data for July showed that **total OECD commercial** oil stocks fell by 10.5 mb m-o-m to stand at 2,944 mb, which was 108 mb higher than the same time one year ago, and 36 mb above the latest five-year average. Within the components, crude stocks fell by 41.3 mb m-o-m to stand at 20 mb below the latest five-year average, while product stocks rose by 30.8 mb m-o-m to remain 55 mb above the latest five-year average. In terms of **days of forward cover**, OECD commercial stocks fell by 0.1 days m-o-m in July to stand at 60.9 days, which was 2.2 days above the same period in 2018, but 0.6 days below the latest five-year average.

Preliminary data for August showed that **US total commercial oil stocks** fell by 9.7 mb m-o-m to stand at 1,299.1 mb, which was 67.6 mb above the same period a year ago and 73.3 mb higher than the latest five-year average. Within the components, crude stocks fell by 16.0 mb, while product stocks rose by 6.2 mb m-o-m.

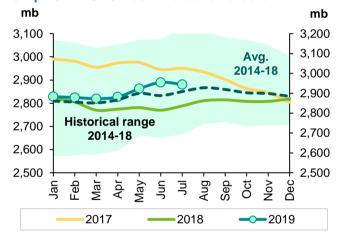
#### OECD

Preliminary data for July showed that **total OECD commercial oil stocks** fell by 10.5 mb m-o-m, reversing the build of the last three months, to stand at 2,944 mb, which is 108 mb higher than the same time one year ago and 36 mb above the latest five-year average.

Within the components, crude stocks fell by 41.3 mb, while product stocks rose by 30.8 mb m-o-m. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 265 mb since the 'Declaration of Cooperation' began at the end of December 2016.

Within the regions, OECD Asia Pacific witnessed stocks builds, while OECD Americas and Europe registered stocks draws.

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



Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US EIA.

OECD **commercial crude stocks** fell by 41.3 mb m-o-m in July, ending the month at 1,427 mb, which is 14 mb above the same time a year ago and 20 mb below the latest five-year average. Compared with the previous month, OECD Americas and OECD Europe fell by 29.9 mb and 13.0 mb, respectively, while crude stocks in OECD Asia Pacific rose by 1.5 mb.

In contrast, OECD **total product inventories rose** by 30.8 mb m-o-m in July to stand at 1,517 mb, which is 94 mb above the same time a year ago and around 55 mb above the latest five-year average. Within the OECD regions, product stocks in OECD Americas rose by 26.9 mb, and OECD Asia Pacific and Europe stocks rose by 3.4 mb and 0.5 mb m-o-m, respectively.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.1 days m-o-m in July to stand at 60.9 days, which is 2.2 days above the same period in 2018, but 0.6 days below the latest five-year average. Within the regions, OECD Americas was 0.5 days above the latest five-year average to stand at 61.0 days in July. OECD Europe's stocks were 1.4 days below the latest five-year average to finish the month at 65.8 days. OECD Asia Pacific stocks were 3.2 days below the latest five-year average to stand at 51.3 days.

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

Days of forward cover	60.4	60.9	60.9	-0.1	58.7
Total	2,923	2,955	2,944	-10.5	2,836
Products	1,447	1,487	1,517	30.8	1,424
Crude oil	1,476	1,468	1,427	-41.3	1,413
	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Jul 19/Jun 19</u>	<u>Jul 18</u>
				Change	

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

Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US EIA.

#### **OECD Americas**

**OECD Americas total commercial stocks** dropped by 2.9 mb m-o-m in July to settle at 1,588 mb, which was 110 mb above a year ago, and 70 mb above the latest five-year average. Within the components, crude stocks fell by 29.9 mb, while product stocks rose by 26.9 mb m-o-m.

**Commercial crude oil stocks** in OECD Americas fell by 29.9 mb m-o-m in July to stand at 795 mb, which is 39.9 mb higher than the same time a year ago, and 19.6 mb above the latest five-year average. This drop could be attributed to higher refinery runs combined with lower US crude imports.

In contrast, **total product stocks** in OECD Americas rose by 26.9 mb m-o-m in July to stand at 793 mb, which is 69.7 mb above the same time one year ago and 50.1 mb above the latest five-year average. Lower consumption, combined with higher crude refinery output in the region, were behind the product stock build.

#### **OECD Europe**

**OECD Europe's total commercial stocks** fell by 12.5 mb m-o-m in July, ending the month at 961 mb, which is 3.5 mb less than the same time a year ago and 5.6 mb lower than the latest five-year average. Crude stocks fell by 13.0 mb, while products rose by 0.5 mb.

OECD Europe's **commercial crude stocks** fell by 13.0 mb m-o-m in July, ending the month at 413 mb, which is 22.9 mb below a year earlier and 7.7 mb lower than the latest five-year average. The drop was driven by higher refinery throughput in the region.

In contrast, OECD Europe's **commercial product stocks** rose slightly by 0.5 mb m-o-m to end July at 548 mb, which is 19.5 mb above the same time a year ago and 2.1 mb above the latest five-year average. The build came on the back of lower consumption in the region.

#### **OECD** Asia Pacific

**OECD Asia Pacific's total commercial oil stocks** rose by 4.9 mb m-o-m in July to stand at 396 mb, which is 1.8 mb above a year ago, but 28.9 mb below the latest five-year average. Within the components, crude and product stocks rose m-o-m by 1.2 mb and 2.3 mb, respectively.

OECD Asia Pacific's **crude inventories** rose by 1.5 mb m-o-m to end July at 219 mb, which was 2.8 mb lower than one year ago and 32 mb below the latest five-year average.

OECD Asia Pacific's **total product inventories** rose by 3.4 mb m-o-m to end July at 177 mb, which was 4.6 mb higher than the same time a year ago and 3.1 mb above the latest five-year average.

#### US

Preliminary data for August showed that **US total commercial oil stocks** fell by 9.7 mb m-o-m to stand at 1,299.1 mb, which was 67.6 mb, or 5.5%, above the same period a year ago, and 43.4 mb, or 3.5%, higher than the latest five-year average. Within the components, crude stocks fell by 16.0 mb, while product stocks rose by 6.2 mb m-o-m.

US **commercial crude stocks** fell in August to stand at 423.0 mb, which is 16.1 mb, or 4.0%, above the same time last year, and 0.9 mb, or 0.2%, above the latest five-year average. The drop came on the back of higher refinery throughput which rose by 490 tb/d m-o-m to average 18.2 mb/d. Inventories in Cushing, Oklahoma, also fell by more than 7.0 mb to end July at 40.1 mb.

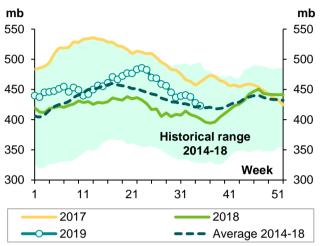
**Total product stocks** in August rose by 6.2 mb m-o-m to stand at 876.1 mb, which is 51.5 mb, or 6.2%, above the level seen at the same time in 2018, and 42.5 mb, or 5.1%, above the latest five-year average. Within products, propylene and other unfinished products witnessed stock builds, while gasoline, distillates and residual fuel saw stock draws.

**Gasoline stocks** fell in August by 5.6 mb m-o-m to settle at 229.6 mb, which was 6.5 mb, or 2.8%, lower than levels seen at the same time last year, but 4.8 mb, or 2.2%, above the latest five-year average. This monthly decrease came on the back of higher demand.

**Distillate stocks** also fell by 3.9 mb m-o-m in August to end the month at 133.5 mb, which was 1.5 mb, or 1.1%, above the same period a year ago, albeit 10.7 mb, or 7.4%, below the latest five-year average. The stock draw could be attributed to higher apparent demand.

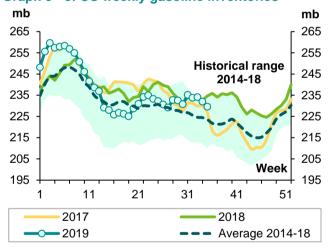
**Residual fuel stocks** decreased by 1.8 mb m-o-m to end August at 30.1 mb, which was 2.3 mb, or 8.1%, above the same time a year ago, but 5.2 mb, or 14.8%, lower than the latest five-year average.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

Graph 9 - 3: US weekly gasoline inventories



Sources: US EIA and OPEC Secretariat.

**Jet fuel stocks** were slightly down by 0.1 mb m-o-m to stand at 42.6 mb in August, which was 0.9 mb, or 2.0%, higher than the same time a year ago, and 1.9 mb, or 4.6%, above the latest five-year average.

Table 9 - 2: US onland commercial petroleum stocks, mb

				Change	
	<u>Jun 19</u>	<u>Jul 19</u>	<u>Aug 19</u>	Aug 19/Jul 19	<u>Aug 18</u>
Crude oil	468.5	438.9	423.0	-16.0	406.9
Gasoline	230.6	235.2	229.6	-5.6	236.1
Distillate fuel	126.8	137.5	133.5	-3.9	132.0
Residual fuel oil	28.6	31.8	30.1	-1.8	27.8
Jet fuel	39.4	42.7	42.6	-0.1	41.8
Total products	838.9	869.9	876.1	6.2	824.6
Total	1,307.4	1,308.8	1,299.1	-9.7	1,231.5
SPR	644.8	644.8	644.8	0.0	660.0

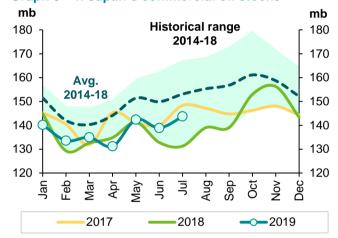
Sources: US EIA and OPEC Secretariat.

## **Japan**

In **Japan**, **total commercial oil stocks** rose by 4.9 mb m-o-m in July to settle at 143.7 mb, reversing the previous month's draw. The level was 12.5 mb, or 9.5%, higher than one year ago, but 9.3 mb, or 6.1%, below the latest five-year average. Within the components, crude and product stocks rose m-o-m by 1.5 mb and 3.4 mb, respectively.

Japanese **commercial crude oil stocks** rose by 1.5 mb m-o-m in July to stand at 83.7 mb, which was 8.9 mb, or 12.0%, above the same period a year ago, but 7.9 mb, or 8.6%, below the latest five-year average. The build was driven mainly by higher crude imports, which rose by around 290 tb/d m-o-m to average 3.0 mb/d. The slight mo-m rise in crude runs by 64 tb/d m-o-m limited further builds.

Graph 9 - 4: Japan's commercial oil stocks



Sources: Ministry of Economic, Trade and Industry of Japan and OPEC Secretariat.

Japan's **total product inventories** rose by 3.4 mb m-o-m to end July at 60.1 mb, which is 3.5 mb, or 6.3%, higher than the same month last year, but 1.4 mb, or 2.3%, below the latest five-year average. Within products, gasoline, naphtha and distillate stocks experienced builds, while residual fuel oil saw a stock draw.

**Distillate stocks** rose by 2.8 mb m-o-m for the third consecutive month to stand at 26.7 mb in July. This was 1.2 mb, or 4.6%, higher than the same time a year ago, but 0.8 mb, or 3.0%, lower than the latest five-year average. Within the distillate components, kerosene and gasoil rose by 27% and 10.2% m-o-m, respectively. The builds in all components were driven by higher output amid lower domestic sales. In contrast, jet fuel oil stocks fell by 11.2% m-o-m, driven by higher domestic sales.

**Gasoline stocks** rose by 0.2 mb m-o-m to stand at 9.7 mb in July, which is 0.3 mb, or 3.4%, higher than a year ago, yet 0.5 mb, or 4.9%, lower than the latest five-year average. The build was mainly driven by higher gasoline output, which increased by 8.0% from the previous month. Higher domestic sales, which increased by 10.2%, limited a further build in gasoline stocks.

By contrast, **total residual fuel oil stocks** fell by 0.2 mb m-o-m in July to stand at 12.4 mb, which was 0.2 mb, or 1.3%, above the same period a year ago, and 1.4 mb, or 10.1%, lower than the latest five-year average. Within the components, fuel oil A and fuel B.C stocks fell m-o-m by 2.0% and 1.2%, respectively. The fall in both products was driven by higher domestic sales.

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

				Change	
	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Jul 19/Jun 19</u>	<u>Jul 18</u>
Crude oil	85.5	82.1	83.7	1.5	74.7
Gasoline	9.9	9.5	9.7	0.2	9.4
Naphtha	11.2	10.7	11.3	0.6	9.4
Middle distillates	22.7	23.9	26.7	2.8	25.5
Residual fuel oil	13.1	12.6	12.4	-0.2	12.2
Total products	56.9	56.7	60.1	3.4	56.5
Total**	142.4	138.9	143.7	4.9	131.3

Note: \* At the end of the month.

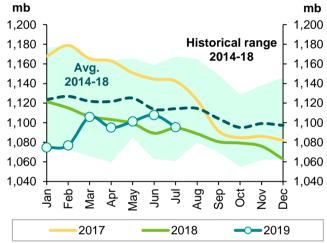
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

# **EU plus Norway**

Preliminary data for July showed that **total European commercial oil stocks** fell by 12.5 mb m-o-m to stand at 1,095.3 mb, which was 0.8 mb, or 0.1%, above the same time a year ago, yet 19 mb, or 1.7%, lower than the latest five-year average. Within the components, crude stocks fell by 13.0 mb, while products stocks rose slightly by 0.5 mb.

European **crude inventories** fell in July to stand at 481.2 mb, which is 9.3 mb, or 1.9%, lower than the same period a year ago, and 7.8 mb, or 1.6%, lower than the latest five-year average. The drop was driven by higher refinery throughput in the EU-16 countries, which rose by 690 tb/d to stand at 10.37 mb/d.

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



Sources: Argus, Euroilstock and OPEC Secretariat.

In contrast, total European **product stocks** rose by 0.5 mb m-o-m, ending July at 614.1 mb, which is 10.1 mb, or 1.7%, higher than the same time a year ago, but 11.2 mb, or 1.8%, lower than the latest five-year average. Within products, distillate stocks witnessed builds, while gasoline, residual fuel and naphtha experienced stock draws.

**Distillate stocks** rose by 1.7 mb m-o-m in July for the second consecutive month to stand at 407.6 mb, which was 7.7 mb, or 1.9%, higher than the same time last year, albeit 11.7 mb, or 2.8%, below the latest five-year average.

In contrast, **gasoline stocks** fell by 0.2 mb m-o-m in July for the fifth consecutive month to stand at 112.5 mb, which was 4.7 mb, or 4.4%, higher than the same time a year ago, and 3.0 mb, or 2.7%, above the latest five-year average.

**Residual fuel and naphtha stocks** also dropped in July by 0.6 mb and 0.4 mb m-o-m, respectively. At 63.2 mb, residual fuel stood at 2.0 mb, or 3.1%, lower than the same time one year ago, and 8.1 mb, or 11.3%, below the latest five-year average. Naphtha stocks ended July at 30.8 mb, which was 0.3 mb, or 1.0%, lower than last year's July level but 5.6 mb, or 22%, higher than the latest five-year average.

<sup>\*\*</sup> Includes crude oil and main products only.

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

				Change	
	<u>May 19</u>	<u>Jun 19</u>	<u>Jul 19</u>	<u>Jul 19/Jun 19</u>	<u>Jul 18</u>
Crude oil	488.7	494.2	481.2	-13.0	490.6
Gasoline	114.8	112.7	112.5	-0.2	107.8
Naphtha	31.7	31.2	30.8	-0.4	31.1
Middle distillates	402.7	405.8	407.6	1.7	399.8
Fuel oils	63.4	63.8	63.2	-0.6	65.2
Total products	612.6	613.6	614.1	0.5	604.0
Total	1,101.3	1,107.8	1,095.3	-12.5	1,094.5

Sources: Argus, Euroilstock and OPEC Secretariat.

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

#### **Singapore**

At the end of July, **total product stocks in Singapore** fell by 4.2 mb m-o-m for the third consecutive month to stand at 39.5 mb, which is 0.8 mb, or 2.0%, below the same period a year ago. All product categories experienced drops when compared to the previous month.

**Light distillate stocks** fell by 1.8 mb m-o-m to end July at 10.0 mb, which was 5.2 mb, or 34.2%, below the same period a year ago. This fall may have been driven by higher exports from the hub.

**Middle distillate and fuel oil stocks** fell in July by 0.5 mb and 1.9 mb, m-o-m, respectively. At 10.4 mb, middle distillates stood at 0.3 mb, or 3.0%, higher than the same time one year ago. Fuel oil stocks ended July at 19.1 mb, which was 4.1 mb, or 27%, higher than last year's July level, and is the lowest inventory level recorded since October 2018.

#### **ARA**

**Total product stocks in ARA** rose by 1.0 mb m-o-m in July to settle at 48.6 mb, which was 5.7 mb, or 13.3%, above the same time a year ago. Within products, the picture was mixed; gasoline and gasoil experienced stock builds, while fuel oil and jet oil witnessed stock draws.

**Gasoline and gasoil stocks** rose by 0.4 mb and 1.2 mb m-o-m in July to stand at 10.6 mb and 22.4 mb, respectively. Gasoline stocks were 2.4 mb, or 29%, above last year's level. Gasoil stocks were 4.0 mb, or 22%, higher than last year's level.

Both **fuel oil stocks and jet oil** fell in July by 0.3 mb each m-o-m, ending the month at 7.6 mb and 6.2 mb, respectively. Fuel oil stocks were 0.3 mb, or 3.8%, lower than the same month last year, while jet oil stocks were 0.8 mb, or 14.8%, higher than the same time a year ago.

#### **Fujairah**

During the week ending 2 September 2019, **total oil product stocks in Fujairah** rose by 0.74 mb w-o-w to stand at 19.90 mb, according to data from FEDCom and S&P Global Platts. At this level, total oil stocks were 2.41 mb higher than the same time a year ago. Within products, light and middle distillates witnessed stock draws, while heavy distillates registered a stock build.

**Light distillate stocks** fell by 0.41 mb w-o-w to stand at 6.09 mb, which was 0.2 mb higher than a year ago at the same time. **Middle distillate** stocks fell by 0.14 mb to stand at 1.96 mb, which was 2.1 mb lower than the same time one a year ago. In contrast, **heavy distillates** rose by 1.29 mb w-o-w to stand at 11.85 mb, which was 4.3 mb higher than in the same week in 2018.

# **Balance of Supply and Demand**

**Demand for OPEC crude in 2019** was revised down from the previous report to stand at 30.6 mb/d, which is 1.0 mb/d lower than the 2018 level. In 1Q19, OPEC crude production averaged 30.5 mb/d, about 0.3 mb/d higher than the demand for OPEC crude in that quarter, while in 2Q19 OPEC crude production averaged 30.0 mb/d, around 0.5 mb/d lower than the demand for OPEC crude.

**Demand for OPEC crude in 2020** was unchanged from the previous report to stand at 29.4 mb/d, which is 1.2 mb/d lower than the 2019 level.

# Balance of supply and demand in 2019

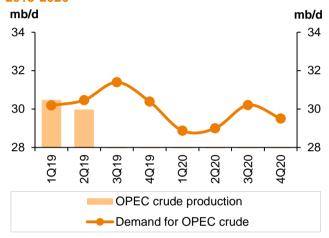
**Demand for OPEC crude in 2019** was revised down from the previous report to stand at 30.6 mb/d, which is 1.0 mb/d lower than the 2018 level.

Compared with the August monthly report, The 1Q19 was unchanged compared to the previous assessment. 2Q19 and 3Q19 were revised down by 0.2 mb/d and 0.3 mb/d, respectively. In contrast, 4Q19 was revised up by 0.2 mb/d.

When equated to the same quarters in 2018, demand for OPEC crude in 1Q19 and 2Q19 were 1.9 mb/d and 1.3 mb/d lower, while both 3Q19 and 4Q19 are expected to show a drop of 0.5 mb/d.

According to secondary sources, OPEC crude production averaged 30.5 mb/d in 1Q19, about 0.3 mb/d higher than the demand for OPEC crude. In 2Q19, OPEC crude production averaged 30.0 mb/d, around 0.5 mb/d lower than the demand for OPEC crude.

Graph 10 - 1: Balance of supply and demand, 2019-2020\*



Note: \*2019-2020 = Forecast. Source: OPEC Secretariat.

Table 10 - 1: Supply/demand balance for 2019\*, mb/d

	2019	1010	2040	2040	4040	2040	Change
	<u>2018</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	<u>2019/18</u>
(a) World oil demand	98.82	98.75	99.08	100.63	100.89	99.84	1.02
Non-OPEC supply	62.41	63.77	63.79	64.37	65.65	64.40	1.99
OPEC NGLs and non-conventionals	4.76	4.80	4.82	4.87	4.86	4.84	0.07
(b) Total non-OPEC supply and OPEC NGLs	67.17	68.57	68.61	69.23	70.51	69.23	2.06
Difference (a-b)	31.65	30.19	30.46	31.39	30.39	30.61	-1.04
OPEC crude oil production	31.86	30.48	29.97				
Balance	0.22	0.29	-0.49				

Notes: \* 2019 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

# Balance of supply and demand in 2020

**Demand for OPEC crude in 2020** was unchanged from the previous report to stand at 29.4 mb/d. This is 1.2 mb/d lower than the 2019 level.

Compared with the last monthly report, the 1Q20 was unchanged. 2Q20 and 3Q20 were revised down by 0.4 mb/d and 0.1 mb/d, respectively, while the 4Q20 was revised up by 0.4 mb/d.

When judged against the same quarters in 2019, demand for OPEC crude in 1Q20 is forecast to be 1.3 mb/d lower, while 2Q20 and 3Q20 are expected to show a drop of 1.5 mb/d and 1.2 mb/d, respectively. The 4Q20 is projected to fall by 0.9 mb/d.

Table 10 - 2: Supply/demand balance for 2020\*, mb/d

							Change
	<u>2019</u>	<u>1Q20</u>	<u>2Q20</u>	<u>3Q20</u>	<u>4Q20</u>	<u>2020</u>	<u>2020/19</u>
(a) World oil demand	99.84	99.78	100.10	101.71	102.06	100.92	1.08
Non-OPEC supply	64.40	66.04	66.24	66.64	67.69	66.65	2.25
OPEC NGLs and non-conventionals	4.84	4.87	4.87	4.87	4.87	4.87	0.03
(b) Total non-OPEC supply and OPEC NGLs	69.23	70.90	71.10	71.50	72.55	71.52	2.28
Difference (a-b)	30.61	28.87	29.00	30.21	29.51	29.40	-1.21

Notes: \* 2019-2020 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Appendix

# **Appendix**

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

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	<u>1Q20</u>	2Q20	3Q20	<u>4Q20</u>	<u>2020</u>
World demand													
OECD	47.00	47.54	47.93	47.65	47.51	48.50	48.44	48.03	47.73	47.57	48.56	48.52	48.10
Americas	24.89	25.07	25.55	25.21	25.66	26.08	26.02	25.75	25.43	25.84	26.24	26.19	25.93
Europe	13.98	14.32	14.31	13.97	14.18	14.68	14.30	14.28	13.92	14.15	14.66	14.28	14.25
Asia Pacific	8.14	8.15	8.08	8.47	7.67	7.73	8.12	8.00	8.39	7.58	7.66	8.05	7.92
DCs	31.56	32.13	32.62	32.97	32.93	33.37	33.07	33.09	33.54	33.50	34.00	33.72	33.69
FSU	4.63	4.70	4.82	4.75	4.74	5.02	5.11	4.91	4.83	4.81	5.11	5.19	4.99
Other Europe	0.70	0.72	0.74	0.75	0.71	0.75	0.84	0.76	0.76	0.72	0.76	0.85	0.77
China	11.80	12.32	12.71	12.63	13.19	12.98	13.43	13.06	12.91	13.50	13.28	13.77	13.37
(a) Total world demand	95.69	97.41	98.82	98.75	99.08	100.63	100.89	99.84	99.78	100.10	101.71	102.06	100.92
Non-OPEC supply													
OECD	24.85	25.69	28.26	29.29	29.64	30.12	31.02	30.02	31.30	31.42	31.90	32.46	31.77
Americas	20.58	21.48	24.02	25.01	25.56	25.91	26.56	25.76	26.79	27.07	27.48	27.76	27.28
Europe	3.85	3.82	3.83	3.84	3.60	3.73	3.95	3.78	3.98	3.83	3.85	4.13	3.95
Asia Pacific	0.42	0.39	0.41	0.43	0.48	0.49	0.51	0.48	0.54	0.53	0.56	0.56	0.55
DCs	13.53	13.39	13.47	13.43	13.47	13.73	13.86	13.62	13.85	13.86	13.87	14.04	13.91
FSU	13.85	14.05	14.29	14.55	14.16	14.07	14.28	14.26	14.33	14.43	14.35	14.63	14.43
Other Europe	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11
China	4.09	3.98	4.02	4.10	4.13	4.05	4.10	4.09	4.11	4.07	4.07	4.12	4.09
Processing gains	2.19	2.22	2.25	2.28	2.28	2.28	2.28	2.28	2.33	2.33	2.33	2.33	2.33
	F0.00	FO 40	62.41	63.77	63.79	64.37	65.65	64.40	66.04	66.24	66.64	67.69	66.65
Total non-OPEC supply	58.66	59.46	02.41	03.77	03.73	04.57	03.03	04.40	00.04	00.24	00.04	07.09	00.00
Total non-OPEC supply  OPEC NGLs +	58.66	59.46	02.41	03.77	03.79	04.57	65.65	04.40	00.04	00.24	00.04	07.03	00.00
	4.58	4.64	4.76	4.80	4.82	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs +													
OPEC NGLs + non-conventional oils													
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply	4.58	4.64	4.76	4.80	4.82	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs	4.58	4.64	4.76	4.80	4.82	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production	4.58 <b>63.24</b>	4.64 <b>64.10</b>	4.76 <b>67.17</b>	4.80 <b>68.57</b>	4.82 <b>68.61</b>	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply	4.58 <b>63.24</b> 32.21	4.64 <b>64.10</b> 32.01	4.76 <b>67.17</b> 31.86	4.80 <b>68.57</b> 30.48	4.82 <b>68.61</b> 29.97	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)	4.58 <b>63.24</b> 32.21	4.64 <b>64.10</b> 32.01	4.76 <b>67.17</b> 31.86	4.80 <b>68.57</b> 30.48	4.82 <b>68.61</b> 29.97	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and	4.58 <b>63.24</b> 32.21 95.45	4.64 64.10 32.01 96.11	4.76 <b>67.17</b> 31.86 99.04	4.80 <b>68.57</b> 30.48 99.05	4.82 68.61 29.97 98.58	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)	4.58 <b>63.24</b> 32.21 95.45	4.64 64.10 32.01 96.11	4.76 <b>67.17</b> 31.86 99.04	4.80 <b>68.57</b> 30.48 99.05	4.82 68.61 29.97 98.58	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, miscellaneous	4.58 63.24 32.21 95.45 -0.24	4.64 64.10 32.01 96.11 -1.30	4.76 67.17 31.86 99.04	4.80 68.57 30.48 99.05	4.82 68.61 29.97 98.58 -0.49	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, micommercial	4.58 63.24 32.21 95.45 -0.24 6 3,002 1,600	4.64 64.10 32.01 96.11 -1.30	4.76 67.17 31.86 99.04 0.22 2,872	4.80 68.57 30.48 99.05 0.29 2,873	4.82 68.61 29.97 98.58 -0.49 2,955 1,541	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mic Commercial SPR  Total	4.58  63.24  32.21  95.45  -0.24  6  3,002 1,600 4,602	4.64 64.10 32.01 96.11 -1.30 2,854 1,568	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425	4.82 68.61 29.97 98.58 -0.49 2,955 1,541	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mic Commercial SPR	4.58  63.24  32.21  95.45  -0.24  6  3,002  1,600  4,602  1,102	4.64  64.10  32.01  96.11  -1.30  2,854 1,568 4,421 1,025	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425	4.82 68.61 29.97 98.58 -0.49 2,955 1,541 4,495	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mic Commercial SPR  Total  Oil-on-water  Days of forward consumption	4.58  63.24  32.21  95.45  -0.24  6  3,002  1,600  4,602  1,102  in OEC	4.64  64.10  32.01  96.11  -1.30  2,854  1,568  4,421  1,025  D, days	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425 1,013	4.82 68.61 29.97 98.58 -0.49 2,955 1,541 4,495 995	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, micrommercial SPR  Total  Oil-on-water	4.58  63.24  32.21  95.45  -0.24  6  3,002  1,600  4,602  1,102	4.64  64.10  32.01  96.11  -1.30  2,854 1,568 4,421 1,025	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425	4.82 68.61 29.97 98.58 -0.49 2,955 1,541 4,495	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mic Commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks	4.58  63.24  32.21  95.45  -0.24  6  3,002  1,600  4,602  1,102  in OEC  63	4.64  64.10  32.01  96.11  -1.30  2,854  1,568  4,421  1,025  D, days  60	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425 1,013	4.82  68.61  29.97  98.58  -0.49  2,955 1,541 4,495 995	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mice and commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks SPR  Total	4.58  63.24  32.21  95.45  -0.24  6  3,002 1,600 4,602 1,102  in OEC 63 34	4.64  64.10  32.01  96.11  -1.30  2,854  1,568  4,421  1,025  D, days  60  33	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058 60 32	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425 1,013 60 33	4.82  29.97  98.58  -0.49  2,955 1,541 4,495 995  61 32	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, mic Commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks SPR	4.58  63.24  32.21  95.45  -0.24  6  3,002 1,600 4,602 1,102  in OEC 63 34	4.64  64.10  32.01  96.11  -1.30  2,854  1,568  4,421  1,025  D, days  60  33	4.76 67.17 31.86 99.04 0.22 2,872 1,547 4,419 1,058 60 32	4.80 68.57 30.48 99.05 0.29 2,873 1,552 4,425 1,013 60 33	4.82  29.97  98.58  -0.49  2,955 1,541 4,495 995  61 32	4.87	4.86	4.84	4.87	4.87	4.87	4.87	4.87

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

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

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>	4Q19	<u>2019</u>	1Q20	2Q20	3Q20	4Q20	2020
World demand			_				_					_	
OECD	0.01	0.01	0.01	-0.03	-0.04	-0.01	0.01	-0.02	-0.05	-0.06	-0.03	-0.01	-0.04
Americas	-	-	-	-0.04	-	-	-	-0.01	-0.05	-0.01	-0.01	-0.01	-0.02
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	0.01	0.01	0.01	0.01	-0.04	-0.01	0.01	-0.01	_	-0.05	-0.02	-	-0.02
DCs	-	-	-	-	-0.13	-0.02	-0.03	-0.05	-0.03	-0.16	-0.05	-0.05	-0.08
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-0.02	-	-0.01	-0.01	-0.01	-0.03	-0.01	-0.02
(a) Total world demand	0.01	0.01	0.01	-0.03	-0.17	-0.06	-0.02	-0.07	-0.09	-0.23	-0.12	-0.08	-0.13
Non-OPEC supply													
OECD	-	-	-	-	0.07	0.05	-0.21	-0.02	-0.15	0.12	-0.09	-0.53	-0.16
Americas	-	-	-	-	0.06	-	-0.21	-0.04	-0.16	0.12	-0.10	-0.54	-0.17
Europe	-	-	-	-	-0.01	0.04	-0.02	-	-	-	-	-	-
Asia Pacific	-	-	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
DCs	-	-	-	-	0.01	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	0.15	-0.02	0.03	0.04	0.04	0.04	0.04	0.04
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	0.07	0.20	-0.23	0.01	-0.12	0.16	-0.05	-0.49	-0.13
OPEC NGLs +													
non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply													
and OPEC NGLs	-	-	-	-	0.07	0.20	-0.23	0.01	-0.12	0.16	-0.05	-0.49	-0.13
OPEC crude oil production													
(secondary sources)	-	-	-	-	-								
Total supply			-	-	0.07								
Balance (stock change and													
miscellaneous)	-0.01	-0.01	-0.01	0.03	0.24								
OECD closing stock levels (mb	)												
Commercial	-	-	-	-	-								
SPR	-	-	-	-	-								
Total	-	-	-	-	-								
Oil-on-water	-	-	-	-	-15								
Days of forward consumption i	in OECD												
Commercial onland stocks	-	-	-	-	-								
SPR	-	-	-	-	-								
Total	-	-	-	-	-								
Memo items													
(a) - (b)	0.01	0.01	0.01	-0.03	-0.25	-0.26	0.21	-0.08	0.02	-0.39	-0.07	0.41	-0.01

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the August 2019 issue.

This table shows only where changes have occurred.

Source: OPEC Secretariat.

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

		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2Q17</u>	3Q17	<u>4Q17</u>	<u>1Q18</u>	<u>2Q18</u>	3Q18	<u>4Q18</u>	<u>1Q19</u>	<u>2Q19</u>
Closing stock	c levels, mb												
OECD onland	l commercial	3,002	2,854	2,872	3,019	2,969	2,854	2,815	2,815	2,867	2,872	2,873	2,955
	Americas	1,598	1,498	1,542	1,596	1,571	1,498	1,468	1,471	1,541	1,542	1,508	1,591
	Europe	989	943	931	999	965	943	969	956	936	931	985	973
	Asia Pacific	415	412	399	424	433	412	378	388	390	399	380	391
OECD SPR		1,600	1,568	1,547	1,588	1,578	1,568	1,575	1,570	1,565	1,547	1,552	1,541
	Americas	697	665	651	681	676	665	667	662	662	651	651	647
	Europe	481	480	476	484	479	480	485	486	481	476	483	476
	Asia Pacific	421	423	420	423	423	423	422	422	422	420	417	417
OECD total		4.602	4,421	4,419	4,608	4.547	4,421	4,390	4.385	4.432	4.419	4,425	4,495
OLOD total		.,	.,	.,	.,	.,0	.,	.,	.,	-,	.,	-,	
Oil-on-water		1,102	1,025	1,058	1,052	998	1,025	1,036	1,014	1,041	1,058	1,013	1,010
Oil-on-water	ard consumptio	1,102	1,025	1,058	,	,-			,	, -	, -		
Oil-on-water		1,102	1,025	1,058	,	,-			,	, -	, -		
Oil-on-water  Days of forwa		1,102 n in OEC	1,025 D, days	1,058	1,052	998	1,025	1,036	1,014	1,041	1,058	1,013	1,010
Oil-on-water  Days of forwa	l commercial	1,102 n in OEC	1,025 D, days 60	1,058	1,052	998	1,025	1,036	1,014	1,041	1,058	1,013	1,010
Oil-on-water  Days of forwa	I commercial Americas	1,102 n in OEC 63 64	1,025 D, days 60 59	<b>1,058 60</b> 60	1,052 63 63	998 62 62	<b>60</b> 59	<b>59</b>	<b>58</b>	<b>59</b>	<b>60</b> 61	<b>60</b> 59	<b>61</b> 61
Oil-on-water  Days of forwa	Americas Europe	1,102 n in OEC 63 64 69	1,025 D, days 60 59 66	<b>60</b> 60 65	1,052 63 63 68	998 62 62 67	<b>60</b> 59 67	<b>59</b> 58 68	<b>58</b> 57 65	<b>59</b> 60 65	<b>60</b> 61 67	<b>60</b> 59 69	<b>61</b> 66
Oil-on-water  Days of forwa  OECD onland	Americas Europe	1,102 n in OEC 63 64 69 51	1,025 D, days 60 59 66 51	<b>60</b> 60 65 50	1,052 63 63 68 54	998 62 62 67 52	<b>60</b> 59 67 48	1,036 59 58 68 49	<b>58</b> 57 65 50	<b>59</b> 60 65 48	<b>60</b> 61 67 47	<b>60</b> 59 69 49	<b>61</b> 61 66 50
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific	1,102 n in OEC 63 64 69 51 34	1,025 D, days 60 59 66 51 33	1,058 60 60 65 50 33	1,052 63 63 68 54 33	998 62 62 67 52 33	1,025 60 59 67 48 33	1,036 59 58 68 49 33	1,014 58 57 65 50 33	1,041 59 60 65 48 32	1,058 60 61 67 47 32	1,013 60 59 69 49	1,010 61 61 66 50 32
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific  Americas	1,102 n in OEC 63 64 69 51 34 28	1,025 D, days 60 59 66 51 33 26	1,058 60 60 65 50 33 26	1,052 63 63 68 54 33 27	998 62 62 67 52 33 27	1,025 60 59 67 48 33 26	1,036 59 58 68 49 33 26	1,014 58 57 65 50 33 26	1,041 59 60 65 48 32 26	1,058 60 61 67 47 32 26	1,013 60 59 69 49 33 25	1,010  61 61 66 50 32 25

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

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

Table 11 - 4. Non-OFL		J,			3.		Change						Change
	2016	2017	2018	3Q19	4Q19	2019	19/18	1Q20	2Q20	3Q20	4Q20	2020	20/19
110													
US	13.6	14.4	16.7	18.6	19.2	18.5	1.8	19.4	20.0	20.2	20.5	20.0	1.5
Canada Mexico	4.5	4.8	5.2	5.3	5.4	5.3	0.1	5.5	5.2	5.5	5.6	5.4	0.1
OECD Americas	2.5 <b>20.6</b>	2.2 <b>21.5</b>	2.1 <b>24.0</b>	2.0 <b>25.9</b>	1.9 <b>26.6</b>	1.9 <b>25.8</b>	-0.1 <b>1.7</b>	1.9 <b>26.8</b>	1.8 <b>27.1</b>	1.8 <b>27.5</b>	1.7 <b>27.8</b>	1.8	-0.1 <b>1.5</b>
Norway	2.0	2.0	1.9	1.8	1.9	1.7	-0.1	1.9	1.9	1.9	2.1	<b>27.3</b> 2.0	0.2
UK	1.0	1.0	1.1	1.0	1.9	1.7	0.1	1.9	1.1	1.1	1.2	1.2	0.2
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
OECD Europe	3.9	3.8	3.8	3.7	3.9	3.8	-0.1	4.0	3.8	3.9	4.1	3.9	0.2
Australia	0.3	0.3	0.3	0.4	0.4	0.4	0.1	0.5	0.5	0.5	0.5	0.5	0.1
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	0.4	0.4	0.4	0.5	0.5	0.5	0.1	0.5	0.5	0.6	0.6	0.5	0.1
Total OECD	24.9	25.7	28.3	30.1	31.0	30.0	1.8	31.3	31.4	31.9	32.5	31.8	1.8
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
India	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	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
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	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	3.7	3.6	3.6	3.5	3.4	3.5	-0.1	3.4	3.4	3.4	3.4	3.4	0.0
Argentina	0.7	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Brazil	3.1	3.3	3.3	3.6	3.7	3.5	0.2	3.7	3.7	3.8	3.8	3.8	0.3
Colombia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	8.0	0.9	0.9	0.0
Trinidad & Tobago	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
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.2	0.2	0.3	0.3	0.3	0.0
Latin America	5.1	5.2	5.2	5.5	5.6	5.4	0.2	5.6	5.6	5.6	5.7	5.6	0.3
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Qatar Syria	2.0	1.9 0.0	2.0	2.0 0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Yemen	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
Middle East	3.3	3.1	3.2	3.2	3.2	3.2	0.0	3.2	3.2	3.3	3.3	3.2	0.0
Cameroon	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
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	0.7	0.7	0.7	0.0	0.7	0.6	0.6	0.6	0.6	0.0
Ghana	0.1	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	0.3	0.2	0.2	0.2	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa	1.5	1.5	1.5	1.6	1.6	1.6	0.1	1.6	1.6	1.6	1.6	1.6	0.0
Total DCs	13.5	13.4	13.5	13.7	13.9	13.6	0.1	13.8	13.9	13.9	14.0	13.9	0.3
FSU	13.9	14.1	14.3	14.1	14.3	14.3	0.0	14.3	14.4	14.3	14.6	14.4	0.2
Russia	11.1	11.2	11.3	11.4	11.3	11.4	0.1	11.4	11.5	11.5	11.6	11.5	0.1
Kazakhstan	1.6	1.7	1.8	1.6	1.9	1.8	-0.1	1.9	1.9	1.8	1.9	1.8	0.1
Azerbaijan	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Europe	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
China	4.1	4.0	4.0	4.0	4.1	4.1	0.1	4.1	4.1	4.1	4.1	4.1	0.0
Non-OPEC production	56.5	57.2	60.2	62.1	63.4	62.1	2.0	63.7	63.9	64.3	65.4	64.3	2.2
Processing gains	2.2	2.2	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3	0.1
Non-OPEC supply	58.7	59.5	62.4	64.4	65.6	64.4	2.0	66.0	66.2	66.6	67.7	66.7	2.3
OPEC NGL	4.5	4.5	4.7	4.8	4.8	4.7	0.1	4.8	4.8	4.8	4.8	4.8	0.0
OPEC Non-conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF) Non-OPEC &	4.6	4.6	4.8	4.9	4.9	4.8	0.1	4.9	4.9	4.9	4.9	4.9	0.0
OPEC (NGL+NCF)	62.0	644	67.0	60.0	70.5	60.0	2.4	70.0	74.4	74 5	72.0	74 5	2.2
Notes OFOD American inch	63.2		67.2	69.2	70.5	69.2	2.1	70.9	71.1	71.5	72.6	71.5	2.3

Note: OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Table 11 - 5: World rig count, units

				Change							Change
	<u>2016</u>	<u>2017</u>	<u>2018</u>	2018/17	<u>3Q18</u>	<u>4Q18</u>	<u>1Q19</u>	2Q19	<u>Jul 19</u>	<u>Aug 19</u>	Aug/Jul
US	509	875	1,031	157	1,051	1,073	1,045	990	955	926	-29
Canada	131	207	191	-15	208	177	185	83	120	141	21
Mexico	26	17	27	9	30	32	26	34	37	33	-4
OECD Americas	665	1,099	1,249	150	1,289	1,282	1,257	1,106	1,112	1,100	-12
Norway	17	15	15	0	14	17	15	17	19	19	0
UK	9	9	7	-2	8	8	13	16	16	18	2
OECD Europe	96	92	85	-7	84	90	92	159	200	193	-7
OECD Asia Pacific	7	15	21	5	22	23	24	29	33	30	-3
Total OECD	768	1,206	1,355	149	1,395	1,396	1,372	1,295	1,345	1,323	-22
Other Asia*	204	208	222	14	228	224	232	225	217	216	-1
Latin America	111	112	123	11	126	123	128	122	129	128	-1
Middle East	75	68	65	-4	64	62	66	69	67	67	0
Africa	43	38	45	7	50	50	54	52	46	48	2
Total DCs	432	426	454	28	468	460	481	468	459	459	0
Non-OPEC rig count	1,200	1,632	1,809	177	1,863	1,855	1,853	1,763	1,804	1,782	-22
Algeria	54	54	50	-4	48	47	47	49	41	44	3
Angola	6	3	4	1	4	5	5	5	5	4	-1
Congo	2	2	3	1	3	4	4	4	4	3	-1
Ecuador	4	6	8	2	9	11	9	8	10	8	-2
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	1	0
Gabon	1	1	3	3	3	4	7	6	6	6	0
lran**	143	156	157	2	157	157	157	157	157	157	0
Iraq	43	49	59	10	58	61	65	75	77	77	0
Kuwait	44	54	51	-3	50	45	44	44	46	47	1
Libya	1	1	5	4	7	9	11	15	15	16	1
Nigeria	6	9	13	5	15	12	14	14	15	15	0
Saudi Arabia	125	118	117	-1	119	123	118	115	125	114	-11
UAE	51	52	55	4	56	57	58	59	63	63	0
Venezuela	58	49	32	-17	27	26	25	23	25	25	0
OPEC rig count	537	553	558	5	557	563	565	576	590	580	-10
World rig count***	1,737	2,185	2,368	183	2,419	2,418	2,418	2,338	2,394	2,362	-32
of which:											
Oil	1,313	1,678	1,886	209	1,945	1,934	1,936	1,827	1,855	1,841	-14
Gas	370	466	448	-17	440	453	455	482	508	490	-18
Others	54	42	33	-9	34	31	26	29	31	31	0

Note: \* Other Asia includes Indonesia.

Totals may not add up due to independent rounding.

Sources: Baker Hughes Incorporated and OPEC Secretariat's estimates.

<sup>\*\*</sup> Estimated data when Baker Hughes Incorporated did not reported the data.

<sup>\*\*\*</sup> Data excludes China and FSU.

# **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

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

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

#### Glossary of Terms

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 purchasing managers' index

PPI producer price index

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

N	

down 5.09 in August

August 2019 59.62

July 2019 64.71

Year-to-date 64.63

# **August OPEC crude production**

mb/d, according to secondary sources



up 0.14 in August

August 2019

29.74

July 2019

29.60

Economic g	rowth ra	te					per cent
	World	OECD	US	Japan	Euro-zone	China	India
2019	3.0	1.6	2.3	0.9	1.2	6.2	6.1
2020	3.1	1.5	1.9	0.3	1.1	5.9	6.7

Supply and dema	and				mb/d
2019		19/18	2020		20/19
World demand	99.8	1.0	World demand	100.9	1.1
Non-OPEC supply	64.4	2.0	Non-OPEC supply	66.7	2.3
OPEC NGLs	4.8	0.1	OPEC NGLs	4.9	0.0
Difference	30.6	-1.0	Difference	29.4	-1.2

OECD commercial stocks								
	May 19	Jun 19	Jul 19	Jul 19/Jun 19	Jul 18			
Crude oil	1,476	1,468	1,427	<del>-4</del> 1.3	1,413			
Products	1,447	1,487	1,517	30.8	1,424			
Total	2,923	2,955	2,944	-10.5	2,836			
Days of forward cover	60.4	60.9	60.9	-0.1	58.7			