Monthly Oil Market Report

14 March 2019

Feature article: Review of global economic development

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) rose in February for the second consecutive month, improving by about 9%, or \$5.09, month-on-month (m-o-m) to average \$63.83/b. Oil prices were supported by expectations of tightening oil supply in the coming months amid increased unplanned outages. Crude oil futures prices continued their upward trend to reach levels not seen since last November. ICE Brent was \$4.19, or 7.0%, m-o-m higher at \$64.43/b, while NYMEX WTI rose by \$3.43, or 6.7%, to average \$54.98/b. Year-to-date (y-t-d) in February, ICE Brent was \$5.25, or 7.8%, year-on-year (y-o-y) lower at \$62.24/b, while NYMEX WTI decreased by \$9.78, or 15.5%, y-o-y to \$53.18/b. The ICE Brent price structure flattened at the front in of the curve, while backwardation strengthened at the back. DME Oman's backwardation remained significant in February. However, the NYMEX WTI price structure moved deeper into contango, mirroring US market oversupply. Hedge funds and other money managers continued to strengthen their bullish positions in ICE Brent, while decreasing their net long positions for NYMEX WTI.

World Economy

The global economic growth estimate remains unchanged at 3.6% in 2018 and is also forecast unchanged at 3.3% for 2019. In the OECD, US growth is unchanged at 2.9% in 2018 and projected at 2.5% for 2019. Eurozone growth remains at 1.8% in 2018 and is anticipated at 1.3% for 2019. GDP growth in Japan was revised lower to 0.7% for both 2018 and 2019. In the non-OECD countries, India's growth forecast was revised lower to 7.3% in 2018 and is now forecast at 7.1% for 2019, also showing a downward revision from the previous month's assessment. China's growth forecast remains at 6.6% in 2018 and 6.1% in 2019. Growth in Brazil remains unchanged at 1.1% in 2018 and is forecast at 1.8% in 2019. Russia's GDP growth forecast is also unchanged at 1.6% for both 2018 and 2019. Risks to global GDP growth continue to be skewed to the downside, as the slowing growth trend seems to be continuing in 1H19.

World Oil Demand

In 2018, world oil demand is estimated to have grown by 1.43 mb/d, down by 0.04 mb/d from the previous estimate amid downward revisions in both OECD and non-OECD regions. Oil demand growth in the OECD region was revised lower by 0.03 mb/d, due to softer-than-expected demand growth in OECD Europe and Asia Pacific during 4Q18 and despite solid data from OECD Americas, particularly the US. In the non-OECD region, oil demand growth in 2018 was also revised slightly lower by 0.02 mb/d, mainly reflecting the slower momentum in Other Asia and the Middle East. For 2019, world oil demand is forecast to grow by 1.24 mb/d, unchanged from last month's projections. As a result, total world oil demand is anticipated to reach 99.96 mb/d. Oil demand growth is projected to be driven by Other Asia particularly India, as well as China and OECD Americas. OECD countries are forecast to grow by 0.24 mb/d, while non-OECD oil demand is projected to rise by 1.00 mb/d in 2019.

World Oil Supply

Non-OPEC oil supply growth in 2018 was revised up by 0.03 mb/d from the previous MOMR, mainly due to higher-than-expected output in Canada in 4Q18, and is now estimated at 2.74 mb/d to average 62.19 mb/d. The main drivers for growth were the US, Canada, Russia, Kazakhstan and Qatar, while Mexico, Norway and Vietnam showed the largest declines. Non-OPEC oil supply growth in 2019 was also revised up by 0.06 mb/d, due to expected production increases in Canada as of April, as well as higher-than-expected growth in the Sudans. Non-OPEC supply growth in 2019 is forecast at 2.24 mb/d to average 64.43 mb/d. The US, Brazil, Russia, the UK and Australia are the main drivers, while Mexico, Norway, Indonesia and Vietnam are projected to see the largest declines. OPEC NGLs and non-conventional liquids are estimated to have grown by 0.04 mb/d in 2018, unchanged from the previous estimate to average 4.98 mb/d, and are forecast to grow by 0.09 mb/d in 2019 to average 5.07 mb/d. In February 2019, OPEC crude oil production decreased by 221 tb/d to average 30.55 mb/d, according to secondary sources.

Product Markets and Refining Operations

Global product markets reversed the downward trends and exhibited gains in February, after two consecutive months of weakening. In the US, all main products showed a solid positive performance as refinery product outputs declined considerably and led to a fall in inventory levels. In Europe, product markets saw increases across the barrel with the exception of naphtha, supported by inventory drawdowns amid lower product imports. In Asia, support came from the middle and the bottom of the barrel attributed to strong exports, despite prevailing weakness at the top of the barrel due to oversupply.

Tanker Market

In February, average dirty tanker spot freight rates declined further by 18%, continuing the downward trend seen a month earlier. Lower rates were seen on all reported dirty classes and most reported routes. The drop in rates came on the back of holidays in the East, reduced port and transit delays, thin market activity in general, and an increase in prompt vessels supply. Clean tanker spot freight rates were equally affected by the weakening trend and the general bearish sentiment.

Stock Movements

Preliminary data for January showed that total OECD commercial oil stocks rose by 22 mb m-o-m to stand at 2,880 mb. This was 4.3 mb higher than the same time one year ago and around 19 mb above the latest five-year average. Within the components, crude stocks indicated a surplus of 47 mb, while product stocks were 27 mb below the latest five-year average. In terms of days of forward cover, OECD commercial stocks rose by 0.5 days m-o-m in January to stand at 60.1 days. This was 0.3 days below the same period in 2018 and 0.9 days below the latest five-year average.

Balance of Supply and Demand

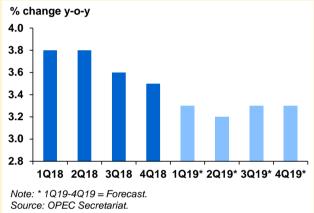
Demand for OPEC crude in 2018 is estimated at 31.5 mb/d, which is 1.4 mb/d lower than the 2017 level. In 2019, demand for OPEC crude is forecast at 30.5 mb/d, around 1.1 mb/d lower than the estimated 2018 level.

Feature Article

Review of global economic development

Global economic growth has slowed and the GDP forecast for 2019 now stands at 3.3% compared to estimate growth of 3.6% in 2018. The deceleration in global economic growth that started in 2H18 is forecast to continue in 1H19, before the growth dynamic picks up again in 2H19 (Graph 1). However, the near-term growth trend remains increasingly uncertain as the fiscal stimulus in the US is likely to taper off, China's slow-down is forecast to continue, issues in the Euro-zone are expected to remain, and India will most likely face lower growth levels in 2019. Moreover, global trade has continued to slow considerably and the outcome of the ongoing US-China trade negotiations remains to be seen. As a result, global economic growth now appears to be slightly skewed to the downside. An important stabilising factor, however, has been the recovery in oil prices since the beginning of the year, with a potentially positive impact on oil producing economies, including major OECD economies such as the US and Canada.

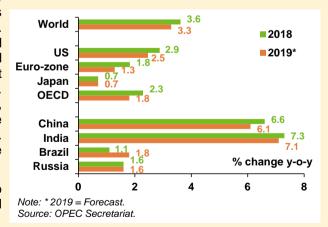
Within the OECD, the US economy continues to Graph 1: World quarterly GDP growth in 2018 and 2019 benefit from fiscal stimulus, however this is expected to fade over the course of the year. Consequently, growth is forecast at 2.5% in 2019, after growth of 2.9% in 2018. Lower growth is seen in the Euro-zone, with 1.3% for 2019, compared to 1.8% in 2018. Continued challenges in Italy, together with a slowdown in the two largest Euro-zone economies, Germany and France, are expected to lead growth lower in the current year. Also, Brexit-related issues may weigh further on 2019 growth. Meanwhile, Japan is forecast to grow at a much lower level, at 0.7% for both 2019 and 2018. As the government intends to increase the sales tax in 4Q19 and the economy continues to be constrained by very low unemployment and high utilisation rates in the industrial sector, the upside remains limited.



The slowing momentum in the global economy has been reflected in central bank policies, with monetary policies remaining relative accommodative. This may also support emerging and developing economies for some time and particularly benefit those with weak fiscal situations. Amid softening inflation levels, the Fed's hiking cycle appears now to be hold until around the end of the year. The ECB has introduced new monetary support facilities and indicated that it will not raise interest rates until at least the end of 2019.

In the emerging economies, India's 2019 growth Graph 2: Global economic growth by region for 2018 and forecast stands at 7.1%, after reported growth of 2019 7.3% in 2018. China's GDP growth in 2019 is forecast at 6.1%, following growth of 6.6% last year. Some upside may still come from further fiscal and monetary stimulus in China, while trade-related issues remain. Brazil's growth forecast stands at 1.8% in 2019, after growth of 1.1% in 2018. Depending on the policy actions by the government, as well as commodity price developments, the country's growth forecast for 2019 may be revised. Russia's growth is forecast at 1.6% for 2019, in line with growth seen in 2018.

The slowdown in global economic growth is also expected to contribute to somewhat lower oil demand requirements in 2019. Global oil demand is



expected to increase by 1.24 mb/d this year, down from growth of 1.43 mb/d last year. The US is expected to lead OECD growth, while in the non-OECD, a slowdown in China is likely to be offset by a recovery in demand growth in the Middle East.

While oil demand is expected to grow at a moderate pace in 2019, it is still well below the strong growth expected in the non-OPEC supply forecast for this year. This highlights the continued shared responsibility of all participating producing countries to avoid a relapse of the imbalance and continue to support oil market stability in 2019.

Feature Article

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Crude Oil Price Movements

The **OPEC Reference Basket** (ORB) rose firmly in February for the second-consecutive month, improving by about 9%, or \$5.09, m-o-m to average \$63.83/b. This was a result of strong crude oil demand for March loading and concerns about tightening oil supply in the coming months amid rising unplanned outages due to technical and geopolitical factors. All ORB component values increased in February along with their respective crude oil benchmarks and positive monthly changes in their respective official selling prices (OSPs) and crude differentials.

Crude oil futures prices continued their upward trend in February to reach levels not seen since last November. Oil prices were supported by increasing confidence that the oil market will balance later this year, the better performance of equity markets and growing optimism regarding the possibility of a US-China deal on trade matters. In February, ICE Brent was on average \$4.19, or 7.0%, m-o-m higher at \$64.43/b, while NYMEX WTI rose m-o-m by \$3.43, or 6.7%, to average \$54.98/b. On an annual average, ICE Brent is \$5.25, or 7.8%, y-o-y lower at \$62.24/b, while NYMEX WTI decreased by \$9.78, or 15.5%, y-o-y to \$53.18/b. DME Oman crude oil futures also progressed m-o-m by \$4.98 in February, or 8.4%, over the previous month to settle at \$64.62/b. On a yearly average, DME Oman was down by \$2.75, or 4.3%, y-o-y at \$62.01/b.

Hedge funds and other money managers continued to strengthen their bullish positions regarding the global benchmark Brent and have raised their net long positions week over week to reach the highest level since last October, amid a more balanced oil market and expectations of tightening global oil supply in the coming months. However, money managers decreased their net long positions for the US NYMEX WTI, and turned less bullish on the outlook for US oil prices owing to growing US oil supply and increasing US crude oil stocks.

The ICE Brent **price structure** flattened in the front of the curve, while price backwardation strengthened in the back of the curve as the oil market continued to move towards balance. DME Oman price backwardation remained significant in February, reflecting the tightening supply of medium and heavy sour crudes. However, the NYMEX WTI price structure moved deeper into contango, mirroring US market oversupply and the increase of crude oil stocks in Cushing, Oklahoma.

The **sweet/sour spread** narrowed again this month, particularly in Asia and in the USGC, as the medium and heavy sour market continued to tighten significantly, while the light sweet crude supply, which comes largely from the US, continued to grow.

OPEC Reference Basket

The **ORB** continued to rise firmly in February for the second consecutive month in a row, improving by about 9%, or \$5.09, m-o-m to average \$63.83/b.

The Basket value continued to increase during February, reaching \$66.56/b, the highest daily settlement since last November. This came on the back of strong crude demand for March loading and concerns about tightening oil supply in the coming months, amid rising unplanned outages owing to technical and geopolitical factors. Oil prices also were supported by a more balanced oil market, which was helped by the start of OPEC and non-OPEC production adjustment in January and tightening supply from several regions. Market sentiments continued to improve in February, given the high conformity levels of the countries participating in the "Declaration of Cooperation."

Graph 1 - 1: Crude oil price movement US\$/b US\$/b 90 90 80 80 70 70 60 60 50 50 40 40 Nov 18 **Jec 18** ∞ 9 Aug, eb, Sep Лау Jun ٦ Jan Mar Apr oct Mar OPEC Basket --WTI Brent Dated

Sources: Argus Media, OPEC Secretariat and Platts.

However, higher US crude oil exports, refinery turnarounds in several regions, and low refining margins, as well as concerns about slowing global economic growth, limited gains.

Crude oil **physical benchmarks** also increased in February, with Dated Brent, WTI and Dubai spot prices rising m-o-m by \$4.63, \$3.35 and \$5.35, respectively, to settle at \$64.00/b, \$54.98/b and \$64.42/b. For the year-to-date (y-t-d), ORB value was \$4.08, or 6.3%, lower at \$61.16/b compared to the same period in 2018.

All **ORB component values** rose in February to multi-month high levels, in line with their respective benchmarks, higher crude differentials and official selling prices, particularly for medium and heavy sour crudes that were supported by lower availability. Crude oil differentials were supported by strong crude demand in the physical market, lower loading programs and sustained backwardation in the Dubai price structure. On a monthly average, the ORB value increased m-o-m by \$5.09, or 8.7%, to settle at \$63.83/b in February.

Light sweet crude **ORB** components from West and North Africa, including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro, increased \$4.86 on average, or 8.2%, m-o-m to \$63.93/b in February. West African crudes, particularly heavier Angolan crudes, increased strongly in February on robust buying interest from Asian refiners amid lower availability of similar grades in the market. The narrowing Brent/Dubai Exchange of Futures for Swaps (EFS) gave more support for crudes linked to Brent. North Africa crude differentials were also supported by lower supply as Libya's El Sharara oil field remained closed.

Latin American ORB components rose strongly in February, performing better than other components. The Latin American market was underpinned by lower heavy sour crude supply, particularly from Venezuela, in addition to lower supply of similar crudes from the Middle East and Canada. Venezuela's Merey and Ecuador's Oriente settled higher m-o-m by \$4.95, or 9.7%, to \$55.85/b, and by \$5.32, or 9.7%, at \$60.42/b, respectively.

The value of **multi-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, increased by \$5.16, or 8.9%, m-o-m to \$63.36/b in February, supported by strong demand and lower crude oil production in an already tight medium and heavy sour market. Higher OSPs of heavier grades added support.

However, the **Middle Eastern spot component** Murban, a light sour grade, evolved lower compared to heavier grades due to high competitiveness of similar crudes in the Asia Pacific. Murban crude differentials to its OSP have been in steady decline, reaching their lowest level in several months. Murban crude saw their values higher m-o-m by \$4.83, or 7.9%, to \$65.64/b.

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

			Chang	je	Year-to-date		
	<u>Jan 19</u>	<u>Feb 19</u>	Feb/Jan	<u>%</u>	<u>2018</u>	<u>2019</u>	
Basket	58.74	63.83	5.09	8.7	65.25	61.16	
Arab Light	59.63	64.85	5.22	8.8	65.81	62.11	
Basrah Light	58.20	63.25	5.05	8.7	64.30	60.60	
Bonny Light	60.51	65.19	4.68	7.7	68.06	62.74	
Djeno	56.77	61.40	4.63	8.2	65.30	58.98	
Es Sider	58.27	63.15	4.88	8.4	66.38	60.59	
Girassol	59.98	65.30	5.32	8.9	68.01	62.51	
Iran Heavy	56.29	61.39	5.10	9.1	64.14	58.72	
Kuwait Export	58.65	63.93	5.28	9.0	64.03	61.16	
Merey	50.90	55.85	4.95	9.7	58.45	53.26	
Murban	60.81	65.64	4.83	7.9	67.41	63.11	
Oriente	55.10	60.42	5.32	9.7	61.98	57.63	
Rabi Light	58.62	63.25	4.63	7.9	66.26	60.83	
Sahara Blend	59.27	64.30	5.03	8.5	68.06	61.67	
Zafiro	60.09	64.92	4.83	8.0	67.31	62.39	
Other Crudes							
Dated Brent	59.37	64.00	4.63	7.8	67.23	61.58	
Dubai	59.07	64.42	5.35	9.1	64.50	61.62	
Isthmus	58.13	63.81	5.68	9.8	66.26	60.83	
LLS	58.50	63.24	4.74	8.1	66.20	60.75	
Mars	56.71	61.89	5.18	9.1	62.59	59.17	
Minas	51.72	56.94	5.22	10.1	59.60	54.21	
Urals	60.26	64.10	3.84	6.4	65.99	62.09	
WTI	51.63	54.98	3.35	6.5	62.96	53.23	
Differentials							
Brent/WTI	7.74	9.02	1.28	-	4.27	8.35	
Brent/LLS	0.87	0.76	-0.11	-	1.04	0.82	
Brent/Dubai	0.30	-0.42	-0.72	-	2.74	-0.04	

Note: As of January 2019, the ORB excludes the Qatar's crude "Qatar Marine". Sources: Argus Media, Direct Communication, OPEC Secretariat and Platts.

On 13 March, the ORB stood at \$66.60/b, \$2.77 above the February average.

The oil futures market

Crude oil futures prices continued their upward trend in February to reach levels not seen since last November on a number of factors including the improving market balance, supply outages, better performance of equity markets and growing optimism that US-China trade talks will result in a deal. Comments from US Federal Reserve officials that the central bank will take a patient approach on monetary policy, also added support. Future oil prices were underpinned by tightening global oil supply amid numerous supply outages, particularly for heavy and medium sour crudes, which pushed DME Oman price to perform better than other future crude benchmarks.

ICE Brent prices rose 7% on average m-o-m, supported by a more balanced global oil market and greater market confidence that the oil market will balance later this year, after the release of data showing that OPEC and non-OPEC production adjustment has registered strong conformity in January, in addition to comments from some OPEC and non-OPEC participating countries on continuing efforts to balance the market in coming months.

NYMEX WTI future prices also rose in February but at a slower pace, as the US benchmark was undermined by the rise of US oil supply to high levels, which contributed to the increase of US crude oil stocks for five consecutive weeks, amid low refinery intakes. DME Oman futures rose strongly in February and have settled higher than ICE Brent, as Middle Eastern crudes were supported by strong demand, particularly for medium

and heavy sour crudes, amid expectations of lower supply of similar grades from other regions. Nonetheless, rising crude oil futures in February were capped by weak refining margins, refinery run cuts as well as persistent worries about global oil demand and economic growth as Asian key economies showed signs of slowing.

Futures oil prices continued to rise in the first decade of March, with ICE Brent price settled in a narrow range of \$65/b and \$67/b, as OPEC and non-OPEC participating countries continued to show high conformity level of production adjustment and as risks of tighter supply due to geopolitical factor remained high. Expectations that the US and China would reach a trade agreement soon also sustained prices. However, disappointing macroeconomic data coming from major economies weighed on market confidence and on oil prices.

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

			Chang	ie –	Year-to-date		
	<u>Jan 19</u>	<u>Feb 19</u>	<u>Feb/Jan</u>	<u>%</u>	<u>2018</u>	<u>2019</u>	
NYMEX WTI	51.55	54.98	3.43	6.7	62.96	53.18	
ICE Brent	60.24	64.43	4.19	7.0	67.48	62.24	
DME Oman	59.64	64.62	4.98	8.4	64.76	62.01	
Transatlantic spread (ICE Brent-NYMEX WTI)	8.69	9.45	0.76	8.8	4.53	9.06	

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

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

In February, **ICE Brent** was on average \$4.19, or 7.0%, m-o-m higher at \$64.43/b, while **NYMEX WTI** rose m-o-m by \$3.43, or 6.7%, to average \$54.98/b. On an annual average, ICE Brent is \$5.25, or 7.8%, y-o-y lower at \$62.24/b, while NYMEX WTI decreased by \$9.78, or 15.5%, y-o-y to \$53.18/b.

DME Oman crude oil futures also progressed m-o-m by \$4.98 in February, or 8.4% over the previous month, to settle at \$64.62/b. On a yearly average, DME Oman was down by \$2.75, or 4.3%, y-o-y at \$62.01/b.

Crude oil futures prices continued to rise in the first half of February. On 13 February, ICE Brent stood at \$67.55/b and NYMEX WTI at \$58.26/b.

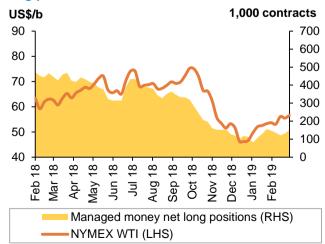
Hedge funds and other money managers continued to strengthen their bullish positions for the global benchmark Brent during February and have raised their net long positions week over week to reach the highest level since last October, amid prospects of tightening global oil supply in the coming months. Expectations for a trade deal between US and China have also increased investors' confidence. However, money managers decreased their net long position in US NYMEX WTI, and turned less bullish on the outlook for US oil prices owing to growing US oil supply and increasing US crude oil stocks.

Hedge funds and money managers continued to reduce their bullish wagers on US crude for three consecutive weeks in February.

The speculator group cut their combined net long positions for futures and options' positions in the **NYMEX WTI** by 24,553 contracts, or 15.8%, to 131,322 contracts for the week ending 26 February, according to US Commodity Futures Trading Commission (CFTC).

Gross short positions rose to 5,650 contracts, while gross long positions declined by 18,903 contracts, the lowest level in more than a year, data showed. Nonetheless, during this period, NYMEX WTI prices increased by about 4% to the highest level since last November.

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



Sources: CFTC, CME Group and OPEC Secretariat.

Hedge funds and other money managers continued to increase firmly their combined futures and options net long positions linked to **ICE Brent**, by 58,633 contracts, or 25.2%, to 291,336 contracts for the week ending 26 February, according to the ICE Exchange.

The **long-to-short ratio** in ICE Brent speculative positions increased late February to 6.1:1, compared to 5.9:1 in late January, while that of NYMEX WTI decreased to 2.7:1 for the week ending 26 February.

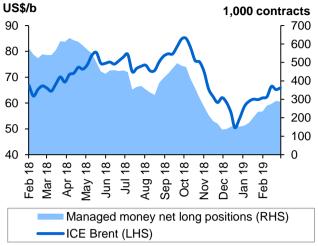
The total futures and options open interest volume in the two exchanges decreased slightly by 176,055 contracts to stand at 5.6 million contracts in the week ending 26 February.

The daily average traded volume for NYMEX WTI contracts fell by 43,324 lots, or 3.5%, in February to 1,197,004 contracts. The daily average traded volume for ICE Brent also declined by 39,638 contracts, or 4.8%, at 790,907 lots.

The daily aggregate traded volume in February for both crude oil futures markets decreased by 82,962 contracts m-o-m to stand at 2.0 million futures contracts, or about 2.0 billion b/d of crude oil.

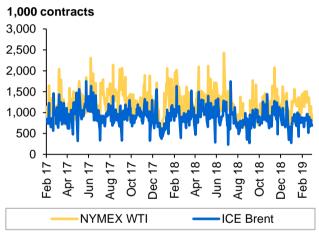
The December **total traded volume** in NYMEX WTI was 12.3% lower at 23.9 million contracts, and that of ICE Brent was 13.4% lower at 15.8 million contracts.

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



Sources: Intercontinental Exchange and OPEC Secretariat.

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



Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

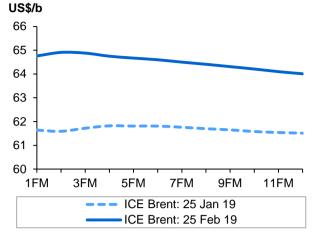
The futures market structure

The ICE Brent **price structure** flattened in the front of the curve while price backwardation strengthened in the back of the curve, as the oil market continued to move towards balance. DME Oman price backwardation remained significant in February, reflecting the tightening supply of medium and heavy sour grades and also healthy crude demand, particularly from Asia. However, the NYMEX WTI price structure moved deeper into contango mirroring the US oil market oversupply and continued increase of crude oil stocks in the US, which was exacerbated by pipeline bottlenecks.

The futures **Brent** price structure flattened in February and the Brent time spread for first to sixth months slipped into **backwardation** of 16¢/b on 25 February, as the oil market continued to move towards balance, reflecting oil supply tightening, while high geopolitical risks added to worries about supply prospects in the coming months. High conformity with the OPEC and non-OPEC production adjustments contributed to the market rebalancing process.

DME Oman market structures remained in **backwardation** over February on strong promptmonth prices, which were supported by tightening medium and heavy sour market, and lower supply of similar crudes quality from several regions. Healthy physical crude oil demand in Asia and expectations of lower supply in the region added support.

Graph 1 - 5: ICE Brent forward curves

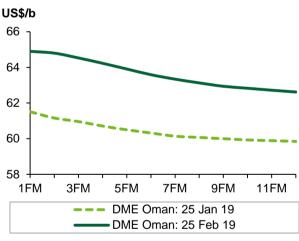


Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

However, **NYMEX WTI** price structure moved deeper into **contango** and the front of the curve steepened further, signaling market overhang around the US trading hub in Cushing, Oklahoma. Indeed, US stocks at Cushing increased in February to reach its highest level since late 2017. The NYMEX WTI forward structure remained in contango over the forward six months as US crude oil production and crude oil stocks were expected to continue to grow, while lower US refining runs weighted on prompt prices.

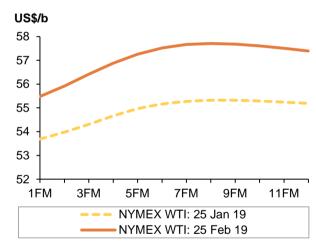
Graph 1 - 6: DME Oman forward curves



Note: FM = future month.

Sources: Dubai Mercantile Exchange and OPEC Secretariat.

Graph 1 - 7: NYMEX WTI forward curves



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

Regarding the **M1/M3 structure**, the North Sea Brent M1/M3 contango of $2\phi/b$ widened slightly to $10\phi/b$, a change of $8\phi/b$. The Dubai M1 $30\phi/b$ premium to M3 increased to a $63\phi/b$ premium, up by 34ϕ . In the US, the WTI contango of $61\phi/b$ widened further to $82\phi/b$, where the spread M1-M3 increased by 22ϕ .

The **spread between the ICE Brent and NYMEX WTI** benchmarks widened further in February to \$9.45/b, on a monthly basis, as ICE Brent increased by more than NYMEX WTI. The global benchmark Brent rose amid tightening supply and a more balanced oil market while the WTI price was undermined by the continuous rise of US oil supply and crude oil stocks.

The first-month ICE Brent/NYMEX WTI spread widened 76¢ m-o-m, to \$9.45/b in February. This was the largest monthly change since October 2018.

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	25 Jan 19	53.69	53.98	54.31	55.16	55.19	1.50
	25 Feb 19	55.48	55.92	56.42	57.52	57.39	1.91
	Change	1.79	1.94	2.11	2.36	2.20	0.41
ICE Brent	25 Jan 19	61.64	61.59	61.72	61.81	61.51	-0.13
	25 Feb 19	64.76	64.91	64.88	64.60	64.01	-0.75
	Change	3.12	3.32	3.16	2.79	2.50	-0.62
DME Oman	25 Jan 19	61.51	61.16	60.96	60.32	59.85	-1.66
	25 Feb 19	64.90	64.80	64.53	63.59	62.62	-2.28
	Change	3.39	3.64	3.57	3.27	2.77	-0.62

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 spread narrowed again this month, particularly in Asia and in the USGC as the medium and heavy sour market continued to tighten significantly, while the light sweet crude supply that is coming largely from the US continued to grow.

In **Europe**, as a result of the tightening of heavier crude supply from several regions, Urals crude differentials have been trading at a premium to light sweet North Sea Brent since the beginning of the year. However, this premium narrowed significantly in February, thanks to higher Urals crude availability for March loadings as Russian refiners planned to cut runs during spring maintenance. According to Argus, seaborne crude exports from Russian Baltic and Black Sea ports are expected to rise by 11% m-o-m, referring to a preliminary fullmonth loading program. Nonetheless, the value of Brent remained lower than Urals, on monthly average. The Brent/Urals discount narrowed by 79¢ to minus 10¢/b.

(Urals and Dubai) spread US\$/b US\$/b 6 0 -2

Graph 1 - 8: Brent Dated vs. sour grades

Nov 18 Aug 18

Urals

Sources: Argus Media, OPEC Secretariat and Platts.

Dubai

In the USGC, the Light Louisiana Sweet (LLS) premium over Mars crude narrowed further in February as medium sour Mars was supported by strong demand from US refiners amid lower supply of similar crudes quality from Middle East and Latin America into the USGC. Crude prices strengthening in Latin America added support. In contrast, light sweet crude differentials remained pressured as light distillate margins weakened and US tight oil supply and crude oil stocks continued to rise. The LLS/Mars spread narrowed by 44¢ to \$1.35/b.

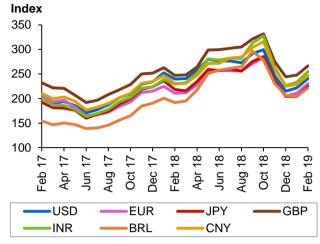
The sweet/sour spread narrowed significantly in Asia as the market witnessed reduced flows of medium and heavy sour crudes from Middle East and Latin America, while lighter grades were under pressure from lower demand. Refinery maintenances and weak light distillates margins in Asia reduced demand for light crudes. Furthermore, Asian light sour grades were under further pressure due to strong competitiveness of similar crudes from Atlantic Basin. The Tapis premium over Dubai narrowed by 69¢ to \$3.61/b.

The impact of the US dollar and inflation on oil prices

The **US dollar (USD)** generally increased against major currency counterparts in February. While the US Federal Reserve has signalled a slower pace of monetary tightening this year, the deceleration in other major developed economies has been more pronounced, and their respective central banks have responded by downplaying expectation of tightening this year. Indeed, most recently, the ECB has effectively dismissed the possibility of a rate hike in 2019 in its last meeting, after downgrading its inflation expectation.

The dollar advanced by 0.6% m-o-m against the euro in February and by 1.2% against the Swiss franc. Against the Japanese yen, the dollar advanced by 1.3%, with the BOJ signalling that further monetary easing could be implemented should the Japanese economy weaken further, and also due to declining safe-haven demand as financial market sentiment continued to improve. In contrast, the dollar declined by 0.9% against the pound sterling with uncertainties regarding Brexit in the driver seat.

Graph 1 - 9: ORB crude oil price index comparing to different currencies (Base January 2016 = 100)



Sources: IMF and OPEC Secretariat.

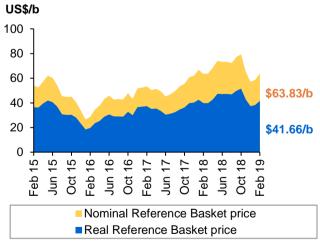
On average, the USD declined against the Chinese yuan for the second-consecutive month in February, down by 0.8% m-o-m supported by the expectation of an agreement between the US and China amid the ongoing trade disputes. Against the Indian rupee, the dollar increased by 0.7%. Against the currencies of large commodity exporters, the USD declined by 0.5% against the Brazilian real – which was supported by the optimism provided by the ongoing pension reform discussions in the country's Congress- and by 2.2% m-o-m against the Russian ruble amid a recovery in oil prices since the beginning of the year.

In **nominal terms**, the price of the ORB increased by \$5.09, or 8.9%, to \$63.83/b in February.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to \$41.66/b in February from a revised \$38.27/b (base June 2001=100) in the previous month.

Over the same period, the ${\bf USD}$ increased by 0.3% against the import-weighted modified Geneva I + USD basket, while inflation increased by 0.1% 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 commodity prices experienced similar trends as in the previous month, with crude oil prices advancing in tandem with improving sentiment in the global financial market. However, in contrast, coal and natural gas declined as mild temperatures during the winter season have resulted in oversupplied markets.

In the group of **non-energy commodities**, base metal prices consolidated previous month gains mainly on the expectation that stimulus measures by the government of China, and a potential breakthrough in trade negotiations between China and the US, would support growth after some deceleration in 4Q18 and at the beginning of 1Q19. In the group of precious metals, gold advanced in the first half of the month, with the Fed's signalling of a slower pace of rate increases in the US.

Trends in selected commodity markets

The **energy price index** increased by around 4.9% in February m-o-m, and it was down on average by 8.7% year-to-date compared to the same period the last year. The non-energy index was up by 1.8% m-o-m, and it was down 6.5% y-t-d compared to last year.

Table 2 - 1: Commodity prices

Commodity	Unit	Мс	onthly aver	ages	% Change	Year-to-date	
Commodity	Offic	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Feb 19/Jan 19	<u>2018</u>	<u>2019</u>
Energy*		72.6	73.8	77.4	4.9	82.8	75.6
Coal, Australia	US\$/mt	101.4	98.6	95.4	-3.2	106.2	97.0
Crude oil, average	US\$/b	54.0	56.6	61.1	8.0	64.8	58.9
Natural gas, US	US\$/mbtu	4.0	3.1	2.7	-11.8	3.3	2.9
Natural gas, Europe	US\$/mbtu	8.0	7.3	6.0	-17.3	6.7	6.6
Non-energy*		80.8	81.3	82.7	1.8	87.7	82.0
Base metal*		82.7	81.3	84.7	4.2	96.9	83.0
Precious metals*		94.9	98.4	100.4	2.0	102.4	99.4

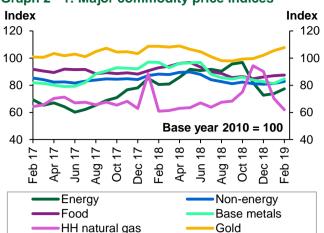
Note: * World Bank commodity price indices (2010 = 100).

Sources: World Bank, Commodity price data; OPEC Secretariat.

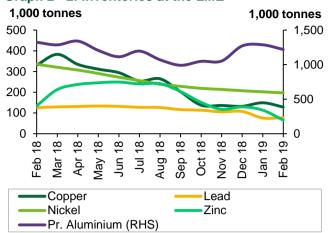
In February, the **Henry Hub natural gas index** decreased on average by 11.8% to \$2.7/mmbtu. The index was 11.5% below y-t-d compared to the same period last year. Prices were significantly low at the beginning of the month due to milder weather which reduced withdrawals from storage, but colder weather resumed in the second half of the month providing some support. Nonetheless prices have struggled to regain \$3 mmbtu since the end of January. According to the EIA, utilities withdrew 149 bcf from working gas underground storage during the week ending March 1, larger than the five year average withdrawal of 109 bcf. The draw left total working gas in underground storage at 1,390 bcf, which was 25.0% lower than the previous five-year average. Since November, withdrawals from storage have been 8% below the five year average. The US Climate Prediction Center (CPC) forecast warmer than average temperatures east of the Mississippi and west of the Rockies for the March-May period.

Natural gas prices in Europe declined with the Title Transfer Facility price falling by 17.3% to \$6.01/mmbtu in February, and they are down around 37% since September 2018. Prices have weakened mainly due to persistently mild weather during winter. At the same time, above normal temperatures in Asia have made both LNG and coal cheaper, providing further downward pressure. Natural gas inventories for EU Member States declined to around 42.2% of capacity at the end of February, versus 52.6% at the end of January. They were higher compared than the 29.1% level at the end of February last year, according to Gas Infrastructure Europe.





Graph 2 - 2: Inventories at the LME



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

Gold

Sources: LME, Thomson Reuters and OPEC Secretariat.

Thermal coal prices decreased to an average of \$95.4/mt in February, or 3.2% m-o-m, with mild weather and China's government import restriction putting downward pressure on prices. Chinese imports fell sharply in February by 47% from the previous month after having almost tripled in January m-o-m. China's coal output increased by 1.1% y-o-y in January, after having increased by 2.1% in December. Coal prices in February were on average around 21% below their July 2019 average.

The base metal price index advanced on average by 4.2% in February m-o-m and was down by 14.4% in the Jan-Feb period compared to the previous months in 2018. Prices recovered in tandem with stimulus measures by the government of China, the expectation of a breakthrough in the trade negotiations between the US and China, and in general, following improving sentiment in equity markets, amid a relatively more accommodative stance by the US Federal Reserve. However, the conditions in the global manufacturing sector have continued to deteriorate in February, as shown by the JP Morgan global manufacturing PMI reaching a 32-month low of 50.6, compared to 50.8 the previous month. The main areas of weakness have been observed in the new orders and new export sub-components. The new orders reading stayed at 50.1 in February, unchanged from the previous month, very close to the expansion/contraction threshold of 50.0. Meanwhile, amid the slowdown in global trade, the new export sub component went further into the contraction zone, with 49.1 compared to 49.4 in January. This slowdown in trade has been also flagged by the WTO's World Trade Outlook Indicator, which showed the weakest reading since March 2010 and pointed to below-trend growth.

Copper prices were up on average 6.1% m-o-m in February following improving financial market sentiment, and the aforementioned stimulus in China. The International Copper Study group estimated the global refined copper balance to be 395,000 in deficit in the January-November period after some data revision. This is a smaller deficit than the estimated 545,000 tonne deficit in the January-October period of 2018. though inventories still suggest some tightness in the market. Indeed, inventory levels at the London Metal Exchange (LME) - designated warehouses - decreased to around 128,475 mt compared to 149,200 mt in the previous month, suggesting a tighter market. This figure is around 60% lower than last February.

Iron ore rose by 15.8%, after increasing by around 10% the previous month, as a result of a major accident at one of the miner company Vale's largest operations in Brazil at the end of January, which not only halted operations in the mine, but triggered security reviews in other mines, resulting in additional reductions of the company's output.

In the group of precious metals, the index rose by 2.0% mainly as a result of a more patient stance by the US Federal Reserve in regard to interest rate increases. As sentiment improved in financial markets, demand for safe-haven assets decreased and prices weakened in the second half of the month. Gold prices advanced by 2.2%, silver by 1.2% and platinum by 1.4%.

Investment flows into commodities

Open interest (OI) decreased on average in December for selected US commodity futures, such as crude oil, copper and natural gas, but increased for precious metals. On average, the speculative net long positions increased for crude oil and precious metals, whereas they decreased for natural gas, and the net short position in copper was also reduced.

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

	Open ir	nterest		gth		
	<u>Jan 19</u>	<u>Feb 19</u>	<u>Jan 19</u>	<u>% OI</u>	<u>Feb 19</u>	<u>% OI</u>
Crude oil	2,079	2,045	109	5	144	7
Natural gas	1,324	1,255	201	15	143	11
Precious metals	679	704	66	10	106	15
Copper	263	250	-41	-15	-3	-1
Total	4,345	4,253	315	28	225	42

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

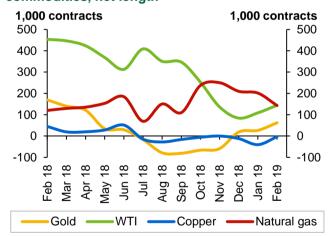
Sources: CFTC and OPEC Secretariat.

Henry Hub's natural gas OI decreased in February by 5.2%, while money managers' average net long positions decreased by 29% to 142,904 contracts. The have decreased their net length by around 43% since November.

Copper's OI decreased in February by 4.8%. Money managers decreased their net bearish bets to just around three thousand contracts, though they are still relatively neutral despite the recent rally.

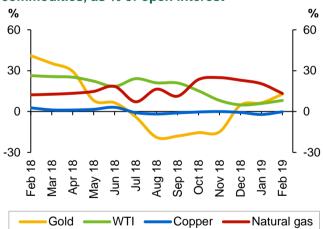
Precious metals' OI increased by 3.6%. Money managers increased their net long positions by around 61% to 106,156 contracts, on the outlook of a more accommodative monetary policy in the US.

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

Recent data has confirmed the **deceleration in global economic activity anticipated in last month's MOMR**. The global economic growth forecast was unchanged at 3.3% for 2019, after estimated growth of 3.6% in 2018. Risks are more skewed to the downside compared to last month's report, as the slowing growth trend is on course to continue in 1Q19. Growth in the OECD economies has slowed further, and China and India also saw a weakening trend. Global trade has continued to slow and the outcome of the ongoing US-China trade negotiations remains uncertain. An important stabilising factor was the recovery in oil-prices since the beginning of the year. This stabilization has had a positive impact on oil producer economies, including major OECD economies, like the US and Canada.

In the **OECD**, the gap in growth levels has widened with the US holding up compared to the Euro-zone and Japan. Momentum in economic growth in the US continues, albeit at a slowing pace. The 2019 US growth forecast remains at 2.5%, after growth of 2.9% in 2018. The Euro-zone's 2019 growth also remains unchanged at 1.3%, following growth of 1.8% in 2018. The 2019 growth forecast for Japan was revised down to 0.7% from 1.0%, after lower-than-expected growth of 0.7% in 2018. Moreover, further downside risks remain to the OECD growth forecast, which now stands at 1.8% for 2019, after 2.3% in 2018.

In the **emerging economies**, with the exception of India, the growth forecasts remain broadly unchanged. 2018 growth in India was reported at a lower-than-expected level of 7.3%, leading to a downward revision of the 2019 growth forecast to 7.1% from 7.2%. China's 2019 growth forecast remains unchanged at 6.1%, following growth of 6.6% in 2018. Some upside may still come from further fiscal and monetary stimulus in China, while trade related tensions continue. Brazil's growth forecast remains at 1.8% in 2019, after growth of 1.1% in 2018. Depending on the policy actions by the government, as well as commodity price developments, the growth forecast for 2019 may alter. Russia's growth forecast for 2019 remains unchanged at 1.6%, the same level as in 2018.

Underlying risks continue and may further hinder the 2019 global growth level. These risks pertain to ongoing trade tensions, uncertainties in monetary policies and challenges in several emerging and developing economies. Moreover, Brexit, fiscal issues in some EU Member Country economies and Japan's slow-down in combination with its envisaged sales tax increase pose additional risks. After a further weakening of the 1Q19 global growth trend, the growth dynamic is forecast to pick up again in the remainder of the year in the current 2019 global growth forecast. However, the near-term growth trend remains increasingly uncertain as the fiscal stimulus in the US is expected to taper off, China's slow-down is forecast to continue, issues in the Euro-zone are expected to remain and India will most likely face lower growth levels as well.

Table 3 - 1: Economic growth rate and revision, 2018-2019*, %

					Euro-					
	World	OECD	US J	Japan	zone	UK	China	India	Brazil	Russia
2018	3.6	2.3	2.9	0.7	1.8	1.4	6.6	7.3	1.1	1.6
Change from previous month	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	-0.2	0.0	0.0
2019	3.3	1.8	2.5	0.7	1.3	1.4	6.1	7.1	1.8	1.6
Change from previous month	0.0	-0.1	0.0	-0.3	0.0	0.0	0.0	-0.1	0.0	0.0

Note: *2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

Table 3 - 2: GDP growth in comparison, 2018-2019*, %

<u>2018</u>	World	US Eur	o-zone	Japan	China	India**	Russia	Brazil
OPEC	3.6	2.9	1.8	0.7	6.6	7.3	1.6	1.1
IMF	3.7	2.9	1.8	0.9	6.6	7.3	1.7	1.3
World Bank	3.6	2.9	1.9	0.8	6.5	7.3	1.6	1.2

<u>2019</u>	World	US Eur	o-zone	Japan	China	India**	Russia	Brazil
OPEC	3.3	2.5	1.3	0.7	6.1	7.1	1.6	1.8
IMF	3.5	2.5	1.6	1.1	6.2	7.5	1.6	2.5
World Bank	3.5	2.5	1.6	0.9	6.2	7.5	1.5	2.2

Note: * 2018 = Estimate and 2019 = Forecast.

Sources: International Monetary Fund, The World Bank Group and OPEC Secretariat.

OECD

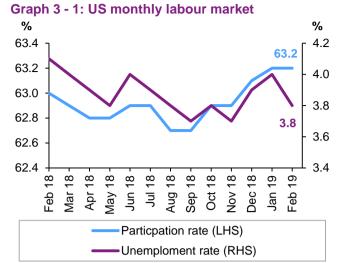
OECD Americas

US

Following a delay due to the government shutdown, the US GDP growth number for 2018 was released, and confirmed annual growth of 2.9%. However, 4Q18 momentum has slowed, a dynamic that is forecast to continue in 1Q19 due to the impact of the government shut-down, the cold weather on the East Coast and a downward trend in consumer sentiment. GDP growth in 4Q18 was reported by the Bureau of Economic Analysis at 2.6% q-o-q at a seasonally-adjusted annualized rate (SAAR), in the first of the usual three estimates. This comes after a very high economic growth level of 3.4% q-o-q SAAR in 3Q18 and 4.2% q-o-q SAAR in 2Q18. At a 4Q18 growth rate of 2.8% q-o-q SAAR, private household consumption contributed to the majority of growth. While growth is relatively likely to be below 2.0% in 1Q19, a rebound is forecast for the remainder of the year. So, the slow-down may be limited, but risks remain in the form of political issues, trade tensions and the waning effects of last year's fiscal stimulus. The outcome of an agreement between the US and China on trade-related issues remains uncertain, although the US administration has extended the negotiation period of 90 days. Also, budgetary issues remain. On 2 March, the US has officially hit the debt ceiling, capping the national debt at just over \$22 trillion. While the Treasury will be able to extend financing for about half a year, the debate in Congress about how to proceed, will probably again aggravate political tensions. Moreover, the 2018 trade deficit has reached the highest level in more than ten years. The US trade deficit rose to \$621bn in 2018, contrary to ambitions by the current US administration to reduce its imbalance. Over the entirety of last year, the deficit rose by 12.5% after the 6.3% expansion in US exports was outpaced by a 7.5% boost to imports. The overall deficit of \$621bn was the largest since 2008, when it reached \$709bn. The US goods deficit was \$891bn, the largest on record, of which China accounted for almost half of that total, increasing \$43.6bn to \$419.2bn last year, based on data from the Census Bureau.

^{**} IMF and World Bank forecasts based on fiscal year versus OPEC forecast based on calendar year.

The labour market report was mixed, with a particularly soft tone on job growth, while earnings growth improved again. The unemployment rate fell as well, moving down to 3.8%, after it stood at 4.0%. However, the low job growth number indicates that the labour market's upside is increasingly becoming more limited. Non-farm payrolls increased by only 20,000 in February, after a considerable 311,000 in January. Average hourly earnings' growth for the private sector also remained above 3% for the fifth consecutive month at a high rate of 3.4% y-o-y, the strongest level since 2009. Long-term unemployment edged up slightly to stand at 20.4% in February, after a level of 19.3% in January, which was the lowest level since 2008. The participation rate remained at 63.2%, the highest level since 2013.



Sources: Bureau of Labor Statistics and Haver Analytics.

Overall **inflation** softened. Total yearly inflation stood at 1.6% y-o-y in January, compared to 1.9% y-o-y in December and 2.2% in November, indicating a clear downward trend as it marks the fourth consecutive month of decline. The important core inflation – excluding volatile items such as food and energy – stood at 2.2% y-o-y in January for the third month in a row, a healthy level and an indication of robust underlying economic development. The Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), retracted slightly to 1.7% y-o-y in December, compared to 1.8% y-o-y in November and 2.0% in October. Considering these declining levels, the Fed is obviously being more flexible in its monetary policies.

The very important housing sector continued to exhibit mixed developments in some of its most important measures, amid the dynamic of rising interest rates. The S&P CoreLogic Case-Shiller Home Price Index Composite 20 for metropolitan areas shows a slowing trend in price-increases. The December rise stood at 4.2% y-o-y, the lowest level since 2012. Furthermore, the yearly change in the house pricing index of the Federal Housing Finance Agency (FHFA) has also continued a slowing dynamic with a monthly price rise of 5.6% in December. This compares to a yearly average of 6.7% in 2018. Existing home sales in January decelerated too, with an annualised level of 4.94 million entities, compared to 5.34 on average in 2018. New home sales recovered somewhat, rising by 621,000 in December and, hence, matching the 2018 average.

Graph 3 - 2: US house prices



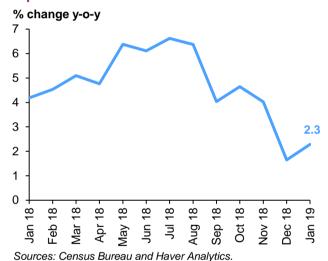
Sources: Federal Housing Finance Agency and Haver Analytics.

The general economy's slowdown has also been reflected in consumer sentiment over the past months. Positively, the lead-indicator, published by the Conference Board, recovered in February, to now stand at 131.4, after having fallen to 121.7 in January. This indicates that after some months, retail sales may also again pick up further.

After having decelerated considerably in December. growing by only 1.7% v-o-v. retail sales recovered to grow by 2.3% y-o-y in January. However, this compares to about the lowest retail sales levels in 2016, a year when US growth stood at only 1.6%.

Industrial production growth stood at 3.8% y-o-y in January, comparing to 4.1% y-o-y in December and 4.5% y-o-y in November. This slowing momentum was also confirmed by manufacturing lead-indictor orders. а good for future manufacturing activity. Manufacturing orders retracted to 2.4% y-o-y, the lowest growth level since 2016.

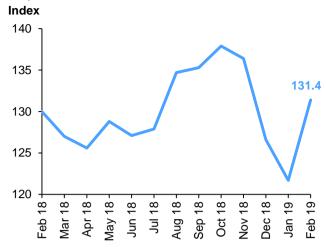
Graph 3 - 4: US retail sales



February's Purchasing Managers' Index (PMI), as provided by the Institute of Supply Management (ISM), indicated a slight deceleration, but a strong trend in the manufacturing sector, while the important services sector has improved in February. The manufacturing PMI retracted to stand at 54.2 in February, compared to 56.6, in January. The important index for the services sector improved to 59.7 in February, compared to 56.7 in January and 58.0 in December.

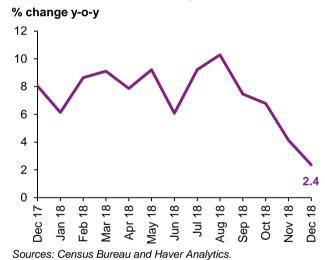
There is still some uncertainty about the real underlying momentum in 1Q19 GDP growth, given distortions caused by the government shut-down. The available economic indicators confirm the slowing trend, while the depth remains to be seen. Further available data in the coming weeks will provide evidence of the near-term trend. For this month, the 2019 GDP growth forecast remains at 2.5%, following growth of 2.9% in 2018.

Graph 3 - 3: US consumer confidence index

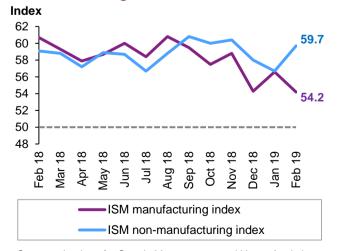


Sources: The Conference Board and Haver Analytics.

Graph 3 - 5: US manufacturing orders



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



Sources: Institute for Supply Management and Haver Analytics.

Ongoing domestic political frictions, trade-related issues amid slowing domestic consumption tilt the risks in the current forecast to the downside.

Canada

The final 2018 growth numbers have confirmed that **Canada's economic slow-down** continues. While Canada's most important trading partners are facing decelerating economies, also the decline in oil-prices is having an impact. Another downside risk comes from Canada's housing sector, which saw price declines in the past three months, after strong rises over the last years. With relatively sensitive indebtedness in the housing sector, this remains an area that should be closely monitored, given that the Central Bank of Canada has tightened monetary policies accordingly since 2017. However, the mixed development is likely to lead the central bank to keep interest rates at the current level in the short-term. This is also supported by the unemployment rate of 5.8% in February, seemingly at around the level that the central bank may consider to be inflation neutral. Moreover, **inflation** retracted sharply and stood at 1.4% y-o-y in January, compared to 2.0% in December and 1.8% y-o-y in November.

This slowing trend is also reflected in the November **industrial production** number, as it grew by 1.4% y-o-y in December, compared to 2.6% y-o-y in November and 4.5% y-o-y in October. Moreover, retail trade continued its sluggish momentum, declining by 0.6% y-o-y in December, after a rise of only 0.8% y-o-y in November. The latest **PMI** index for manufacturing is also pointing at a deceleration, reaching a level of 52.6 in February, compared to 53.0 in January, the lowest number in more than two years.

Given the clear downward trend in the economic situation in Canada, the 2019 **GDP growth** forecast has been revised down to 1.6%, compared to 1.8% in the previous month. This compares to GDP growth of 1.8% in 2018.

OECD Asia Pacific

Japan

Japan's economy continues to slow and again faces relatively anaemic growth in the current year. Last year's growth was revised down to now stand at only 0.7% due to the fact that the 4Q18 growth rate stood at a low 1.4% q-o-q SAAR. Therefore, 2018 has seen two quarters with a severe decline, namely the 3Q18 at a decline of 2.6% q-o-q SAAR and 1Q18 with a decline of 0.9% q-o-q SAAR. The low growth momentum is forecast to continue in 2019 and the upside from this level just below 1.0% is considered to be limited, given the very tight labour market and ongoing high capacity utilisation rates. Moreover, the export oriented economy of Japan is already severely impacted by the slow-down in global trade, partially due to the slowing growth in China, but also in other parts of the world. Particularly exports and industrial production have declined towards the end of the year and retail trade remained muted in a core-inflation dynamic that continues a relatively stagnant trend, despite the tight labour market. Considering the ongoing deceleration in inflation, it is expected that the BoJ will continue its accommodative monetary policies, at least until the end of the year. The BoJ remains focused on achieving an inflation rate of around 2%. The envisaged sales-tax increase in 4Q19 may further dampen economic growth.

Inflation slowed again in January. It retracted to stand at only 0.2% y-o-y in January, compared to 0.3% y-o-y in December and 0.9% y-o-y in November. The yearly average in 2018 stood at 1.0%. While wages continue to rise and earnings' growth remains strong, the support is lifting inflation to a limited extent only.

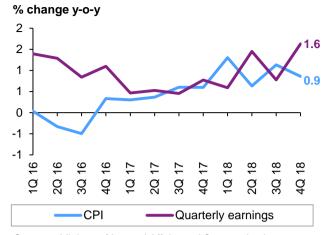
In December, **monthly earnings** rose by a high level of 2.9% y-o-y, a strong rise even compared to the high December number of 1.7% y-o-y. The more wage level-driven core inflation, which excludes food and energy, stood at 0.4% y-o-y in January, slightly above the 0.3% y-o-y in December. Given the labour market tightness, the unemployment rate stood at an extremely low level of 2.5% in January, only a touch above the 2.4% in December and the same level as in November.

Along with other economic indicators, **export** growth slowed significantly. After a solid increase of exports for most of 2018, international trade fell again severely in December and January, declining by 3.9% y-o-y and 8.4% y-o-y, non-seasonally adjusted, respectively.

A similarly weak trend was seen for **industrial production**, which fell in December by 1.2% y-o-y and by 0.1% y-o-y in January. The lead-indicator of manufacturing orders point at a mixed development. After having risen by 4.3% y-o-y in November, manufacturing orders declined by 2.0% y-o-y in December.

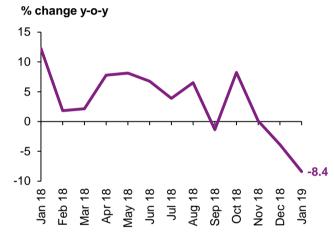
Domestic retail demand mirrored the slowing trend in the Japanese economy too, growing by only 0.6% y-o-y in January and 1.3% y-o-y in December. This compares an already relatively low annual rise of 1.7% y-o-y in 2018.

Graph 3 - 7: Japan's CPI vs earnings



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

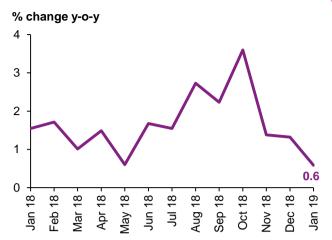
Graph 3 - 8: Japan's exports



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

Also **consumer confidence** has fallen again and now stands at 40.9, based on the Cabinet Office's index level. This is the lowest level since 2016.

Graph 3 - 9: Japan's retail trade



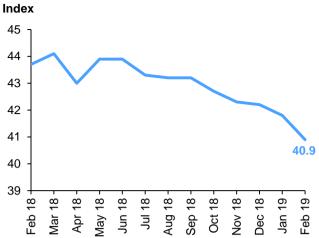
Sources: Ministry of Economy, Trade and Industry and Haver Analytics.

The latest **February PMI number** for manufacturing confirms the slowing trend. The manufacturing PMI fell below the growth indicating level of 50 to stand at 48.9, compared to 50.3 in January and 52.6 in December. The services sector PMI – the sector that constitutes around two-thirds of the Japanese economy – recovered further to stand at 52.3 in February, compared to 51.6 in January and 51.0 in December.

Given the clear downward slope and the weakerthan-expected GDP growth of 0.7% in 2018, also the 2019 **GDP growth forecast** was revised down. Weakness in 1Q19 is forecast to continue and also given the envisaged sales tax increase, the 4Q19 growth level is forecast to be negative.

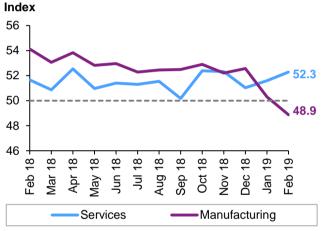
Hence, the 2019 GDP growth forecast was revised to 0.7%, compared to 1.0% in the previous month.

Graph 3 - 10: Japan's consumer confidence index



Sources: Cabinet Office of Japan and Haver Analytics.

Graph 3 - 11: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

South Korea

The **South Korean economy** is facing continued signs of a moderation in its growth dynamic. But this will also depend on the development of its most important trading partners and peer economies in Asia. **Exports** point at such a development, along with other indicators. After already softening growth of 1.1% y-o-y in January, exports fell by 7.6% y-o-y in February. Consequently, industrial production remained low, albeit not declining, to stand at only 0.6% y-o-y in both December and January. Moreover, on the negative side, the latest **PMI number** for the manufacturing sector points to another declining trend. It fell to 47.2 in February, after 48.3 in January and 49.8 in December.

While **GDP growth** in 2018 was reported at a better-than-expected level of 2.7%, the GDP growth forecast for 2019 remains unchanged at 2.4%, considering the ongoing slowdown.

OECD Europe

Euro-zone

The latest available data confirmed the **downward trend in the Euro-zone**. The Euro-zone is experiencing low-growth, with continued monetary stimulus as the ECB sees this necessary to support the region. Growth risks in Italy have been apparent in previous months, and now weakening growth is being felt in Germany and France as well. It is clear that the slowing trend in the Euro-zone has gained momentum and already started at the beginning of 2017, when reviewing the now available data. Both Germany and France had the weakest yearly growth in 4Q18 at 0.6% y-o-y and 0.9% y-o-y respectively. Italy even recorded no growth in the last quarter of the year. Italy is currently the weakest of the three largest economies and there is still the risk that the economy is facing a mild recession in 2019. This development in the Euro-zone seems to have been due to a variety of factors, including weakening external demand, domestic political issues that create uncertainties (Brexit, Italy) and also a slide in domestic consumption. Consequently, the ECB has halted its monetary policy normalisation and indicated that it will not raise interest rates until at least the end of 2019. This will help those economies with ongoing high sovereign debt levels, particularly Italy, which along with some weak areas in the banking sector will require monitoring. Moreover, international trade is forecast to retract further, thereby impacting the Euro-zone negatively. However, this will also depend on the outcome of the ongoing US-China trade talks. Adding to uncertainties are the latest developments concerning Brexit. The latest parliamentary gridlock means that there is a likelihood of a no-deal scenario.

In the **labour market**, the unemployment rate in January remained at 7.8% for the second month in a row, the lowest level in more than a decade. However, as in previous months, levels of unemployment continue to differ widely among countries, with Germany having reached a new all-time low of 3.2% in January, while France's unemployment rate stood at 8.8%, the lowest since 2009. Spain has improved to 14.1% and Greece to 18.0%. Almost all of the region's economies exhibit an improving trend and there is still some upside in the peripheral economies. However, improvements in Italy are stalling, with an unemployment rate of 10.5% in January, a rise from 10.4% in December.

%
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4

Graph 3 - 12: Euro-zone unemployment rate

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

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While the labour market has shown signs of improvements, the developments in the area of **retail trade** remain soft. Retail trade growth in value terms stood at 2.6% y-o-y in January, albeit an increase from only 1.3% y-o-y in December.

Industrial production fell considerably in both December and November, declining by 3.9% y-o-y and 3.2% y-o-y respectively, after already weak growth in the preceding four months, when growth stood below 1%.

Manufacturing activity was low in both months, as it declined by 3.7% in December and 3.0% y-o-y in November. A sharp decline of manufacturing orders, a good lead indicator for future manufacturing activity, indicates the slow growth trend will continue. Manufacturing order growth fell by 5.7% y-o-y in December.

Graph 3 - 13: Euro-zone retail sales

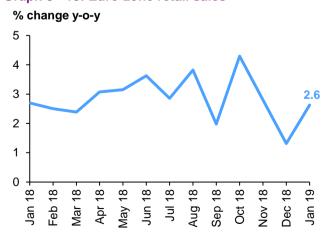
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Sources: Statistical Office of the European Communities and Haver Analytics.

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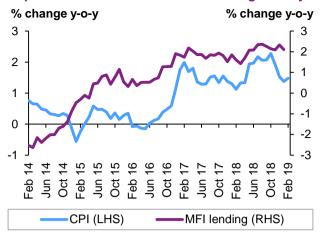
Dec Jan **Inflation** recovered during the month of February. Total inflation stood at 1.5% y-o-y in February, compared to 1.4% y-o-y in January. With ongoing weak consumption, amid rising uncertainties, it remains to be seen if this trend continues. Core inflation – the CPI, excluding energy and food – stood at 1.0% y-o-y in February, comparing to 1.1% y-o-y in January.

Although some areas of the Euro-zone's banking sector remain weak, the growth dynamic of the liquidity lines, a vital financing source for the Euro-zone, has remained relatively stable in the past months. Developments in **lending activity** – as a motor for investments – remain an important element to monitor. The latest growth number now from January stood at 2.1% y-o-y, compared to 2.3% y-o-y in December.

The Euro-zone's latest February **PMI** indicators generally point to a mixed development. The manufacturing PMI fell to stand below the growth indicating level of 50, as it retracted to 49.3, compared to 50.5 in January and 51.4 in December. The important PMI for the service sector, which constitutes the largest sector in the Euro-zone, improved to stand at 52.8 in February, compared to 51.2 in both January and December.

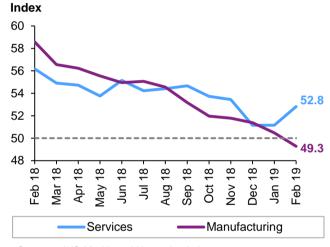
After a significant downward revision of the Euro-zone's growth in the past month, the **GDP** growth forecast for 2019 remains 1.3% y-o-y. However, the developments will need close monitoring and the risk is further skewed to the downside. In general, the political uncertainties, including the Brexit process, weakness in the banking sector, as well as monetary policies and the management of still-high sovereign debt levels in some economies remain important factors to monitor.

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

After a second parliamentary defeat of an EU-exit deal proposed by the Prime Minister, near term developments remain uncertain and the likelihood of a disorderly and hard **Brexit** remain. In the meantime, the Bank of England has implemented emergency facilities to provide enough liquidity in such an event. In this regard, the BoE has also instructed some lenders to hold enough liquidity in case of an interbanking market meltdown and to hold liquidity reserves of 100 days, according to the Financial Times.

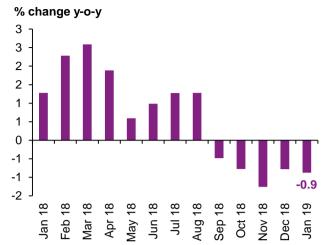
In the meantime, the underlying economic development has been showing mixed signals. **Industrial production** declined for the fifth consecutive month in January, falling by 0.9% y-o-y. **Retail trade** in value terms rose by 4.5% y-o-y in January, compared to 3.8% in December. The weak pound sterling continues to support growth in exports, which rose by 2.1% y-o-y in January, compared to 2.4% y-o-y in December.

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Jan Feb

Manufacturing

Graph 3 - 16: UK industrial production





Aug Sep Oct

Graph 3 - 17: UK PMIs

Sources: CIPS, IHS Markit and Haver Analytics.

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Services

Sources: Office for National Statistics and Haver Analytics.

The most recent January **PMI** lead indicators point to a mixed development as well. The PMI for manufacturing fell to 51.9 in February, compared to 52.6 in January. The very important PMI of the services sector, which constitutes the majority of the UK's economy, recovered from a low 50.1 in January to stand at 51.3 in February.

48

Feb

18

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The 2019 **GDP growth** estimate remains at 1.4%, unchanged from the previous month. However, the Brexit development will be the most influential factor and the current uncertainty is likely to have a negative impact on the UK's economic growth this year. GDP growth for 2018 stood at 1.4% as well.

Non-OECD

BRICs

Table 3 - 3: Summary of macroeconomic performance of BRIC countries, 2018-2019*

	GDP growth rate, %		Consumer index % change	ζ,	Current a balan US\$ I	ce,	Government of Go	ance,	Net public % of G	•
	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>
Brazil	1.1	1.8	3.7	3.8	-15.7	-26.9	-7.1	-5.8	80.5	84.1
Russia	1.6	1.6	2.9	4.9	106.9	97.8	2.7	2.5	9.5	8.4
India	7.3	7.1	4.0	3.3	-71.1	-55.6	-3.6	-3.4	50.2	49.6
China	6.6	6.1	1.9	2.7	43.5	50.6	-3.9	-4.4	19.2	22.1

Note: *2018 = Estimate and 2019 = Forecast.

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

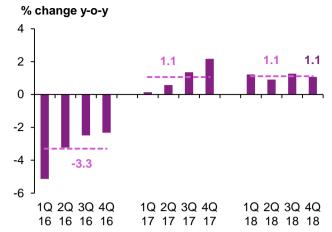
Brazil

Brazil's GDP posted growth of 1.1% y-o-y in 4Q18, compared to 1.3% in the previous quarter. Thus, the full year growth stood at 1.1% y-o-y in 2018, similar to the economic growth registered in 2017. Private consumption grew by 1.5% y-o-y in 4Q18, up from 1.4% in 3Q18. Government consumption dropped by 0.7% y-o-y in 4Q18, down from 0.3% growth in the previous quarter. Gross Fixed Capital Formation (GFCF) posted growth of 3.0% y-o-y in 4Q18, from a 7.8% acceleration in 3Q18. Exports rose by 12.0% y-o-y in 4Q18, from 2.6% increase in 3Q18, and import growth slowed from 13.5% y-o-y in 3Q18 to 6.0% in 4Q18.

In February, the Brazilian real appreciated by 0.5% m-o-m, following January's appreciation of 3.7% m-o-m. The real depreciated by 18% in 2018. Inflation slightly increased from 3.4% y-o-y in December 2018 to 3.6% in January 2019. In 2018, the inflation average stood at 2.9%. The central bank held its benchmark interest rate unchanged at 6.5% in February 2019 for the twelfth month in a row. The unemployment rate rose to 12% in January 2019, up from 11.6% a month earlier. Consumer confidence index went down to 96.1 in February, from 98.7 in January 2019.

The upturn in Brazil's **manufacturing sector** continued to gain steam. February saw the second-fastest expansion in production volumes in just under a year, reflecting higher order intakes from the domestic market. The IHS Markit Brazil Manufacturing PMI climbed to an 11-month high in

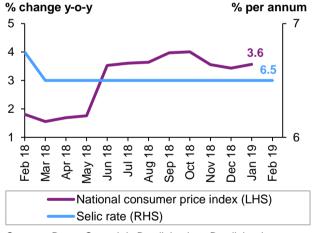
Graph 3 - 18: Brazil's GDP growth



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

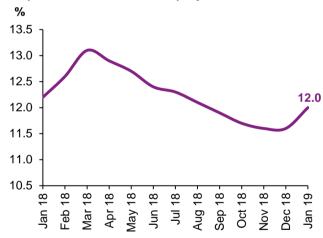
February. Rising from 52.7 in January to 53.4, the latest figure was indicative of a solid improvement in the health of the sector. The increase in sales equalled the fastest rate in almost one year, matching that seen last December. While total order books rose, new export work fell for the third successive month. Not only did production rise for the eighth straight month in February, but also at the second-fastest pace since March 2018. Amid reports of greater sales, higher production needs and an upbeat outlook towards growth prospects, employment expanded for the second month in a row. Furthermore, the rate of job creation was the strongest since April 2010.

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

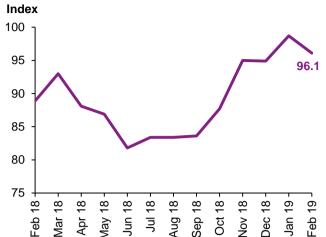


Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

The IHS Markit Brazil **Services** Business Activity Index was at 52.2 in February, signalling a modest upturn in output. However, rising from 52.0 in January, the latest figure pointed to the strongest rate of growth in one year. New business growth accelerated to the sharpest since January 2013, with robust sales performances evident in the Information & Communication, Finance & Insurance and Real Estate & Business Services. There was little help from international trade, as signalled by only a fractional rise in aggregate new business from abroad.

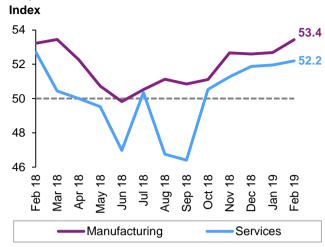
The rather slow pace of growth in the economy of Brazil in 2017 and 2018 – even after three years of sharp declines – highlights the importance of structural economic reforms that targets balancing the public spending to improve the ease of doing business and attract foreign investment. Brazil's economy started 2019 on a positive note. Private sector growth was solid for both manufacturing and services. However, exports to Argentina are still suffering, falling by more than 43% y-o-y in January 2019. Argentina is the third largest trading partner to Brazil. Furthermore, significant uncertainty regarding the government plan to revamp the country's pension system prevents a more optimistic scenario for GDP growth in 2019.

Graph 3 - 21: Brazil's consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 22: Brazil's PMIs



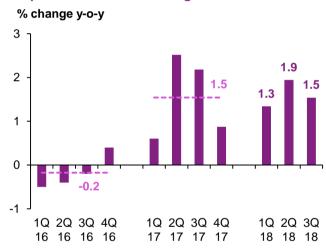
Sources: IHS Markit and Haver Analytics.

There is no change this month to Brazil's **GDP**, which is forecast to grow by 1.8% in 2019, from the 1.1% growth achieved in 2018.

Russia

Russia's trade surplus of Russia was \$18.856 billion in December 2018, down from \$18.984 billion in the previous month. For the entire year, the 2018 trade surplus stood at \$194.953 billion, up from the \$115.422 billion posted in 2017, a rise of 69% y-o-y. The unemployment rate edged to 4.9% in January 2019, up from 4.8% in the previous month. It was the highest unemployment rate since April 2018. The number of unemployed was 3.667 million in January, a fall of 31,000 from 3.698 million in the previous month. Compared with the previous year, unemployment fell by 251,000 from 3.918 million. **Real wages** increased by 0.2% y-o-y in January, following a revised 2.9% advance in the previous month. Average nominal wages jumped 5.2% to 41,120 rubles.

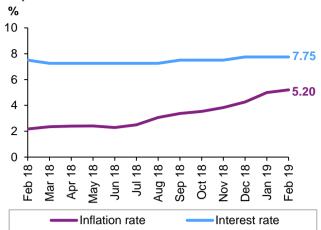
Graph 3 - 23: Russia's GDP growth



Sources: Federal State Statistics Service and Haver Analytics.

The **ruble** appreciated by 1.3% m-o-m in February, following a 0.9% appreciation in January 2019. On a y-o-y comparison, the ruble was 15.8% lower in February 2019 compared to its level a year earlier. Consumer price **Inflation** in February accelerated to 5.2% y-o-y, from 5.0% in January, and 4.3% in December, as a result of the VAT increase. In August, inflation surpassed 3% y-o-y for the first time in 12 months. The January 2019 was the highest inflation rate since the same month of 2017. The central bank's benchmark one-week **repo rate** was unchanged in February at 7.75.

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

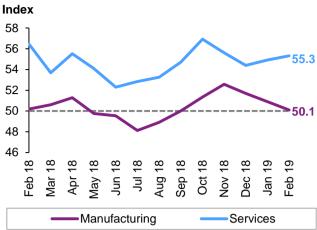


Sources: Federal State Statistics Service, Central Bank of

Russia and Haver Analytics.

Sources: IHS Markit and Haver Analytics.

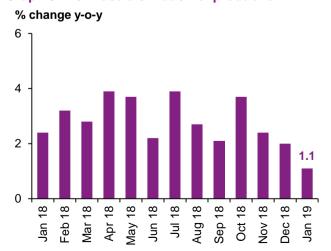




The IHS Markit Russia **manufacturing PMI** on January indicated that manufacturing firms registered broadly unchanged operating conditions in February, with the headline PMI dipping to a five-month low. Although output growth picked up slightly, the upturn in new business softened to the slowest pace since last September. Moreover, foreign client demand fell further and new export orders contracted at the quickest rate since April 2017. Nonetheless, firms remained upbeat and optimism reached its second-highest since May 2013. The index registered 50.1 in February, down slightly from 50.9 in January. Russian manufacturers signalled a sixth-successive monthly increase in production in February, with the rate of expansion accelerating slightly from January's recent low. Nonetheless, the pace of growth was well below the series trend and only marginal overall. **Industrial production** grew by 1.1% y-o-y in January 2019, after posting a 2.0% increase in December 2018.

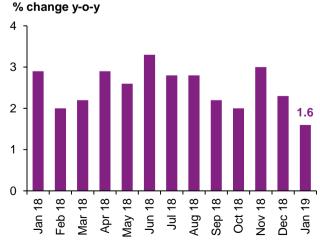
Business activity across the Russian **service sector** picked up to a three-month high in February. The IHS Markit Russia Services Business Activity Index posted 55.3 in February, up from 54.9 in January. The latest expansion in business activity was strong overall and the quickest since last November. New business growth was elevated in February. The rate of increase softened slightly from January, but was broadly in line with those seen since last October and faster than the series trend. In line with a sharp increase in new business, service providers registered a stronger rate of job creation in February. Furthermore, the rise in workforce numbers, which stemmed from greater business requirements, was the quickest for a year. The recent hike in VAT continued to impact upon cost pressures across the Russian service sector in February. The rate of input price inflation eased from January, but remained elevated and was the second-fastest rise since December 2014. Higher fuel and raw material costs were also highlighted as helping drive the increase in cost burdens. For the fourteenth month in a row, **retail sales** continued their increasing streak in January 2019. The rate of increase was 1.6% y-o-y, down from 2.3% a month earlier.

Graph 3 - 26: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 27: Russia's retail sales



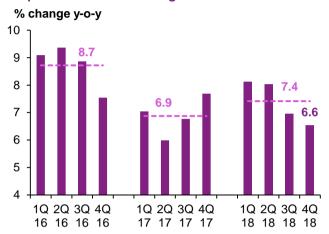
Sources: Federal State Statistics Service and Haver Analytics.

Russia's **GDP forecasts** point to growth of 1.6% y-o-y in 2018 and 1.6% in 2019.

India

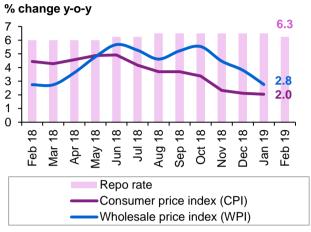
India's real GDP grew by 6.6% y-o-y in the 4Q18, below a downwardly-revised 7.0% expansion in the 3Q18. It is the lowest growth rate in five quarters as weak consumer demand and government spending held back expansion. India's government revised down its growth estimate for FY 2018/2019 (April 2018 to March 2019) to 7.0% from 7.2%.

Graph 3 - 28: India's GDP growth



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

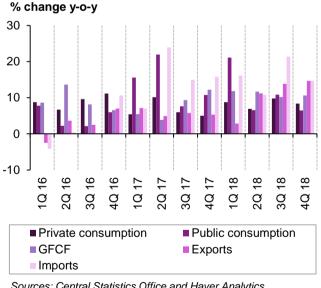
Graph 3 - 29: Repo rate and inflation in India



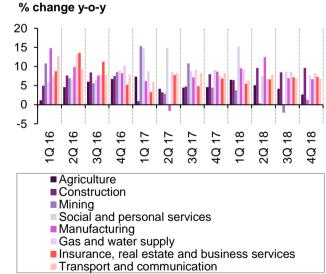
Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Slower growth rates were seen in household spending, government consumption and inventories, while GFCF rose slightly faster. There was also a lower negative contribution from external trade as exports increased at a faster rate while imports slowed. Outlook for consumption growth as a main GDP driver in India is under pressure in the short term.

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. Sources: Central Statistics Office and Haver Analytics.

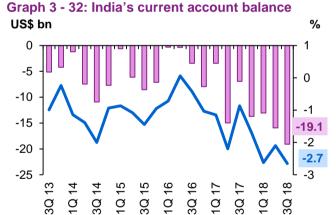
Early signs that manufacturing activity picked up in February 2019 have not materialized. While the headline Nikkei manufacturing PMI moved back towards 54.3 in February, up from an average of 53.4 in 4Q18, industrial production (IP) growth continued to decelerate in December, slowing to 2.4% y-o-y from an average of 4.3% in October-November. Although lower oil and commodity prices and a stabilizing rupee to the US dollar eased cost pressures and provide some support to manufacturing in 4Q18.

India's **CPI inflation** moderated to 2.0% y-o-y in January from 2.1% previously, belying consensus expectations of a pick-up to 2.5%. Food inflation remained negative (-2.2%), while fuel inflation fell sharply to 2.2% from 4.5% in December. Core inflation (CPI excluding food, fuel and motor fuels), however, remained close to the upper end of the RBI's 2-6% target range (5.7% vs. 5.8% prior). India's WPI eased considerably to 2.8% y-o-y in January 2019, slowing from a 3.8% rise in the previous month. It was the lowest WPI inflation since March 2018, mainly due to a noticeable slowdown in the cost of fuel and manufactured products. The cost of food in India decreased 2.17% in January of 2019 over the same month in the previous year. India's inflation still remains unusually low and will likely remain below the historical trend for some time.

At the first monetary policy review meeting, the Reserve Bank of India's (RBI's) Monetary Policy Committee (MPC) reduced India's lending rate by 25 basis points (bp) to 6.25%. This marked India's first rate cut in approximately 18 months, and follows two rate increases in 2018. The RBI justified its rate cut by stating that it had lowered its inflation projections. India's trade deficit in January 2019 was revised downwardly \$15.67 billion from a year earlier. Exports rose 3.74% to \$26.36 billion. Imports were flat at \$41.09 billion after falling 2.44% in December, the biggest drop since August 2016.

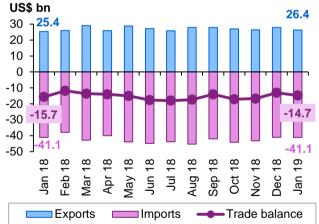
The US President announced plans to end special trade treatment for India under the preferential trade program, known as the Generalized System of Preferences (GSP), which lowers US duties on exports from 121 developing countries. The benefits for India for such exemptions amount to only about \$190 million a year. India was the biggest beneficiary of the program in 2017, according to US data, with exemptions on goods worth \$5.6 billion. India was one of many countries hit by US steel and aluminium tariffs last year. In retaliation, the Indian government announced its own tariffs on US goods worth \$240 million, but it has yet to put them into effect.

India's current account deficit widened sharply to \$19.1 billion, or 2.9% of GDP, in July-September 2018-19 from \$6.9 billion, or 1.1% of GDP, in the same period of the previous fiscal year. The goods deficit increased to \$50.0 billion from \$32.5 billion y-o-y and the primary income gap edged up to \$8.7 billion from \$8.6 billion. On the other hand, the services surplus rose to \$20.2 billion from \$18.4 billion a year ago and the secondary income surplus advanced to \$19.4 billion from \$15.7 billion.



As % of GDP (RHS)





Sources: Reserve Bank of India and Haver Analytics.

CAB (LHS)

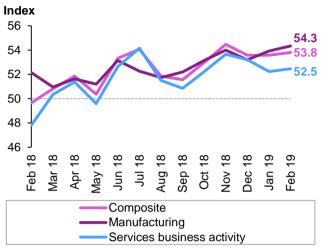
Sources: Ministry of Commerce and Industry and Haver Analytics.

The Nikkei India **Manufacturing PMI** increased unexpectedly to 54.3 in February 2019 from 53.9, a month earlier and beating market expectations of 53.5. The latest reading pointed to the strongest pace of expansion in the manufacturing sector since December 2017, boosted by a sharp and accelerated increase in both output and employment. Also, there was a marked and accelerated upturn in new export work, with a number of panellists indicated the acceptance of bulk orders from clients in key export destinations.

The Nikkei India **Services PMI** rose to 52.5 in February 2019 from a three-month low of 52.2 in January. New business received by services companies rose at a faster pace, despite a renewed contraction in external sales, and employment growth remained solid. On the price front, input cost inflation softened slightly. Finally, business sentiment among service providers strengthened on the back of expectations of further improvements in domestic demand, advertising efforts and the offering of new services.

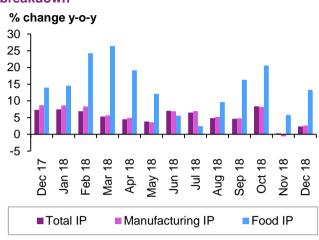
December's improvements in industry growth are likely to reflect the impact of easing oil prices and a partial recovery of the Indian rupee in late 2018.

Graph 3 - 34: India's PMI



Sources: Nikkei, IHS Markit and Haver Analytics.

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



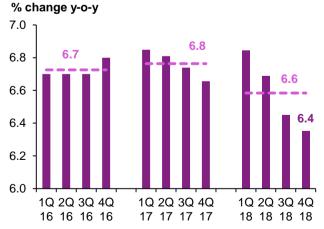
Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

India's real **GDP growth** for 2018 according the real number stood at 7.4%, compared to our estimation of 7.5%. India's GDP growth was revised downward in 2019 from 7.2% to 7.1% and it seems the risks are skewed somewhat to the downside.

China

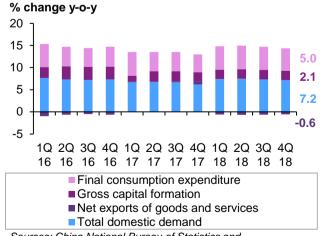
Despite weaker PMI data and soft retail sales during the Chinese New Year holiday, export and import growth both improved in January, providing some relief amid slowing external and domestic demand. Meanwhile, overall credit growth picked up for the first time in 19 months in January, suggesting that the impact of monetary policy easing has finally started to kick in. **China's GDP growth** is likely to decelerate through 2020 on slowing investment and industrial activity. However, consumption and service sector growth continued healthily. The government also emphasises improving the industrial structure and moving up the value chain. It seems policy easing to moderate the slowdown GDP growth in the short term and a more growth-supporting policy stance has gained momentum. However, the desire not to "overdo" it will continue to shape the extent of policy easing and maybe policymakers will aim for a floor for growth rather than a significant pick-up in growth.

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.

A decline in China's **current account surplus** is not a crisis moment on the FX market or the balance of payments. But it will affect views on financial stability and the yuan, as well as the policy approach towards

the capital account opening. Overall economic growth will remain under pressure in the coming months from slowing exports and weak sentiment, before finding a floor of around 2Q19 in response to the growth-supporting measures and be 6.2% in 2019 as a whole. One key question is the trade conflict with the US. Based on the positive signals from the US-China trade negotiations, any further tariff hikes are likely to be suspended. Although underlying tensions are unlikely to subside, a prolonged tariff suspension would imply an upside risk to growth. Domestically, the risk of credit growth not rising in response to the policy easing has diminished. However, it remains to be seen what the impact on the economy will be. An additional risk is a pronounced slowdown in housing sales. Real estate activity is expected to cool further as sentiment softens and support from the scheme to renovate shanty towns declines and has a negative impact on the domestic demand as a main driver of GDP in 2019.

China's **government targets an urbanisation rate** of 60% by 2020 (from 55% in 2015), with around 100 million urban residency permits granted to rural migrants. However, better access to public services will be needed if migrants are to spend like full urban citizens.

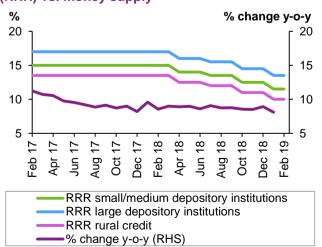
Following December's Central Economic Work Conference, policy makers have started to roll out and announce an increasing number of monetary and fiscal measures, including a further 100 bp reserve requirement rate (RRR) cut in January, tax cuts and approvals for infrastructure projects.

China's **trade surplus** widened sharply to \$39.16 billion in January 2019 from \$18.42 billion y-o-y. **Exports** from China surged 9.1% y-o-y to \$217.6 billion in January 2019. The rebound in overseas sales came amid signs of trade talks progress and efforts from companies to ship out goods ahead of the Lunar New Year holiday. Among China's biggest trade partners, exports rose to the EU (15.3%), ASEAN countries (12.5%), Japan (5.7%), South Korea (14.4%), Taiwan (13.3%) and Australia (19.1%). By contrast, exports to the US dropped 2.4%. **Imports** to China decreased 1.5% y-o-y to \$178.4 billion in January 2019, far less than forecasts of a 10% slump and after a 7.6% decline in December. Among China's biggest trade partners, imports fell mainly from the US (-41.2%), ASEAN countries (-7.1%), South Korea (-11.8%), Japan (-1.3%) and Taiwan (-0.5%), but rose from the EU (8.2%) and Australia (7.6%).

To ease trade tensions with the US, the Chinese government has stepped up efforts to open up its capital market and attract more foreign investment. China is the largest consumer and importer of iron ore in the world. In 2018, China imported 1.06 billion tonnes of iron ore in 2018, a small decline of 1% from the previous year. However, more generally,, the macro picture in China seems to be improving slightly, which along with the trade news has helped fuel a recent rebound in Chinese equities.

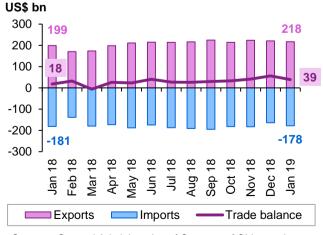
In terms of **financial policy**, the China Banking and Insurance Regulatory Commission (CBIRC) announced a structural deleveraging campaign to reduce economic risks. As part of its structural reform efforts, China launched the deleveraging campaign in late 2015 to restrict excessive borrowing by local governments, nonfinancial corporations, financial institutions and individuals. The campaign has led to a slowdown in the economy, with small and private businesses being the most affected. In mid-2018, China slowed the pace of the campaign amid increasing downward pressure on the economy and trade tensions.

Graph 3 - 38: China's reserve requirement ratio (RRR) vs. money supply



Sources: People's Bank of China and Haver Analytics.

Graph 3 - 39: China's trade balance



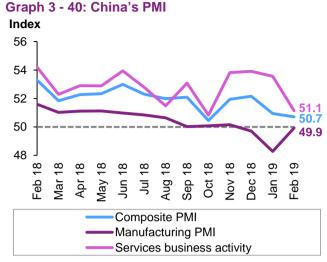
Sources: General Administration of Customs of China and Haver Analytics.

The **Official NBS Manufacturing PMI** fell to 49.2 in February 2019 from 49.5 in January, according to a release from the National Bureau of Statistics. The latest reading pointed to the third consecutive month of contraction since the end of 2018 and the figure is the lowest reading recorded since March 2016, amid a series of Lunar New Year holidays.

The Caixin China Manufacturing PMI rose to 49.9 in February 2019 from a near three-year low of 48.3 in January and beating market expectations of 48.5. It marked the highest PMI reading since November 2018, as output expanded slightly and new orders returned to growth for the first time in three months. Meantime, export sales slipped back into contraction, following a rise a month earlier.

The **official Non-Manufacturing PMI** fell to 54.3 in February 2019 from a 4-month high of 54.7 in the previous month.

The Caixin China General Services PMI fell to 51.1 in February 2019 from 53.6 in the previous month. The latest PMI reading pointed to the weakest growth in the service sector since October 2018, as new orders rose the least in four months, new export order growth slowed to a five month low and employment grew only marginally.



Sources: Caixin, IHS Markit and Haver Analytics.

The February PMI readings point to further moderation in China's manufacturing and nonmanufacturing sectors. Exports may further deteriorate and industrial production growth will continue to moderate in the first quarter. A weakening real estate sector will be an additional drag on China's economic growth this year. The pickup in new orders shows that domestic demand is improving, supported by the expansion of policy stimulus. However, the recovery remains weak as the reading is lower than that recorded the same period last year, suggesting continuous supportive policy in the coming months. China's Producer Price Index (PPI) is likely to rise in February on improving demand and deteriorating production.

China's **GDP growth** forecast to be followed by 6.1% in 2019 without any changes in compare to the last months.

OPEC Member Countries

Saudi Arabia

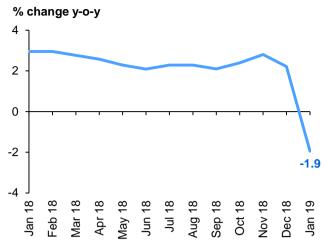
Saudi Arabia posted GDP growth of 3.9% y-o-y in 4Q18. Growth for the entire year was 2.2% y-o-y, the highest level since 2015. Inflation dropped by 1.9% y-o-y in January 2019, down from 2.2% in December 2018. The inflation average was 2.5% y-o-y in 2018. The Emirates NBD Saudi Arabia PMI rose modestly to 56.6 in February from 56.2 in January, the highest reading since December 2017. The main driver for the improvement in February was a stronger rise in new orders, despite the second consecutive decline in new export orders. This suggests that it is domestic demand which drives order growth. The output index rose slightly last month as well. Despite relatively strong growth in output and new orders, employment in the private sector was broadly unchanged. Overall input costs eased for the second month in a row, providing some relief for firms' margins as selling prices were broadly stable. February also saw a stronger increase in purchasing activity as firms looked to bring their buying levels in line with higher output requirements and build up inventories. Businesses that raised their stocks of purchases also commented on an expected uplift in activity in the coming months. Confidence about the outlook was among the highest seen over the past five years, albeit with the degree of optimism easing slightly from January's recent peak.

Graph 3 - 41: Saudi Arabia's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 42: Saudi Arabia's inflation

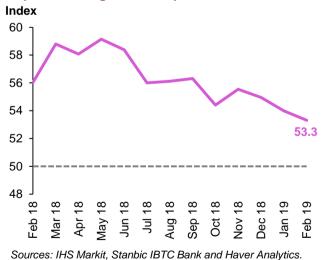


Sources: General Authority for Statistics and Haver Analytics.

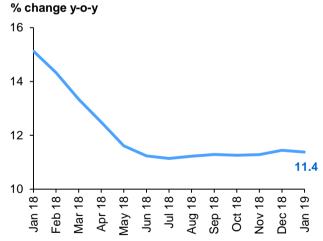
Nigeria

GDP in **Nigeria**, registered growth of 2.4% y-o-y in 4Q18, its highest since 3Q15. This brings GDP growth in 2018 to 1.9% y-o-y, up from a contraction of 1.6% y-o-y in 2016 and a 0.8% y-o-y growth in 2017. It is also highest rate of GDP growth since 2015. February data pointed to a further loss of growth momentum in the Nigerian private sector, with output, new orders and employment all rising at weaker rates than at the start of the year. Meanwhile, rates of expansion in purchasing activity and inventories slowed sharply. Inflationary pressures also remained relatively muted midway through the first quarter of the year. The Stanbic IBTC Bank Nigeria PMI fell for the third successive month in February, down to 53.3 from 54.0 in January. Although continuing to signal a solid monthly strengthening of business conditions at Nigerian companies, the rate of improvement was the weakest since June 2017. The rate of expansion in purchasing activity slowed sharply, continuing the broad trend of softening growth seen since the survey record in April 2018. In fact, the latest rise in input buying was the weakest for a year-and-a-half.

Graph 3 - 43: Nigeria's composite PMI



Graph 3 - 44: Nigeria's inflation

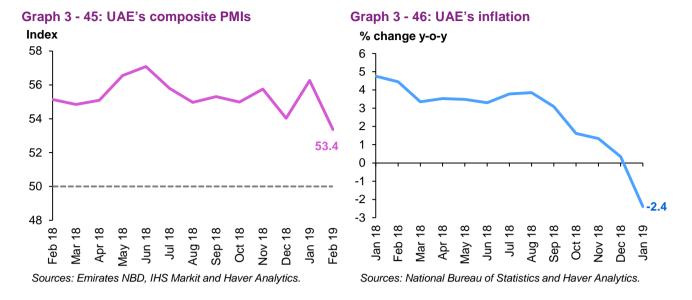


Sources: National Bureau of Statistics and Haver Analytics.

The United Arab Emirates (UAE)

In the **United Arab Emirates**, consumer price inflation notably dropped in January 2019, posting a 2.4% y-o-y decrease. The easing trend was noticeable since December 2018 when the rise in inflation went down to 0.4% y-o-y, from 1.3% in November. The inflation average was 3.1% y-o-y in 2018. The Emirates NBD PMI for the UAE fell to 53.4 in February from 56.3 in January, and was the lowest reading since October 2016. The drop in the headline index reflects slower growth in new orders last month – new export orders rose at the slowest rate in 11 months – as well as the steepest decline in private sector employment in

survey history. The quantity of purchases increased sharply in February, in line with output growth, but inventories rose only slightly following two months of declines.



Other Asia

Indonesia

Indonesia posted GDP growth of 5.2% y-o-y in 4Q18, similar to 3Q18. The economy grew by 5.2% y-o-y in 2018. This is the fastest pace of growth since 2013. Private consumption expenditure accelerated by 5.2% v-o-v in 4Q18, up from 5.1% in the previous quarter, whereas growth in general government expenditure slowed to 4.6% y-o-y in 4Q18, from 6.4% in 3Q18. GFCF rose by 6.2% y-o-y in 4Q18, from 6.9% in 3Q18. Both exports and imports showed slowing momentum in 4Q18. Export growth went down from 7.8% v-o-v in 3Q18, to 4.3% in 4Q18. Imports increased by 7.4% y-o-y in 4Q18, from 13.5% in 3Q18. The headline Nikkei Indonesia Manufacturing PMI rose from 49.9 in January to 50.1 February. While new order inflows stabilised, and employment rose, output fell slightly in February. Firms cut back on purchasing activity and reported a further fall in stocks of finished goods. Inflationary pressures remained subdued, with both input costs and output charges rising only mildly. Encouragingly, manufacturers remained generally positive towards the business outlook. Despite lower output, firms took on more workers, which enabled them to keep on top of backlogs. The level of unfinished work fell for the fourth month in a row, the quickest rate since December 2017. Firms were cautious towards inventories, scaling back on purchasing activity for the first time in just over a year, due to reasons linked to sufficient stocks and reduced production requirements. On the price front, inflationary pressures were relatively mild, largely due to a stronger exchange rate. Input costs rose at the weakest rate in the survey's near eight-year history during February. Firms also raised output prices marginally. Surveyed firms were generally upbeat about business outlook for the year-ahead. Reasons for optimism included more product varieties, new marketing strategies, capital investment and planned business expansions.

Africa

In **South Africa**, GDP posted the first y-o-y contraction in 4Q18 since 1Q16. GDP contracted by 0.1% y-o-y in 4Q18, from a 0.2% growth in the previous quarter. Private consumption increased by 1.1% y-o-y in 4Q18, similar to 3Q18. Public consumption showed a slight acceleration in the pace of growth in 4Q18 vs 3Q18, growing by 1.9% y-o-y in 4Q18 vs 1.8% in 3Q18. GFCF suffered a sharp drop in 4Q18 by 3.6% y-o-y, after dropping by 0.5% in 3Q18. Exports growth stood at 5.4% y-o-y in 4Q18, from 5.8% in the previous quarter, whereas imports had a notable drop in growth pace in 4Q18. Imports went up by only 1.2% y-o-y in 4Q18, from 9.6% in 3Q18. The IHS Markit South Africa PMI rose from 49.6 in January to 50.2 in February, signalling the first improvement in the health of the private sector since last June. The latest reading was the fourth consecutive rise in the index. However, it was still slightly below the long-run average, with new orders still falling. Output at South African firms broadly stabilized in February, following seven successive monthly declines. Some firms raised activity due to higher customer demand. However, others reported a contraction

in output, with some relating this to power load shedding over the last few weeks. New orders continued to fall in February, although the rate of deterioration was the slowest in the current eight-month run of decline. Employment rose for the third month running and at a faster rate in February, as several South African firms reported hiring multiple workers. Selling prices saw only a marginal uptick in February, with South African firms reporting the softest rise in charges for 13 months. Business sentiment towards future output declined in February, despite the improvement to operating conditions. Firms that expected output to increase in 12 months' time related this to anticipation of a pick-up in the economy amid higher export sales, particularly with African trade partners.

Latin America

Argentina

The economy of **Argentina** shrank by 3.5% y-o-y in 3Q18, from a 4.0% contraction in 2Q18. Private consumption dropped by 4.3% y-o-y in 3Q18, from a 0.4% growth in the previous quarter. Government consumption also decreased by 5.1% y-o-y in 3Q18, from a 2.6% contraction in the previous quarter. GFCF suffered the sharpest drop of 11.1% y-o-y in 3Q18, following growth of 2.9% in 2Q18. In 3Q18, both of exports and imports dropped. Exports decelerated by 5.9% y-o-y in 3Q18, slower than 2Q18's drop of 8.0%, while imports switched from 2.9% y-o-y expansion in 2Q18, to 9.9% contraction in 3Q18. The monthly economic activity indicator showed a contraction of 7.0% y-o-y in December 2018, following a 7.5% decline in the previous month. Better performance in the agriculture, mining and quarrying, and financial intermediation helped somewhat easing the downward trend. However, most other sectors of the economy reported contractions as highlighted by the ongoing contraction in manufacturing, wholesale, and retail trade during December 2018 and falling cement sales and construction activity in the last months of 2018. Such indicators suggest a continued contraction in GDP in 4Q18. The deceleration is expected to slightly ease in 2019, with the help from farm output recovery, which was hit by severe drought in 2018, together with increasing competitiveness due to a weak currency.

Transition region

Czech Republic

In Czech Republic, GDP grew by 3.2% y-o-y in 4Q18, up from 2.6% in 3Q18. The economy grew by 3.0% y-o-y in 2018. Growth in household consumption decelerated from 2.8% y-o-y in 3Q18 to 2.4% in 4Q18. Government consumption growth also decelerated, posting 4.7% y-o-y in 4Q18 vs 5.3% in 3Q18. GFCF increased by 10.6% y-o-y in 4Q18, following an 11.0% rise in the previous quarter. Exports went up by 5.7% y-o-y in 4Q18, from 4.2% in 3Q18, while exports rose by 6.3% y-o-y in 4Q18 vs a 6.4% in 3Q18. Business conditions across the Czech manufacturing sector deteriorated for the third successive month in February, with the headline PMI dipping to its lowest in over six years. Driving the decline in the health of the sector were faster falls in output and new orders. Moreover, new business contracted at the fastest rate since October 2012, as both domestic and foreign demand weakened. Meanwhile, inflationary pressures intensified. Input costs increased at a marked pace and output charges rose at the fastest rate since September 2018. The IHS Markit Czech Republic Manufacturing PMI dipped to 48.6 in February, from 49.0 in January. The decreased in output levels in February equalled the strongest pace since December 2012, with the rate of contraction accelerating from that seen in January. February saw a fourth successive monthly fall in new orders that was the sharpest since October 2012. On the price front, manufacturers indicated a marked rise in input prices in February. Higher raw material costs were reportedly a factor. Business confidence improved slightly in February, but remained subdued overall. Concerns surrounding global economic conditions and client demand over the coming 12 months weighed on expectations.

World Oil Demand

World oil demand in 2018 increased by 1.43 mb/d, revised lower by 0.04 mb/d from last month's assessment, while total oil demand averaged 98.72 mb/d.

Oil demand growth in the **OECD** region was revised lower by around 0.03 mb/d in 2018 due to weaker-than-expected data in OECD Europe and Asia Pacific in 4Q18, and despite solid data from OECD Americas, primarily the US.

Similar to recent trends, US oil demand figures exhibited better-than-expected demand for light and middle distillates during 3Q18, primarily from positive developments in the industrial and petrochemical sectors. Oil demand growth in OECD Americas was adjusted higher by around 0.01 mb/d for 2018.

In OECD Europe, latest data for 2018 indicate a slower than expected performance in a number of countries, such as Germany, France and Turkey, as economic activities eased, coupled with warmer weather conditions in 4Q18. Resultantly, OECD Europe oil demand data was revised lower by around 0.03 mb/d for 2018.

OECD Asia Pacific was adjusted lower by around 0.01 mb/d in 2018 due to slower than expected demand from the petrochemical sector in South Korea during 4Q18.

In the **non-OECD** region, oil demand growth was also revised slightly lower in 2018, by around 0.02 mb/d, mainly reflecting the slower momentum in Other Asia and the Middle East. Demand for diesel fuel in India during the month of November was lower than expected due to slower construction activities. Additionally, there was slower than expected oil demand data from Saudi Arabia in 4Q18.

World oil demand growth in 2019 was unchanged at 1.24 mb/d with total world oil demand marginally below the 100 mb/d mark. Total demand is projected to exceed 100 mb/d during 2H19.

In the **OECD** region, oil demand is anticipated to grow by 0.24 mb/d with OECD Americas leading growth amid steady NGL and middle distillate requirements.

In the **non-OECD** region, oil demand is foreseen rising by 1.00 mb/d with lower Chinese oil demand growth, compared to the previous year; however, this is likely to be counterbalanced by a recovery in oil requirements in the Middle East.

World oil demand in 2018 and 2019

Table 4 - 1: World oil demand in 2018*, mb/d

							Change 2	2018/17
	<u>2017</u>	<u>1Q18</u>	<u> 2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	Growth	<u>%</u>
Americas	25.06	25.20	25.40	25.78	25.74	25.53	0.48	1.90
of which US	20.27	20.57	20.64	20.93	20.78	20.73	0.46	2.26
Europe	14.30	13.95	14.19	14.68	14.32	14.29	-0.01	-0.09
Asia Pacific	8.06	8.54	7.65	7.70	8.16	8.01	-0.05	-0.61
Total OECD	47.42	47.69	47.24	48.16	48.22	47.83	0.41	0.87
Other Asia	13.24	13.55	13.84	13.38	13.87	13.66	0.42	3.14
of which India	4.53	4.83	4.74	4.40	4.96	4.73	0.20	4.43
Latin America	6.51	6.35	6.48	6.81	6.47	6.53	0.02	0.31
Middle East	8.17	8.19	7.96	8.40	7.82	8.09	-0.08	-0.98
Africa	4.20	4.35	4.32	4.27	4.40	4.33	0.13	3.13
Total DCs	32.13	32.44	32.60	32.86	32.56	32.61	0.49	1.52
FSU	4.70	4.66	4.65	4.94	5.01	4.82	0.12	2.45
Other Europe	0.72	0.73	0.69	0.73	0.82	0.74	0.03	3.48
China	12.32	12.28	12.84	12.65	13.07	12.71	0.39	3.18
Total "Other regions"	17.74	17.68	18.18	18.32	18.90	18.27	0.53	2.99
Total world	97.29	97.80	98.02	99.35	99.68	98.72	1.43	1.47
Previous estimate	97.29	97.80	98.02	99.30	99.89	98.76	1.47	1.51
Revision	0.00	0.00	0.00	0.05	-0.21	-0.04	-0.04	-0.04

Note: * 2018 = Estimate.

Totals may not add up due to independent rounding.

Table 4 - 2: 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	25.53	25.43	25.64	26.06	26.00	25.79	0.25	1.00
of which US	20.73	20.79	20.85	21.19	21.02	20.96	0.23	1.11
Europe	14.29	13.97	14.18	14.69	14.32	14.29	0.01	0.06
Asia Pacific	8.01	8.53	7.61	7.68	8.13	7.99	-0.03	-0.34
Total OECD	47.83	47.94	47.43	48.43	48.46	48.07	0.24	0.49
Other Asia	13.66	13.91	14.21	13.75	14.25	14.03	0.37	2.71
of which India	4.73	5.03	4.93	4.58	5.15	4.92	0.19	4.05
Latin America	6.53	6.38	6.52	6.86	6.51	6.57	0.04	0.66
Middle East	8.09	8.23	7.99	8.45	7.86	8.13	0.04	0.49
Africa	4.33	4.45	4.42	4.36	4.50	4.43	0.10	2.31
Total DCs	32.61	32.98	33.15	33.42	33.12	33.17	0.55	1.69
FSU	4.82	4.75	4.74	5.03	5.11	4.91	0.09	1.87
Other Europe	0.74	0.75	0.71	0.75	0.84	0.76	0.02	2.69
China	12.71	12.61	13.18	12.99	13.42	13.05	0.34	2.67
Total "Other regions"	18.27	18.11	18.63	18.77	19.37	18.72	0.45	2.46
Total world	98.72	99.02	99.21	100.62	100.95	99.96	1.24	1.25
Previous estimate	98.76	99.02	99.21	100.57	101.16	100.00	1.24	1.26
Revision	-0.04	0.00	0.00	0.05	-0.21	-0.04	0.00	0.00

Note: * 2018 = Estimate and 2019 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

OECD

OECD Americas

US

The most recent available monthly **US oil demand** data for December 2018 imply robust gains in oil requirements of around 0.1 mb/d, or 1%, y-o-y, after strong increases in October and November 2018, and an overall robust 4Q18.

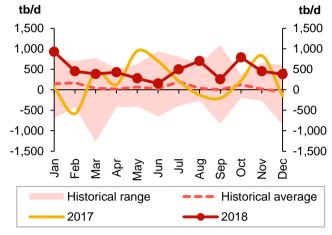
Table 4 - 3: US oil demand, tb/d

		Change 2018/17					
	<u>Dec 18</u>	<u>Dec 17</u>	tb/d	<u>%</u>			
LPG	3,230	2,992	238	8.0			
Naphtha	235	224	11	4.9			
Gasoline	9,219	9,247	-28	-0.3			
Jet/kerosene	1,669	1,757	-88	-5.0			
Diesel oil	4,028	3,975	53	1.3			
Fuel oil	404	314	90	28.7			
Other products	1,985	2,105	-121	-5.7			
Total	20,770	20,614	155	0.8			

Sources: US EIA and OPEC Secretariat.

Monthly December 2018 data confirmed to some extent positive expectations, which were based on preliminary weekly data earlier this month, as well as the overall positive status of the majority of leading oil demand indicators. December 2018 oil demand growth was largely supported by industrial and petrochemical demand. In addition warmer weather seems to have slightly capped oil demand growth for the same month.

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



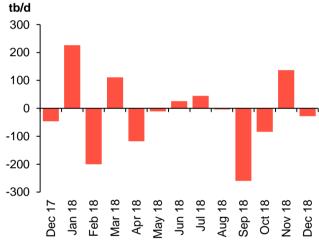
Sources: Joint Organisations Data Initiative and OPEC Secretariat.

Gasoline demand saw a slight decline, in line with more moderate vehicle miles travelled data. The developments in gasoline requirements occurred despite a y-o-y rebound in light weight vehicle sales. Following declines for 2017, light vehicle sales in 2018 showed a meagre annual increase.

In December 2018, diesel fuel demand also rose strongly, mainly as a result of stronger industrial activities in line with an overall expanding economy.

Jet fuel and residual fuel oil requirements showed declines y-o-y in December 2018, while NGLs/LPG demand remained robust for another month.

Graph 4 - 2: US gasoline demand, y-o-y change



Sources: US EIA and OPEC Secretariat.

The overall picture for 2018 shows solid US oil demand growth, dominated by rising NGLs/LPG, diesel and jet fuel requirements, in combination with slightly declining gasoline oil demand.

Preliminary weekly data imply robust oil demand growth in January and February 2019, with gains in most of the main petroleum categories, notably LPG, jet fuel and diesel. Expectations for US oil demand in 2019 remains generally positive as a result of forecast US economic growth, with risks remaining balanced compared to last month's projections.

Mexico

In **Mexico**, January 2019 saw a strong decrease y-o-y and was dominated by shrinking oil demand in diesel fuel, and residual fuel oil, as a result of fuel substitution and weaker gasoline requirements.

For the whole of 2018, oil demand in Mexico declined slightly y-o-y, with the majority of main product categories being in the negative – with LPG as the only exception.

Canada

Latest December 2018 **Canadian data** showed a slight fall in oil requirements y-o-y, mainly attributable to LPG, naphtha and diesel, while jet/kerosene and gasoline demand remained in the positive y-o-y.

In 2018, **OECD Americas oil demand** grew by 0.48 mb/d as compared to 2017. 2019 OECD Americas oil demand is projected to remain strong, growing by 0.26 mb/d as compared to 2018.

OECD Europe

The latest and partly preliminary January 2019 data for the **European Big 4** oil consuming countries – Germany, France Italy and the UK – imply increasing oil demand requirements, y-o-y. Substantially colder weather in combination with some low historical baseline effects implied gains in requirements for the majority of petroleum product categories, notably diesel, jet/kerosene and LPG.

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

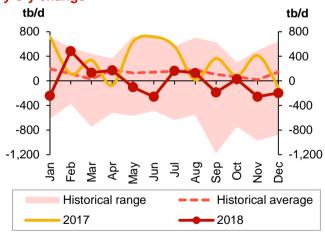
			Change 2019/18				
	<u>Jan 19</u>	<u>Jan 18</u>	tb/d	<u>%</u>			
LPG	506	488	18	3.6			
Naphtha	621	617	4	0.6			
Gasoline	1,059	1,083	-24	-2.2			
Jet/kerosene	779	753	26	3.5			
Diesel oil	3,015	2,868	147	5.1			
Fuel oil	241	253	-12	-4.8			
Other products	542	534	8	1.5			
Total	6,763	6,596	167	2.5			

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

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

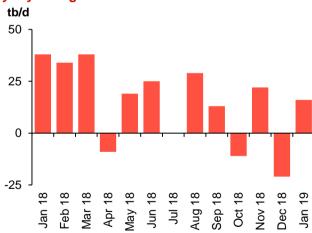
Following solid gains in demand over the previous three years, the year 2018 closed with a slight decline for the whole region, by around 0.01 mb/d with gains being registered only during the first quarter of the year. Gasoline, jet/kerosene and to some extent also LPG usage lead the growth, while demand for all other petroleum categories fell sharply, notably for diesel.





Sources: Joint Organisations Data Initiative and OPEC Secretariat

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



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

There is considerable uncertainty for 2019 oil demand in the region. The unsolved economic issues in some countries as well as fuel taxation and substitution pose considerable downside risks. Some leading indicators during January 2019, such as decreasing industrial production and falling car sales, pose downside risks for oil demand. The expectations for 2019 oil demand in the region remained unchanged since last month, with a small growth as compared to 2018, with risks to be rather skewed to the downside.

In 2018, **OECD Europe oil demand** fell by 0.01 mb/d y-o-y, while oil demand during 2019 will be 0.01 mb/d higher than the previous year.

OECD Asia Pacific

Japan

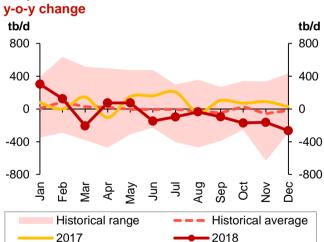
Japanese oil demand decreased sharply in January 2019 by 0.2 mb/d y-o-y, with a mixed picture among the main petroleum categories.

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

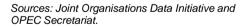
		Change 2019/18					
	<u>Jan 19</u>	<u>Jan 18</u>	tb/d	<u>%</u>			
LPG	461	467	-6	-1.3			
Naphtha	812	787	25	3.2			
Gasoline	792	816	-24	- 2.9			
Jet/kerosene	739	795	-56	-7.0			
Diesel oil	800	784	16	2.0			
Fuel oil	270	323	-53	-16.3			
Other products	348	427	-79	-18.5			
Total	4,223	4,399	-176	-4.0			

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

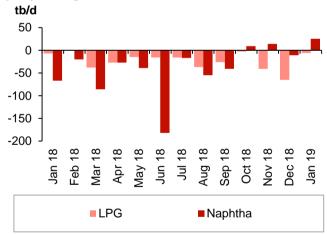
The petroleum product categories with gains in demand y-o-y were naphtha and diesel, while demand for all other petroleum product categories shrank, particularly for gasoline, jet/kerosene and residual fuel. Crude and fuel oil deliveries for electricity generation fell y-o-y, as a result of the warmer weather during January 2019, as compared to the historical normal and the same month in 2018.



Graph 4 - 5: OECD Asia Pacific oil demand,



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.

For the whole of 2018, Japanese oil demand fell by 0.1 mb/d y-o-y, with diesel being the only product with requirements on the positive side.

The outlook risks for 2019 Japanese oil demand remain substantially skewed to the downside and will be determined by the development of the country's economy.

South Korea

South Korean oil demand did not come out of negative territory during the month of December 2018, falling by approximately 0.1 mb/d or around the 2.4% y-o-y. Naphtha and residual fuel oil demand dominated the declines, falling by around 0.07 mb/d and 0.06 y-o-y.

South Korean oil demand has recorded a minor decrease in 2018 for the second consecutive year and is projected to see increases during 2019, particularly as most leading indicators, namely, economic development as well as expansions in the petrochemical and transportation sectors point to the upside.

Australia

According to available data up to December 2018, which marked a month of weak oil demand growth, **Australian oil demand** grew solidly by 0.04 mb/d, or 3.4%, in 2018 with the bulk of additional oil requirements being for diesel used in industrial activities.

OECD Asia Pacific oil demand decreased by 0.05 mb/d y-o-y in 2018. In 2019, oil demand in the region is projected to decline by a further 0.03 mb/d.

Non-OECD

China

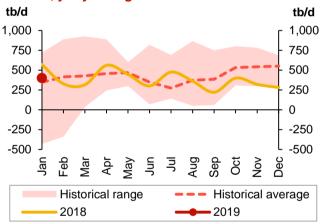
China's oil demand started the year at healthy growth levels. Oil demand growth for the country grew by 0.40 mb/d compared to January 2018.

In absolute figures, the total oil demand for the country stood at 12.1 mb/d in January. Growth was determined by increases in light distillates – LPG and naphtha – followed by middle distillates particularly diesel fuel, which flipped into the positive after two months of declines.

In contrast, fuel oil consumption dropped, shedding around 6% y-o-y. LPG demand hit total consumption of around 1.96 mb/d increasing by around 0.10 mb/d, supported by propane dehydrogenations capacity (PDH) expanding capacity and ramping up operations.

Naphtha requirements were also higher compared to January 2018, demand for Naphtha increased by a strong 0.17 mb/d on the back of new reforming capacity coming on stream during the month.

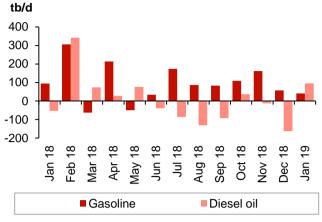
Graph 4 - 7: Changes in China's apparent oil demand, y-o-y change



Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics of China and OPEC Secretariat. Diesel fuel consumption improved by around 0.10 mb/d y-o-y with total demand for diesel fuel pegged at 3.4 mb/d. The expansion in diesel fuel requirements in January is likely supported by bunker fuel in the marine sector and occurred despite China's manufacturing PMI remaining below the 50 point expansion territory at 49.5. Jet/kerosene total consumption is now estimated to be at 0.89 mb/d, up by 0.07 mb/d boosted by domestic air travel and the Lunar New Year travel season despite some economic activities concerns.

Gasoline growth continues to grow in January 2019, adding some 0.07 mb/d to reach a total consumption of 3.03 mb/d. Demand was supported by additional driving a head of the lunar New Year holidays and despite dwindling car sales data which continued to decline for the seventh consecutive month. Chinese car sales data showed a decline of around 14% y-o-y during the month of January 2019.

Graph 4 - 8: China's diesel fuel 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.

For 2019, the outlook is currently balanced. Expansions in the petrochemical sector and the overall development in the economy show the upside potential for Chinese oil demand growth. On the other hand, possible easiness in monetary policy in addition to policies encouraging a reduction in transportation fuel consumption remains as negative downsides risks.

For 2018, Chinese oil demand grew by 0.39 mb/d, while oil demand in 2019 is projected to increase by 0.34 mb/d.

Other Asia

India

Indian oil demand rose during the month of January 2019, boosted by healthy gains in diesel fuel requirements supporting government infrastructure projects. Oil demand in January accelerated by 0.31 mb/d, or 6.4%, y-o-y, with total consumption exceeding 5 mb/d.

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

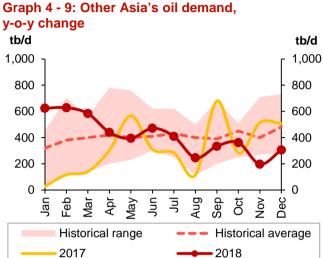
		Change 2019/18					
	<u>Jan 19</u>	<u>Jan 18</u>	<u>tb/d</u>	<u>%</u>			
LPG	816	735	81	11.1			
Naphtha	280	284	-3	-1.2			
Gasoline	661	584	77	13.2			
Jet/kerosene	240	246	-6	-2.3			
Diesel oil	1,923	1,808	115	6.3			
Fuel oil	452	452	0	0.0			
Other products	721	678	44	6.4			
Total	5,094	4,786	308	6.4			

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

Looking at the product mix, diesel fuel demand growth led gains in January followed by LPG and gasoline. Diesel fuel demand increased by 0.12 mb/d, or more than 6%, y-o-y. Diesel fuel requirements were encouraged by increases in infrastructure projects spending with a focus on road construction. As highlighted in the previous month's reports, sales of commercial vehicles were also supported by the increase in diesel fuel demand in January as medium and heavy commercial vehicles sales increased by more than 2% y-o-y, whereas light commercial vehicle sales added 3.2%. During the month of January, total diesel fuel

consumption recorded its second highest total demand, at 1.92 mb/d, just 0.06 mb/d lower than the historical levels registered in November 2017.

Total consumption of LPG remained above 0.80 mb/d in January rising by 0.08 mb/d, or more than 11%, y-o-y. The rise in LPG consumption is a result of the current government's commitment to supply LPG to around 80 million households by 2020.



Sources: Joint Organisations Data Initiative and OPEC Secretariat.

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

Gasoline demand was higher by 0.08 mb/d or more than 13% y-o-y in January, in line with rising auto sales market. The increase is due to the decreased difference between diesel fuel and gasoline retail prices, pushing more consumers to use gasoline driven automobiles, particularly 4-wheeler and 2-wheeler. Additionally, improved road connectivity and economic conditions in rural areas and urban areas positively affected the amount of miles driven.

In contrast, domestic car sales dropped in January as passenger vehicle sales declined 1.9% y-o-y amid a tightening of vehicle financing. 2-wheelers sales also dipped in January by 5.2%. Total gasoline consumption in January was 0.66 mb/d.

Looking forward, uncertainties around Indian oil demand growth in 2019 are currently expected to be balanced in line with a stable economic outlook, suggesting steady improvement in the coming months as we approach a general election in the 2Q19. However, government spending on infrastructure projects such as road construction and housing are anticipated to continue at a healthy pace for 2019. LPG for residential use and gasoline for transportation sector are expected to be the main providers of growth.

Indonesia

Indonesia's oil consumption edged higher in December 2018. Product demand registered an increase of 0.02 mb/d, which equates to around 2% y-o-y. Total consumption for the country was 1.61 mb/d. The growth in oil consumption can be mainly attributed to better than expected industrial production data, as this indicator continued to record positive gains for the sixth consecutive month, adding 6.5% y-o-y. As such, diesel fuel demand was higher y-o-y by more than 3%.

On a cumulative basis, oil demand grew in Indonesia by 0.05 mb/d equating to more than 3% y-o-y, largely driven by increases in LPG and middle distillates.

Thailand

In **Thailand**, **oil demand** inched up in December 2018, increasing by 0.02 mb/d or around 1% y-o-y. Increases in gasoline and middle distillates requirements supported demand growth in December 2018.

In cumulative terms with data for the 2018, oil demand was higher than 2017 levels by 0.02 tb/d or around 1.3% y-o-y led by higher demand for jet/kerosene, LPG, fuel oil and gasoline.

Going forward, the **Other Asia region** is projected to be a significant contributor to oil demand growth in 2019 with India, Indonesia, Thailand and Singapore being the major supporters of oil demand growth. Steady development in economic conditions should provide support to middle distillate demand while positive expectation for plastic demand should in turn provide support to petrochemical feedstocks requirements.

Other Asia's oil demand grew by 0.42 mb/d in 2018. As for 2019, oil demand is forecast to increase by 0.37 mb/d.

Latin America

Brazil

In **Brazil**, oil demand grew during January 2019, rising by 0.09 mb/d, or around 3%, as compared to the same period in 2018.

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

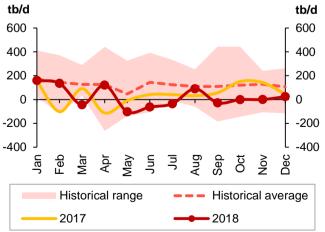
			Change 2019/18				
	<u>Jan 19</u>	<u>Jan 18</u>	tb/d	<u>%</u>			
LPG	207	211	-3	-1.6			
Naphtha	147	145	2	1.4			
Gasoline	635	689	-54	-7.9			
Jet/kerosene	136	131	5	3.8			
Diesel oil	890	839	51	6.1			
Fuel oil	61	72	-11	-15.5			
Other products	604	508	96	18.9			
Total	2,680	2,595	86	3.3			

Note: * = Inland deliveries.

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

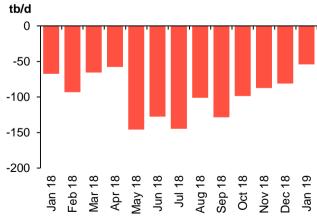
Increase in oil demand growth was led by ethanol, middle distillates and naphtha. Demand for ethanol has been stimulated by cheaper retail prices as compared to gasoline. Ethanol retail prices were at 2.81 reals per litre during January 2019, while gasoline retail prices were at 4.27 reals per litre.

Graph 4 - 11: Latin America oil demand, y-o-y change



Sources: Joint Organisations Data Initiative and OPEC Secretariat.

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.

Gasoline demand, on the other hand, declined for the 17th consecutive month shedding off some 0.05 mb/d, as compared to the same period last year. Diesel fuel demand increased by 0.05 mb/d on the back of improvements in in the manufacturing PMI of the country. This was the second highest reading since February 2018 at 52.3, remaining in the expansion zone for the fourth consecutive month.

Conversely, fuel oil demand eased in January falling by 0.01 mb/d y-o-y. This can be a result positive development in the hydropower generation, limiting fuel oil consumption in the country.

Argentina

Oil consumption in **Argentina** declined in December 2018 for the fourth consecutive month as negative performances were recorded for fuel oil, diesel fuel and gasoline requirement while jet/kerosene exhibited marginal gains.

Oil demand dropped by 0.04 mb/d with full 2018 information suggesting a minor decline of around 0.01 mb/d as compared to 2017, in line with the slower economic activities in 2H18.

Going forward, risks for 2019 **oil demand growth in Latin America** point towards some improvement from the level recorded in 2018, as economic conditions of the major consuming countries in the region improve for the remainder of 2019. Uncertainties stem from slower than expected developments in the overall economy of the region as well as unexpected weather conditions supporting limited oil demand growth potential.

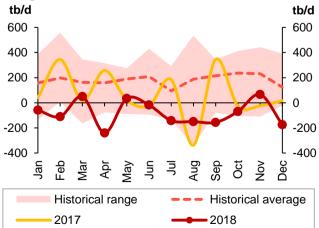
Latin American oil demand edged up by 0.02 mb/d in 2018. During 2019, oil demand growth is forecast to rise by 0.04 tb/d from the levels seen in 2014.

Middle East

Saudi Arabia

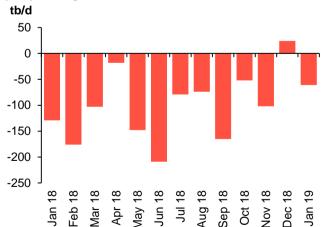
Oil demand in **Saudi Arabia** flipped into positive territory in January 2019 for the first time since March 2018 and for only the third time since January 2018. Oil requirements inched up by around 0.02 mb/d, or about 1%, y-o-y with total oil consumption at 2.07 mb/d. Demand for crude burning for power generation and the Other Products category led the pack, rising by 0.05 mb/d and 0.08 mb/d y-o-y respectively. In contrast, declines were registered in diesel fuel, jet/kerosene and light distillates.





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

Graph 4 - 14: Iraq's direct crude burning, y-o-y change



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

Iraq

In **Iraq**, oil demand figures for the month of January 2019 exhibited positive growth. Demand increased by 0.03 mb/d, or 5%, y-o-y. All products have shown positive demand growth, with the exception of the Other Products category, which declined sharply.

Middle distillates led consumption growth with both jet/kerosene and diesel fuel increasing by 0.02 mb/d and 0.04 mb/d, y-o-y, respectively.

Other countries in the Middle East

Elsewhere in the Middle East, the latest available data for oil demand from **Kuwait** and **IR Iran** points to declining oil demand growth in the month of December 2018, down 0.04 mb/d and 0.01 mb/d, y-o-y, respectively. Data for the same month indicates a rise in oil requirements in the **UAE** by 0.03 mb/d y-o-y.

Going forward, **Middle East oil demand** is projected to return to positive territory in 2019 with many uncertainties on the horizon. The performance of various economies in the region, the impact of oil prices on their spending plans and subsidy reductions along with substitution plans are major elements to monitor throughout the year.

For 2018, Middle East oil demand recorded a decline of 0.08 mb/d, while oil demand in 2019 is projected to increase by 0.04 mb/d.

World Oil Supply

Non-OPEC oil supply growth in 2018 was revised up by 0.03 mb/d from the previous month's report and is now estimated at 2.74 mb/d, for an average of 62.19 mb/d. The adjustment was mainly due to an upward revision in Canada owing to higher-than-expected output in 4Q18. The expected y-o-y growth in the US along with Canada, Russia, Kazakhstan, Qatar, Other OECD Europe, the UK and Ghana supported non-OPEC supply growth, while Mexico, Norway and Vietnam showed the largest declines.

Non-OPEC oil supply growth in 2019 was revised up by 0.06 mb/d to average 2.24 mb/d, mainly due to a re-assessment of the production forecast for Canada, following the decision to increase production by 100 tb/d as of April 2019, as well as higher-than-expected growth in the Sudans. Total non-OPEC supply is now forecast to average 64.43 mb/d. The US, Brazil, Russia, the UK, Australia, Kazakhstan, Ghana and the Sudans are the main drivers for this year's growth, while Mexico, Norway, Indonesia and Vietnam are projected to see the largest declines. The 2019 non-OPEC supply forecast is faced with a large amount of uncertainty, mainly with regard to existing infrastructure constraints in North America, both in Texas and Alberta.

OPEC NGLs and non-conventional liquids are expected to grow by 0.04 mb/d in 2018, unchanged from the previous estimate, to average 4.98 mb/d, and are forecast to grow by 0.09 mb/d in 2019 to average 5.07 mb/d.

In February 2019, **OPEC crude oil production** decreased by 221 tb/d to average 30.55 mb/d, according to secondary sources.

According to preliminary **February data, non-OPEC supply, including OPEC NGLs**, increased by 0.06 mb/d m-o-m to average 68.60 mb/d, higher by 2.75 mb/d y-o-y. As a result, preliminary data indicates that **global oil supply** decreased in February 2019 by 0.16 mb/d m-o-m to average 99.15 mb/d.

Table 5 - 1: Non-OPEC supply forecast comparison in 2018-2019*, mb/d

		Change		Change
Region	<u>2018</u>	<u>2018/17</u>	<u>2019</u>	<u>2019/18</u>
OECD Americas	23.97	2.48	25.63	1.66
OECD Europe	3.77	-0.06	3.77	0.00
OECD Asia Pacific	0.41	0.02	0.47	0.06
Total OECD	28.15	2.44	29.86	1.71
Other Asia	3.53	-0.08	3.45	-0.07
Latin America	5.17	0.02	5.52	0.35
Middle East	3.21	0.07	3.22	0.02
Africa	1.51	0.03	1.58	0.07
Total DCs	13.41	0.04	13.78	0.36
FSU	14.29	0.24	14.45	0.16
Other Europe	0.12	-0.01	0.12	0.00
China	3.97	0.00	3.95	-0.02
Non-OPEC production	59.94	2.71	62.15	2.21
Processing gains	2.25	0.04	2.28	0.03
Non-OPEC supply	62.19	2.74	64.43	2.24

Note: * 2018 = Estimate and 2019 = Forecast. Non-OPEC supply includes Qatar.

Monthly revisions to non-OPEC supply growth forecast

The **non-OPEC** oil supply growth estimation for 2018 was revised up by 25 tb/d to average 2.74 mb/d. On a country-by-country basis, cumulative expected growth in Canada, US and Australia was revised up by 46 tb/d in 2018, mostly in 4Q18, while the growth forecasts for other OECD Europe, other OECD Asia Pacific, Malaysia, the Sudans and South Africa were revised down by 21 tb/d (*Graph 5 - 1*).

Graph 5 - 1: Monthly oil market report Mar 19/Feb 19 revisions in 2018* annual supply changes

Canada

US

Australia

Sudans

-3

Malaysia

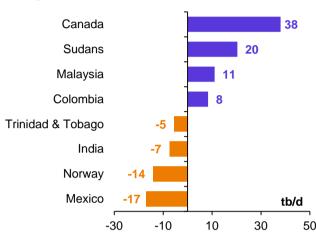
-10

tb/d

-20

Note: *2018 = Estimate.
Source: OPEC Secretariat.

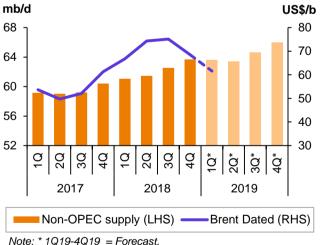
Graph 5 - 2: Monthly oil market report Mar 19/Feb 19 revisions in 2019* annual supply changes



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

Revisions to non-OPEC oil supply growth for **2019**, as seen in *Graph 5 - 2*, indicate upward adjustments to the US, Canada, other OECD Europe, Malaysia, Argentina, Colombia and the Sudans, totalling 91 tb/d, while oil supply forecasts for Mexico, Norway, India, Asia others as well as Trinidad and Tobago were revised down cumulatively by 49 tb/d. As a result, y-o-y growth for non-OPEC supply in 2019 was revised up by 0.06 mb/d to average 2.24 mb/d.

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



Note: * 1Q19-4Q19 = Forecast. Source: OPEC Secretariat.

Graph 5 - 4: Non-OPEC quarterly oil supply



Note: * 1Q19-4Q19 = Forecast. Source: OPEC Secretariat.

Non-OPEC oil supply in 2018 and 2019

Table 5 - 2: Non-OPEC oil supply in 2018*, mb/d

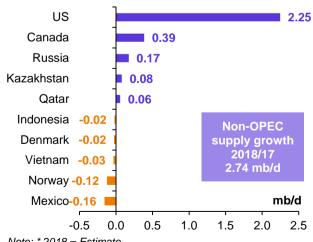
							Change 2	2018/17
	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	Growth	<u>%</u>
Americas	21.49	22.93	23.36	24.51	25.05	23.97	2.48	11.53
of which US	14.40	15.53	16.22	17.17	17.64	16.65	2.25	15.59
Europe	3.83	3.92	3.73	3.63	3.79	3.77	-0.06	-1.60
Asia Pacific	0.39	0.41	0.38	0.42	0.44	0.41	0.02	4.87
Total OECD	25.71	27.25	27.47	28.57	29.28	28.15	2.44	9.47
Other Asia	3.61	3.60	3.55	3.47	3.49	3.53	-0.08	-2.34
Latin America	5.15	5.15	5.20	5.10	5.23	5.17	0.02	0.32
Middle East	3.13	3.16	3.21	3.22	3.24	3.21	0.07	2.29
Africa	1.48	1.50	1.52	1.55	1.49	1.51	0.03	2.30
Total DCs	13.38	13.40	13.47	13.34	13.45	13.41	0.04	0.28
FSU	14.05	14.10	14.14	14.33	14.57	14.29	0.24	1.67
of which Russia	11.17	11.14	11.18	11.44	11.61	11.35	0.17	1.56
Other Europe	0.13	0.12	0.12	0.12	0.12	0.12	-0.01	-4.58
China	3.97	3.94	4.00	3.94	4.02	3.97	0.00	0.07
Total "Other regions"	18.15	18.17	18.25	18.39	18.71	18.38	0.23	1.28
Total non-OPEC								
production	57.24	58.81	59.20	60.30	61.44	59.94	2.71	4.73
Processing gains	2.21	2.25	2.25	2.25	2.25	2.25	0.04	1.67
Total non-OPEC supply	59.45	61.06	61.44	62.55	63.69	62.19	2.74	4.61
Previous estimate	59.45	61.07	61.44	62.54	63.58	62.17	2.72	4.57
Revision	0.00	-0.01	0.00	0.00	0.11	0.03	0.02	0.04

Note: * 2018 = Estimate.

Non-OPEC supply includes Qatar.

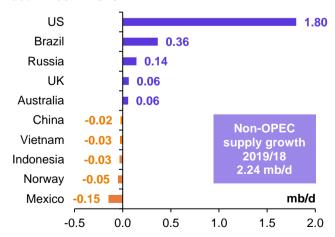
Source: OPEC Secretariat.

Graph 5 - 5: Annual supply changes for selected countries in 2018*



Note: * 2018 = Estimate. Source: OPEC Secretariat.

Graph 5 - 6: Annual supply changes for selected countries in 2019*



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

Table 5 - 3: Non-OPEC oil supply in 2019*, mb/d

							Change 20	19/18
	<u>2018</u>	<u>1Q19</u>	<u> 2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	<u>Growth</u>	<u>%</u>
Americas	23.97	24.80	25.04	25.95	26.68	25.63	1.66	6.91
of which US	16.65	17.74	17.99	18.64	19.41	18.45	1.80	10.83
Europe	3.77	3.79	3.62	3.71	3.94	3.77	0.00	-0.04
Asia Pacific	0.41	0.45	0.46	0.47	0.49	0.47	0.06	13.83
Total OECD	28.15	29.04	29.12	30.14	31.11	29.86	1.71	6.08
Other Asia	3.53	3.46	3.44	3.46	3.46	3.45	-0.07	-2.04
Latin America	5.17	5.41	5.42	5.51	5.73	5.52	0.35	6.74
Middle East	3.21	3.20	3.22	3.24	3.24	3.22	0.02	0.59
Africa	1.51	1.55	1.56	1.59	1.62	1.58	0.07	4.47
Total DCs	13.41	13.62	13.64	13.80	14.05	13.78	0.36	2.71
FSU	14.29	14.55	14.35	14.37	14.50	14.45	0.16	1.11
of which Russia	11.35	11.55	11.40	11.50	11.50	11.49	0.14	1.25
Other Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.00	-1.08
China	3.97	3.99	3.94	3.93	3.95	3.95	-0.02	-0.60
Total "Other regions"	18.38	18.66	18.41	18.42	18.58	18.52	0.13	0.73
Total non-OPEC								
production	59.94	61.32	61.17	62.36	63.74	62.15	2.21	3.68
Processing gains	2.25	2.28	2.28	2.28	2.28	2.28	0.03	1.25
Total non-OPEC supply	62.19	63.59	63.44	64.64	66.01	64.43	2.24	3.59
Previous estimate	62.17	63.61	63.30	64.53	65.91	64.34	2.18	3.50
Revision	0.03	-0.01	0.14	0.11	0.11	0.09	0.06	0.10

Note: * 2018 = Estimate and 2019 = Forecast. Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

OECD

Total OECD oil supply in 2018 is estimated to have grown by 2.44 mb/d to average 28.15 mb/d, up by 40 tb/d since the previous month's assessment. OECD Americas, following an upward revision by 42 tb/d m-o-m, is expected to have increased by 2.48 mb/d y-o-y to average 23.97 mb/d. Oil supply in OECD Europe, despite a minor downward revision by 4 tb/d this month, remains unchanged from the last assessment and shows a contraction of 0.06 mb/d to average 3.77 mb/d (of which 3.02 mb/d is from the North Sea). Supply from OECD Asia Pacific is expected to have grown by 0.02 mb/d y-o-y to average 0.41 mb/d, also unchanged from last month's assessment.

Yearly growth of 1.71 mb/d is forecast for **OECD oil supply in 2019** to average 29.86 mb/d, representing an upward revision of 27 tb/d compared to the previous month's assessment. While OECD Americas and OECD Asia Pacific are both projected to grow by 1.66 mb/d and 0.06 mb/d to average 25.63 mb/d and 0.47 mb/d, respectively, oil production in OECD Europe is anticipated to remain flat at 3.77 mb/d.

OECD Americas

US

US crude oil output (including lease condensate) in December 2018, following robust growth of 346 tb/d in November, dropped m-o-m by 56 tb/d to average 11.85 mb/d, although output was higher by 1.80 mb/d y-o-y. Average crude oil production growth in 2018 is estimated at 1.60 mb/d compared to an increase of 0.52 mb/d in 2017, higher than expected, due to increasing oil prices as well as the rising cash flow of operators who are active in the shale regions.

The m-o-m decrease in December came as output in the Gulf of Mexico (GoM) declined by 0.13 mb/d m-o-m to average 1.80 mb/d after robust m-o-m output growth seen a month earlier at 0.19 mb/d m-o-m.

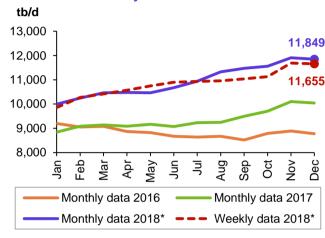
Production in Texas (PADD 3) rose by 35 tb/d m-o-m, the slowest growth since May 2018, to average 4.88 mb/d, mainly from the prolific Permian Basin, and also from New Mexico by 13 tb/d to average 0.82 mb/d. Among the major states, New Mexico had the strongest y-o-y growth rate in percentage terms, by almost 46%. Oil production in North Dakota, despite the seasonal production slowdown and a slight decline of 11 tb/d in November, rose by 18 tb/d in December m-o-m to average 1.37 mb/d, mainly from the Bakken shale play in the Williston Basin. Except for Oklahoma, Colorado and Wyoming, where minor monthly growth was recorded, oil production declined in all other producer states.

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

Change Nov 18 Dec 18 Dec 18/Nov 18 State Alaska 497 496 Colorado 515 517 2 Oklahoma 578 584 6 New Mexico 803 816 13 North Dakota 1.355 1,373 18 Federal Offshore -1,927 Gulf of Mexico (GoM) 1,802 -125 Texas 4,842 4,877 35 Total US crude oil production 11,905 11,849 -56

Sources: US EIA and OPEC Secretariat.

Graph 5 - 7: US monthly crude oil production in 2016-2018 vs. weekly forecast in 2018

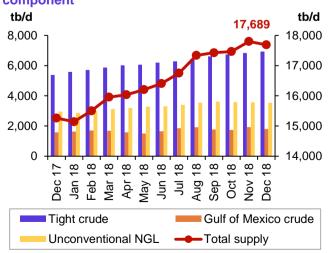


Note: *2018 = Estimate.

Sources: US EIA and OPEC Secretariat.

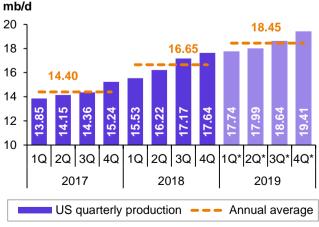
US crude oil production in 2018 is estimated to have increased by 1.60 mb/d y-o-y to average 10.95 mb/d. More than 64% of crude output in 2018 was produced in the Gulf Coast (PADD 3) at an average of 7.05 mb/d, and represented growth of 1.19 mb/d, mainly coming from Texas, New Mexico and the GoM. With regard to crude production by state, more than 40% of total crude oil output in the US, at an average of 4.43 mb/d, came from Texas, mainly from the Permian Basin. The entire Permian Basin had almost 59% of total US crude output growth at 0.94 mb/d in 2018. Total crude output from New Mexico grew by 215 tb/d y-o-y, followed by North Dakota (184 tb/d), Colorado (102 tb/d), Oklahoma (95 tb/d), GoM (51 tb/d), Wyoming (31 tb/d) and Ohio (12 tb/d). Total crude oil production from other states represented minor growth, or showed declines totalling 73 tb/d, y-o-y.

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



Source: US EIA and OPEC Secretariat.

Graph 5 - 9: US total liquids supply quarterly



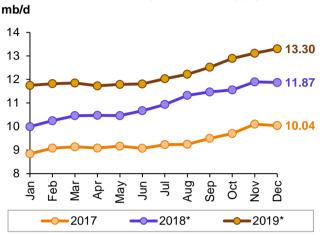
Note: * 1Q19-4Q19 = Forecast.

Sources: US EIA and OPEC Secretariat.

US liquids output in December (excluding processing gains) showed a decrease of 0.13 mb/d m-o-m to average 17.67 mb/d, up by 2.41 mb/d y-o-y. According to the EIA, the m-o-m US liquids supply decline in December was due to decreases in crude oil and other liquids, mainly ethanol production, by 56 tb/d and 89 tb/d, to average 11,849 tb/d and 1,239 tb/d, respectively, while NGL output showed an increase of 9 tb/d m-o-m to reach 4.58 mb/d.

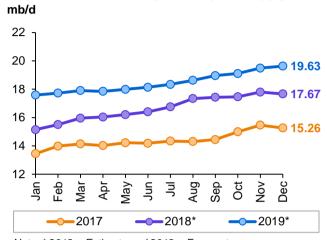
US liquids supply in 2018 is estimated to have grown by 2.25 mb/d to average 16.65 mb/d, revised up by 8 tb/d from the previous month's report, following an upward revision by 22 tb/d in 4Q18 to 141 tb/d for a new record of 17.64 mb/d on a quarterly basis, up by 2.40 mb/d y-o-y.

Graph 5 - 10: US monthly crude oil supply



Note: *2018 = Estimate and 2019 = Forecast. Source: OPEC Secretariat.

Graph 5 - 11: US monthly total liquids supply



Note: * 2018 = Estimate and 2019 = Forecast. Source: OPEC Secretariat.

US liquids supply in 2019 is forecast to reach an average of 18.45 mb/d, with a minor upward adjustment, representing y-o-y growth of 1.80 mb/d, unchanged compared with the previous month's report. With preliminary indications such as drilling activities, US production growth is slowing compared to 2018, as most shale producers are guiding flat-to-gradually-declining activity levels, focusing on capital discipline.

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

			Change		Change		Change
	<u>2016</u>	<u>2017</u>	<u>2017/16</u>	<u>2018*</u>	2018/17	<u>2019*</u>	<u>2019/18</u>
Tight crude	4.24	4.71	0.47	6.28	1.57	7.45	1.17
Gulf of Mexico crude	1.60	1.68	0.08	1.73	0.05	1.88	0.15
Conventional crude oil	2.99	2.96	-0.03	2.94	-0.02	2.91	-0.03
Unconventional NGLs	2.58	2.77	0.19	3.34	0.57	3.77	0.43
Conventional NGLs	0.93	1.01	0.08	1.02	0.01	1.07	0.05
Biofuels + Other liquids	1.27	1.27	0.00	1.34	0.07	1.37	0.03
US total supply	13.61	14.40	0.80	16.65	2.25	18.45	1.80

Note: * 2018 = Estimate and 2019 = Forecast.

Sources: US EIA, Rystad Energy and OPEC Secretariat.

US tight crude output in December 2018 is estimated to have grown by 100 tb/d m-o-m to average 6.93 mb/d, an increase of 1.57 mb/d y-o-y, according to preliminary shale play and tight oil production estimates. M-o-m, US tight crude growth in December was slightly higher than the monthly growth achieved in November (95 tb/d), but lower than growth seen in October (172 tb/d) and September (151 tb/d) 2018. Crude output from shale and tight formations through horizontal wells in the Permian Basin was up by 48 tb/d in December m-o-m to average 3.20 mb/d, followed by an increase of 46 tb/d m-o-m at the Eagle Ford to average 1.31 mb/d. Oil output from the Niobrara play showed a mild increase of 5 tb/d to average 0.48 mb/d, and at the same time, m-o-m growth of 18 tb/d was seen in the Bakken shale play to average 1.37 mb/d, while tight crude output in other shale plays decreased by a total of 17 tb/d m-o-m in December to average 0.57 mb/d.

On a yearly basis, **US tight crude for 2018** is estimated to have grown by 1.57 mb/d to average 6.28 mb/d, revised up by minor 5 tb/d from last month's assessment. Indeed, counting unconventional NGLs as a part of US liquids supply with 0.57 mb/d y-o-y growth, 2018 was another outperforming year for US shale oil production with total expected growth of 2.14 mb/d.

Tight crude production from the Permian Basin in 2018 is estimated to have grown by 0.94 mb/d y-o-y to reach an average of 2.85 mb/d. The Permian's share of US tight crude growth in 2018 is around 60%. It is worth pointing out that tight crude production from the Bakken shale play in North Dakota is expected to grow by 0.18 mb/d y-o-y to average 1.24 mb/d, while tight oil output in the Eagle Ford and Niobrara-Codell plays are estimated, respectively, at 0.09 mb/d to average 1.18 mb/d and by 0.10 mb/d to average 0.44 mb/d. US tight crude output from other shale plays grew by 0.25 mb/d y-o-y to average 0.56 mb/d.

Table 5 - 6: US tight crude production growth

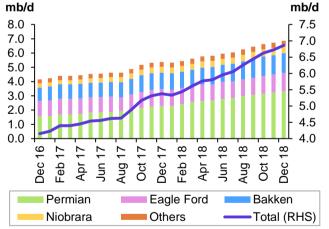
Shale play	<u>2017</u>		<u>2018</u> *	•	<u>2019</u> *		
		Ү-о-у		Y-o-y		Y-o-y	
tb/d	Production	change	Production	change	Production	change	
Permian tight	1.91	0.45	2.85	0.94	3.45	0.60	
Bakken shale	1.06	0.03	1.24	0.18	1.46	0.22	
Eagle Ford shale	1.09	-0.08	1.18	0.09	1.30	0.12	
Niobrara shale	0.34	0.04	0.44	0.10	0.55	0.11	
Other tight plays	0.31	0.02	0.56	0.25	0.68	0.12	
Total	4.71	0.47	6.28	1.57	7.45	1.17	

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

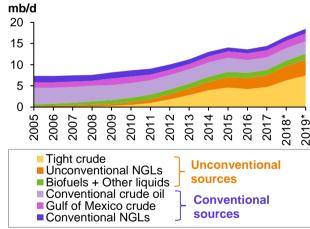
Y-o-y growth in **US tight crude output for 2019** is forecast at a slower pace of 1.17 mb/d to average 7.45 mb/d, which is 0.39 mb/d less than estimated for 2018, due to fundamental constraints, mainly limited pipeline capacity to transfer Permian oil to the USGC, as well as less drilling activity outside of the main shale plays.

Graph 5 - 12: US tight crude breakdown



Souces: US EIA and OPEC Secretariat.

Graph 5 - 13: US liquids production breakdown



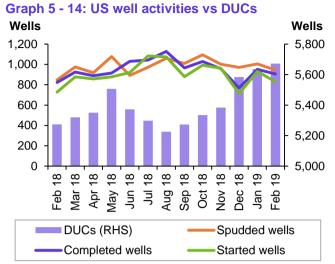
Note: * 2018 = Estimate and 2019 = Forecast. Sources: US EIA, Rystad Energy and OPEC Secretariat.

Tight crude production from the Permian Basin is anticipated to grow by 0.60 mb/d in 2019 to average 3.45 mb/d, which is 36%, or 0.34 mb/d, less than a year earlier. In North Dakota, production growth from the Bakken shale is projected at 0.22 mb/d to average 1.46 mb/d, while the Eagle Ford shale is anticipated to grow by 0.12 mb/d to reach an average of 1.30 mb/d. The Niobrara is forecast to grow by 0.11 mb/d to average 0.55 mb/d, and the other shale regions are projected to increase by 0.12 mb/d to average 0.68 mb/d.

US horizontal drilled, but uncompleted, wells (DUCs)

From February 2018 to the end of February 2019, overall **DUCs** in all US shale and tight plays (27 shale and tight plays, including the five key regions of Permian Delaware, Permian Midland, Eagle Ford, Bakken and Niobrara) increased by 398 units to 5,672 wells (preliminary).

Looking at the last three months shows that the DUC count grew strongly compared to previous months. Moreover, while DUCs since November 2018 have increased in the Niobrara and Permian Midland tight plays by 217 and 94 units to average 1,076 and 1,367 wells in February 2019, respectively, the DUC inventories in some regions either declined or were steady. For example, the DUC count dropped by 57 units in the Bakken shale to average 705 wells in the same period.



Sources: Rystad Energy and OPEC Secretariat.

With regard to the comparison between the US horizontal shale well activities from different phases of operation, declines in drilling and completion activities occurred in 2H18.

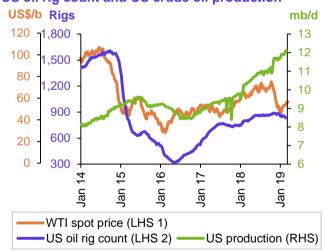
US oil rig count

The total US oil and gas rig count was down by 11 units w-o-w to 1,027 rigs in the week ending 8 March 2019.

By **basin**, the active oil rig count in the Permian and Eagle Ford Basins declined by 1 unit each to average 465 and 81 rigs, respectively, and in the Williston Basin declined by 3 units w-o-w to 53 rigs.

In 2018, the US oil rig count increased by 138 y-o-y to average 841 rigs, representing growth of ~20%. Simultaneously, 11,695 horizontal oil (oil & gas) wells were spudded in 2018, higher by ~19% y-o-y, while the number of total completed wells and wells that have started to produce oil increased by 11,125 wells and 10,629 wells, respectively, each up by 35% y-o-y. In comparison, for efficiency, despite the number of wells starting production in 2018 being 15% less than the wells starting production in 2014, tight crude output growth was at 1.56 mb/d in 2018, representing an increase of 36% compared to y-o-y growth in 2014 which was at 1.14 mb/d.

Graph 5 - 15: The comparison between WTI price, US oil rig count and US crude oil production



Sources: Baker Hughes, US EIA and OPEC Secretariat.

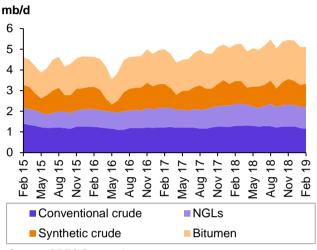
Concerning the **oil and gas split**, there was a drop of 9 units in oil fields to reach 834 rigs, while gas rigs decreased by only 2 units w-o-w to reach 193 rigs. The corresponding y-o-y increase for oil rigs was 38 units, or less than 5%.

Regarding the **drilling trajectory**, the number of horizontal rigs (active in oil and gas fields) was down by 7 units w-o-w to reach 904 rigs. However, compared to a year ago, 56 more rigs, or 7%, are active in horizontal drilling.

Canada

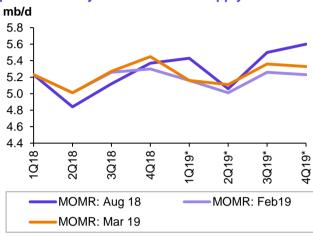
Canada's liquids supply rose by 0.10 mb/d in November m-o-m to average 5.49 mb/d, a record high following m-o-m growth of 0.31 mb/d in October. Incremental production in November mainly came from oil sands in Alberta, which added 71 tb/d to average 3.17 mb/d, higher by 0.26 mb/d, or 9%, y-o-y based on official data. In second place, Canada's NGLs rose by 29 tb/d m-o-m to average 1.06 mb/d, higher by 0.08 mb/d, or 9%, and finally, conventional crude oil production remained unchanged y-o-y at an average of 1.27 mb/d.

Graph 5 - 16: Canada's production by product type



Source: OPEC Secretariat.

Graph 5 - 17: Impact of Alberta mandate for production adjustment on 2019 supply forecast



Note: * 1Q19 - 4Q19 = Forecast. Source: OPEC Secretariat.

According to secondary sources, Canada's main oil-producing province of Alberta raised the amount of crude that companies can produce in April to 3.66 mb/d, an increase of 100 tb/d from the limit imposed in January. Late last year, congestion on oil export pipelines backed up crude in storage tanks and sent crude prices in the province tumbling to record lows, according to secondary sources. The slump prompted the Alberta government to mandate temporary production adjustments effective 1 January that took 325 tb/d out of the market.

The province is now raising the limit because the amount of oil in storage is shrinking and prices are stronger, the Alberta premier said in a statement. Pipeline transportation capacity could also increase because less diluent, used to help viscous heavy crude flows, is needed as the weather warms up. Hence, the oil supply forecast for Canada was reassessed and now shows an increase of 100 tb/d from 2Q19 onward.

Canada's liquids supply in 2018, following an upward revision of 10 tb/d and 143 tb/d in 3Q18 and 4Q18, respectively, is estimated to have increased by 0.39 mb/d y-o-y to average 5.24 mb/d, revised up by 39 tb/d compared with the previous month's assessment.

Canada's oil supply in 2019, is now forecast to remain flat y-o-y at an average of 5.24 mb/d, representing an upward revision of 0.04 mb/d m-o-m.

Mexico

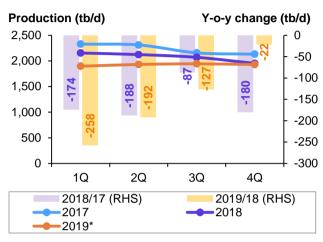
Average **liquids output in Mexico in January 2019** declined by 0.07 mb/d m-o-m to average 1.86 mb/d, lower by a massive 0.34 mb/d y-o-y. Crude oil output dropped by 87 tb/d m-o-m to average 1.62 mb/d, lower by 136 tb/d y-o-y. NGL output in January increased by 18 tb/d to average 0.24 mb/d.

In **2018**, light and super light crude oil production was down by 0.16 mb/d y-o-y to average 0.74 mb/d, while heavy crude output grew by 0.02 tb/d y-o-y to average 1.07 mb/d. The only Mexican oil field production remaining steady in 2018 was the offshore complex of Ku-Maloob-Zaap, which kept its annual production level at 0.82 mb/d while all of the others were in decline.

Mexico's liquids supply in 2018 is estimated to have declined by 0.16 mb/d to average 2.08 mb/d, remaining unchanged compared to last month's assessment. Annual crude oil production declined by 136 tb/d to average 1.81 mb/d.

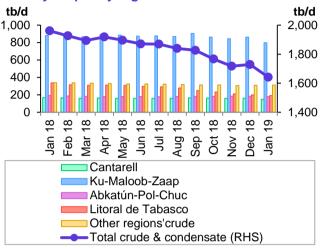
Mexico's oil supply in **2019** is forecast to decline by 0.15 mb/d to average 1.93 mb/d in a continuation of the natural decline, revised down by 16 tb/d, following weaker-than-expected production performance in 1Q19 as well as outages occurring during maintenance.

Graph 5 - 18: Mexico's quarterly liquids supply



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

Graph 5 - 19: Mexico's crude and condensate monthly output by region



Sources: Pemex and OPEC Secretariat.

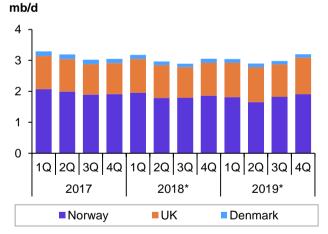
OECD Europe

OECD Europe's preliminary oil supply was down by 0.02 mb/d m-o-m in January 2019 to reach 3.76 mb/d, and declined by 0.28 mb/d y-o-y, much more than the y-o-y decline seen in Jan 2018.

The region's oil supply in **2018** is estimated to have reached 3.77 mb/d, indicating a y-o-y contraction of 0.06 mb/d. While production in Norway and Denmark is estimated to have declined by 0.12 mb/d and 0.02 mb/d to average 1.85 mb/d and 0.12 mb/d, respectively, oil supply in the UK and Other OECD Europe is likely to have grown by 0.03 mb/d and 0.06 mb/d to average 1.05 mb/d and 0.74 mb/d, respectively.

For **2019**, oil supply is forecast to see a stagnant trend, at 3.77 mb/d, to show an increase of 0.06 mb/d for the UK, while production is likely to decline in other countries of the region. North Sea oil production is expected to see a gradual ramp up from 4Q19 onward, owing to the Norwegian giant Johan Sverdrup start-up.

Graph 5 - 20: North Sea quarterly liquids supply



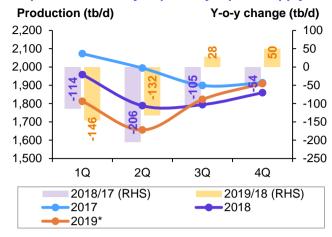
Note: *2018 = Estimate and 2019 = Forecast.

Norway

Preliminary production figures for January 2019 show average daily production of 1.82 mb/d of crude, NGLs and condensate, contrary to a forecast from the Norwegian Petroleum Directorate (NPD), which indicated a decline of 30 tb/d m-o-m following decreasing NGL production. Liquids production in December declined by 0.08 mb/d y-o-y to average 1.85 mb/d. **Norway's oil supply for 2018** is estimated to have declined by 0.12 mb/d, or ~6% y-o-y, to average 1.85 mb/d, due to limited new field startups and steep natural declines, unchanged from the previous month's report.

In **January**, crude oil and condensate output declined by 47 tb/d m-o-m to average 1.46 mb/d, mainly due to natural annual declines at the Troll, Oseberg, Ekofisk and Aasgard fields, and showing a y-o-y decline by 0.20 mb/d. NGL output in January

Graph 5 - 21: Norway's quarterly liquids supply



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

was up by 18 tb/d to average 0.24 mb/d, but lower by 45 tb/d compared to January 2018. According to the NPD, low average liquids output across 2018 was due to weaker-than-expected field performance, in particular below-capacity output from new fields.

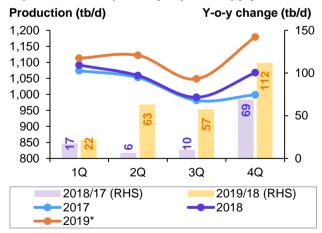
Looking at NPD's forecast for **2019**, despite an increase of 13% in investment in the offshore for the current year, crude oil production is projected to decline by 60-70 tb/d compared to the average of 1.49 mb/d achieved in 2018, with a slower y-o-y decline rate than the contraction of 100 tb/d seen in 2018. However, with more spending in offshore facilities, improved production performance from new fields such as Goliat and some possible incremental production in late 2019 from the start-up of the giant Johan Sverdrup field in 4Q19 is expected. Therefore, a contraction of 0.05 mb/d y-o-y is anticipated for Norwegian oil supply in 2019, representing an annual average liquids supply of 1.80 mb/d.

UK

In January 2019, UK crude oil output increased by 10 tb/d to average 0.94 mb/d, but was lower by 73 tb/d y-o-y. Liquids output in January was also supported by incremental production of NGLs by 6 tb/d to average 113 tb/d. Preliminary production data for February also indicates m-o-m growth of more than 60 tb/d. As highlighted in the previous month's report, first oil was produced from the second phase of development of the giant Clair Ridge project in the West of Shetland region offshore UK in late November. Therefore, the oil supply forecast of 1Q19 was revised up by 17 tb/d to average 1.11 mb/d. However, the expected supply for 2019 remains unchanged at 1.12 mb/d, representing y-o-y growth of 0.06 mb/d.

UK oil supply is estimated to have risen by 0.03 mb/d y-o-y to average 1.05 mb/d in **2018**, which was lower than expected in the original forecast, as production from new projects was mostly offset by heavy declines in mature fields as well as consecutive field shutdowns.

Graph 5 - 22: UK quarterly liquids supply



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

Developing Countries (DCs)

Total developing countries' (DCs) oil supply for 2018 is estimated to have reached an average of 13.41 mb/d, revised down by 0.02 mb/d, following a downward revision mainly in the Other Asia region. Overall, y-o-y growth stood at 0.04 mb/d. While Africa, Latin America and the Middle East regions showed y-o-y growth of 0.03 mb/d, 0.02 mb/d and 0.07 mb/d, respectively, oil supply in the Other Asia region showed a y-o-y contraction of 0.08 mb/d.

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

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
2017	13.24	13.35	13.45	13.46	13.38	-0.15
2018*	13.40	13.47	13.34	13.45	13.41	0.04
2019*	13.62	13.64	13.80	14.05	13.78	0.36

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

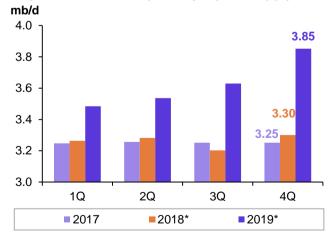
For **2019**, following the anticipation of 0.35 mb/d y-o-y growth in Latin America owing to the planned new project production start-ups and ramp-ups at the recently installed FPSOs in Brazil, oil supply in DCs is forecast to grow by 0.36 mb/d to average 13.78 mb/d. Indeed, the expected y-o-y growth coming from Latin America, Africa and the Middle East will be partially offset by expected continuous declines in the Other Asia region.

Latin America

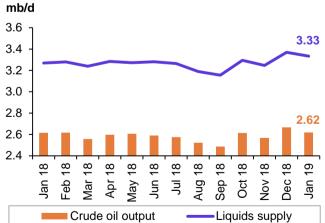
Brazil

Brazil's preliminary crude oil output declined by 72 tb/d m-o-m to average 2.62 mb/d in **January 2019**, despite production reaching its highest level in December 2018 since June 2017, based on Petrobras' trend. Moreover, according to Petrobras, average oil production in Brazil during February was 2.08 mb/d, which is 1% lower than the volume produced in January. This was mainly due to the operational issues in the platforms P-18 and P20, which operate in the Marlim field, in the Campos Basin, and the FPSO Cidade de Angra dos Reis, located in the Lula field, in the Santos pre-salt Basin.

Graph 5 - 23: Brazil's quarterly liquids supply



Graph 5 - 24: Brazil's monthly liquids supply



Source: OPEC Secretariat.

Note: * 2018 = Estimate and 2019 = Forecast. Source: OPEC Secretariat.

However, according to Petrobras, production at platforms installed in the giant pre-salt **Buzios field** last year – P-74 and P-75 – should rise significantly as of March 2019. Oil output from the Buzios field reached around 98 tb/d in December 2018, according to oil regulator ANP. Production capacity of the field's P-76 platform in February 2019 reached around 450 tb/d and is expected to rise to 600 tb/d by the end of the year when the

P-77, the fourth platform will be installed. Petrobras has started producing oil and gas from the P-76 FPSO in the Buzios from 20th February 2019. P-76 is the second FPSO to start-up in 2019 for Petrobras, following the start-up of the P-67 FPSO in the **Lula Norte** area in the Santos Basin earlier this month. Oil production could reach 360 tb/d by the end of 2019 in Buzios – the largest of six pre-salt deposits in the cluster known as the **Transfer-of-Rights (TOR) region** – according to Petrobras. The Brazilian oil company plans to add two more FPSOs in 2019.

Brazil increased crude oil production capacity by approximately 0.6 mb/d over the past four years (2015-2018), however oil output fell by 35 tb/d to average 2.59 mb/d in 2018. More than 55% of total crude oil production, or 1.43 mb/d, was exploited from the pre-salt horizon, mainly from the Lula oil field, accounting for 0.86 mb/d.

Brazil's **liquids output** in **January 2019** declined by 0.04 mb/d to average 3.33 mb/d although preliminary production data indicates m-o-m growth of 0.05 mb/d in February to average 3.38 mb/d. Liquids supply in 2019 is expected to grow by 0.36 mb/d to average 3.63 mb/d, while total liquids output is estimated to have grown by only 0.01 mb/d y-o-y to average 3.26 mb/d in 2018. Oil production growth in 2019 is largely supported by the ramp-up of the Lula South expansion (P-69) and the start of production on Berbigao/Sururu (P-68) and Lula North (P-67) in 1Q19. Petrobras was due to begin production from the P-68 platform in the Berbigao field by the end of 2018, but this has been delayed to 1Q19. The firm began producing from the 150 tb/d P-75 FPSO at the Buzios pre-salt field in early November.

FSU

FSU oil production for 2018 is estimated to have grown by 0.24 mb/d to average 14.29 mb/d, unchanged from the previous forecast. Oil production in Russia and Kazakhstan is estimated to have grown by 0.17 mb/d and 0.08 mb/d to average 11.35 mb/d and 1.81 mb/d, respectively. Azeri oil production is expected to have remained stagnant y-o-y at 0.80 mb/d, while oil supply from FSU others will have declined by 0.02 mb/d to average 0.32 mb/d.

For **2019**, FSU oil supply is forecast to increase by 0.16 mb/d to average 14.45 mb/d. Oil supply in Russia and Kazakhstan, based on running projects' ramp ups and assuming annual natural declines and voluntary production adjustments, is expected to increase by 0.14 mb/d and 0.04 mb/d, respectively, while Azeri supply is likely to see a minor contraction of 0.01 mb/d for steady production at 0.80 mb/d.

Russia

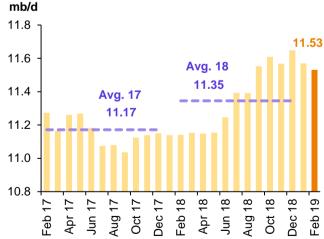
Russia's preliminary liquids supply stood at 11.53 mb/d in **February**, lower by 0.04 mb/d m-o-m, yet up by 0.39 mb/d y-o-y.

For 2019, based on project ramp-ups in Russia, Russian oil companies are expected to potentially further increase production through greenfield development. Incremental production of oil, NGLs and condensate could come from several projects, such as Uvat, East-Siberian, Vankorneft, Yamal LNG and Messoyakha.

Russia is committed to adjusting its oil supply in 1H19 by 230 tb/d below the production level of October 2018.

Preliminary total production data of Russian companies in January and February 2019 indicates a production increase by more than 0.40 mb/d

Graph 5 - 25: Russia's monthly liquids supply



Sources: Nefta Compass and OPEC Secretariat.

y-o-y. Rosneft is the main company with an average of 3.98 mb/d, representing growth of 0.17 mb/d compared to total output in January and February 2018.

Russia's annual oil supply in **2018** reached the highest-ever record to average 11.35 mb/d, representing y-o-y growth of 0.17 mb/d. For **2019**, Russia's liquids supply is forecast to grow by 0.14 mb/d to average 11.49 mb/d.

Caspian

Kazakhstan

In Kazakhstan, the January liquids output was up by a minor 7 tb/d, m-o-m to average 1.89 mb/d, unchanged compared to a month earlier. Crude oil was up by 11 tb/d to average 1.63 mb/d, higher by 96 tb/d y-o-y, while NGL output declined by 4 tb/d m-o-m to average 0.27 mb/d. The Kashagan field's oil output was pegged at a record of 0.31 mb/d. However, operators have announced temporary oil field production shutdowns maintenance. Oil production will be halted in the Kashagan field for 45 days from 14 April, in Tangiz from 1 August for 42 days and in Karachaganak for 28 days from 15 September.

Hence, liquids production in Kazakhstan is forecast to grow by only 0.04 mb/d to average 1.85 mb/d in 2019. Kazakh oil supply in 2018 was up by 0.08 mb/d to average 1.81 mb/d.

Graph 5 - 26: Kazakhstan's quarterly liquids output



Note: * 1Q19 - 4Q19 = Forecast. Source: OPEC Secretariat.

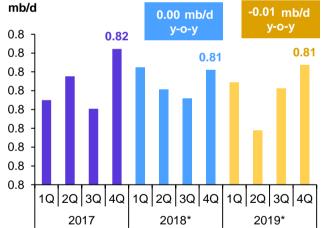
Azerbaijan

Azerbaijan's liquids output increased by a minor 5 tb/d m-o-m to average 0.81 mb/d in **January**, including 0.71 mb/d of crude oil and 0.10 mb/d of NGLs (mainly field condensate). Recent growth in condensate produced at the Shah Deniz complex is offsetting continuous declines at the ACG complex, Azerbaijan's largest field.

For **2019**, liquids production in Azerbaijan is forecast to remain unchanged or with a minor y-o-y contraction of 0.01 mb/d, representing an annual production at 0.80 mb/d. However, heavy y-o-y decline in production is anticipated due to potential maintenance on two platforms at the ACG complex across 2019 according to BP.

Azerbaijan's oil supply in ${\bf 2018}$ was stagnant y-o-y at 0.80 mb/d.

Graph 5 - 27: Azerbaijan's quarterly liquids supply



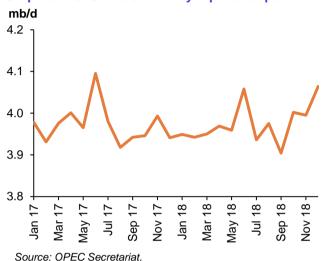
Note: *2018 = Estimate and 2019 = Forecast. Source: OPEC Secretariat.

China

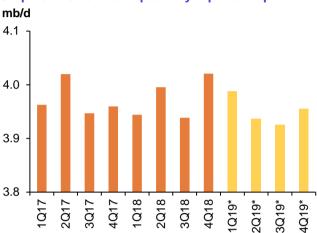
China's liquids production in January decreased by 68 tb/d m-o-m to average 4.00 mb/d, higher by 47 tb/d y-o-y. Chinese liquids output in December increased by 69 tb/d, but in January returned to the same level of November. Crude oil output in January dropped by 79 tb/d to average 3.77 mb/d, the lowest since September 2018, and almost at the same level of a year earlier.

Production of non-conventional liquids, mainly **coal-to-liquids (CTLs)**, compensated for the decline of crude oil production during the same period. CTL output reached 213 tb/d in February 2019, higher by 34 tb/d y-o-y. The Chinese government has mandated the national companies to increase domestic production through higher investment and more exploration activities, particularly in unconventional sources. A recovery in the oil price also incentivized the main domestic companies to spend more on higher production. With more investment pledged for the upstream in 2019, China is likely to keep drilling activity at current levels. For instance, PetroChina plans to allocate 25% more budget in 2019 to domestic oil exploration and development of projects than in 2018 and, at the same time, CNOOC is also planning to allocate capital amounting to \$10.4–11.9 billion, compared to \$9.4 billion in 2018. Oil supply in 2019 is estimated to see a mild contraction of 0.02 mb/d to average 3.95 mb/d compared to last year's steady production of 3.97 mb/d.

Graph 5 - 28: China's monthly liquids output



Graph 5 - 29: China's quarterly liquids output



Note: * 1Q19 - 4Q19 = Forecast. Source: OPEC Secretariat.

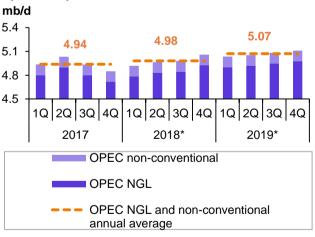
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids for 2018 are estimated to grow by 0.04 mb/d to average 4.98 mb/d.

For **2019**, they are likely to grow by 0.09 mb/d to average 5.07 mb/d, remaining unchanged from last month's assessment.

Preliminary production data in **February 2019** shows lower output by 0.04 mb/d m-o-m to average 5.02 mb/d compared to January, but was higher by 0.12 mb/d y-o-y. In February 2019, the volume of 0.13 mb/d was classified as OPEC nonconventional liquids, and the largest share, at 4.89 mb/d, is from NGL production.

Graph 5 - 30: OPEC NGL and non-conventional liquids output



Note: *2018 = Estimate and 2019 = Forecast. Sources: OPEC Secretariat.

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

			Change				Change	Change		
	<u>2016</u>	<u>2017</u>	<u>17/16</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018*</u>	<u>18/17</u> <u>2019*</u>	<u>19/18</u>
Total OPEC	4.81	4.94	0.12	4.92	4.96	4.98	5.06	4.98	0.04 5.07	0.09

Note: * 2018 = Estimate and 2019 = Forecast.

OPEC crude oil production

According to secondary sources, **total OPEC-14 preliminary crude oil production** averaged 30.55 mb/d in February, a decrease of 221 tb/d over the previous month. Crude oil output decreased mostly in Venezuela, Saudi Arabia and Iraq, while production inched up in Libya and Angola.

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

	<u>2017</u>	<u>2018</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>Dec 18</u>	<u>Jan 19</u>	Feb 19	<u>Feb/Jan</u>
Algeria	1,047	1,042	1,031	1,059	1,055	1,051	1,024	1,026	2
Angola	1,634	1,505	1,493	1,470	1,497	1,484	1,435	1,457	22
Congo	252	318	324	320	320	327	317	316	0
Ecuador	530	519	519	526	517	518	517	522	5
Equatorial									
Guinea	133	125	127	124	116	103	112	126	14
Gabon	200	186	183	184	184	194	197	203	7
Iran, I.R.	3,813	3,553	3,818	3,603	2,982	2,724	2,731	2,743	12
Iraq	4,446	4,549	4,481	4,606	4,664	4,712	4,702	4,633	-70
Kuwait	2,708	2,746	2,707	2,797	2,774	2,800	2,723	2,709	-14
Libya	811	952	883	892	1,059	949	883	906	23
Nigeria	1,658	1,719	1,653	1,704	1,741	1,733	1,731	1,741	10
Saudi Arabia	9,954	10,311	10,114	10,422	10,749	10,586	10,172	10,087	-86
UAE	2,915	2,986	2,873	2,982	3,234	3,238	3,075	3,072	-4
Venezuela	1,911	1,354	1,406	1,272	1,191	1,172	1,150	1,008	-142
Total OPEC	32,013	31,864	31,613	31,961	32,082	31,591	30,770	30,549	-221

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>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>Dec 18</u>	<u>Jan 19</u>	Feb 19	Feb/Jan
Algeria	1,059	1,041	1,025	1,066	1,067	1,063	1,033	1,025	-8
Angola	1,632	1,478	1,477	1,475	1,440	1,445	1,470	1,423	-47
Congo	263	327	328	329	330	323	353	367	15
Ecuador	531	517	516	524	516	520	524	533	10
Equatorial									
Guinea	129	120	124	118	112	111	109	101	-8
Gabon	210	194	185	192	206	209	209		
Iran, I.R.	3,867		3,804	3,789					
Iraq	4,469	4,410	4,360	4,460	4,460	4,465	4,575	4,545	-30
Kuwait	2,704	2,737	2,704	2,784	2,755	2,802	2,715	2,707	-8
Libya									
Nigeria	1,536	1,605	1,526	1,611	1,671	1,797	1,646	1,731	85
Saudi Arabia	9,959	10,317	10,128	10,399	10,790	10,643	10,243	10,136	-106
UAE	2,967	3,001	2,876	2,998	3,285	3,250	3,070	3,050	-20
Venezuela	2,035	1,516	1,523	1,451	1,469	1,511	1,488	1,432	-56
Total OPEC									

Notes: .. Not available.

Totals may not add up due to independent rounding.

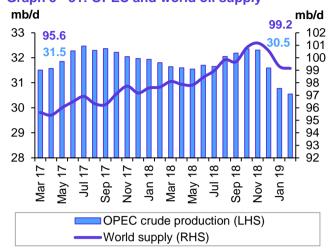
World oil supply

Preliminary data indicates that **global oil supply** decreased by 0.16 mb/d to average 99.15 mb/d in February 2019, compared with the previous month.

An increase in non-OPEC supply (including OPEC NGLs) of 65 tb/d in February compared with the previous month was mainly driven by the US, the UK and Brazil. This was offset by a remarkable decline in OPEC crude oil production of 221 tb/d, which leads to a total increase in global oil output of 1.50 mb/d y-o-y.

The share of OPEC crude oil in total global production declined by 0.2 pp to 30.8% in February 2019 compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 31: OPEC and world oil supply



Product Markets and Refinery Operations

Product markets globally reversed trends and exhibited gains in February after two consecutive months of weakening.

In the **US**, all main products performed positively as refinery product outputs declined considerably and led to a fall in inventory levels, thereby fuelling bullish sentiment.

In **Europe**, product markets received support all across the barrel, with the exception of naphtha, supported by inventory drawdowns amid lower product imports.

In **Asia**, support came from the middle and the bottom of the barrel, which can be attributed to strong exports, despite prevailing weakness at the top of the barrel due to oversupply.

Refinery margins

US refinery margins rose, supported by a considerable fall in US product inventory levels, particularly that of gasoline. At the same time, the sizeable reduction in refinery runs, due to the onset of peak refinery maintenance activities, provided further support. This decline in product availability led to higher imports over the month.

With the USEC Bayway and Girard Point 0.23 mb/d of FCC capacity returning to service, gasoline demand in the USEC is expected to remain under pressure, providing little support to the USGC gasoline market. Preparations for the shift to lower RVP summer grades, along with the refinery turnaround-related bullishness pushed regional gasoline prices up to a three-month high, to reach \$70.30/b, thereby further contributing to the positive outcome. US refinery margins for WTI averaged \$15.56/b in February, up by \$2.25 m-o-m and \$4.76 y-o-y

Graph 6 - 1: Refining margins US\$/b US\$/b 20 20 15 15 10 10 5 5 0 0 Jun 18 19 19 Jan 1 Feb, WTI (US Gulf) Brent (Rotterdam) Oman (Singapore)

Sources: Argus Media and OPEC Secretariat.

Refinery margins in **Europe** performed positively in February and exhibited a recovery across nearly all product cracks. This was especially true for gasoline and the bottom of the barrel, where cracks recovered on the back of higher exports and a relatively tighter environment due to refinery outages.

Refinery turnarounds in the region curtailed supplies and fuelled bullish sentiment which kept prices well supported. Refinery margins for Brent in Europe averaged \$3.42/b in February, up by 38¢ compared with a month earlier, but down by \$2.16 y-o-y.

Asian refinery margins strengthened, as strong gasoil exports as well as lower fuel oil imports exerted pressure on the corresponding stock levels. In addition, higher Jet A demand around the peak travelling season in China due to the Lunar New Year festivities provided further support. Meanwhile, the prevailing regional gasoline surplus continued to weigh on gasoline margins and kept gains capped.

In February, overall product exports from Asia declined by 280 tb/d m-o-m reaching 0.97 mb/d, despite an uptick in gasoline and diesel figures supported by the onset of the spring refinery maintenance season. Nevertheless, on a yearly basis, exports were higher by 86 tb/d and are likely to continue to trend upwards in the long term as an increasing number of refineries supply IMO-compliant bunker fuels. Rising feedstock costs and the premium growth of Oman vs Brent and WTI in February kept exports depressed and weighed

on Asian refining economics. Refinery margins for Oman in Asia gained 36¢ m-o-m to average \$3.51/b in February, which was lower by \$5.68 y-o-y.

Refinery operations

In the **US**, refinery utilization rates decreased in February to average 86.89%, which corresponds to a throughput of 15.89 mb/d. This represented a drop of 5.8 pp and 1.05 mb/d, respectively, compared with the previous month. Y-o-y, the February refinery utilization rate was down by 1.2 pp, with throughputs showing a drop of 472 tb/d.

European refinery utilization averaged 84.89%, in February corresponding to a throughput of 10.52 mb/d. This is a m-o-m drop of 0.5 pp and 60 tb/d, respectively. On a y-o-y basis, utilization rates increased by 0.3 pp, while throughput rose by 46 tb/d.

In **selected Asia** — comprising Japan, China, India and Singapore — refinery utilization rates declined, averaging 77.32% in February, corresponding to a

Graph 6 - 2: Refinery utilization rates % 100 100 90 90 80 80 70 70 <u>o</u> 19 8 Sep 1 Aug . oct O Feb Feb Jun Jan Mar EU-16 Selected Asia*

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

throughput of 21.68 mb/d. Compared with the previous month, throughputs were down by 1.8 pp and by 100 tb/d. Meanwhile, y-o-y they were up by 0.3 pp and higher by 732 tb/d.

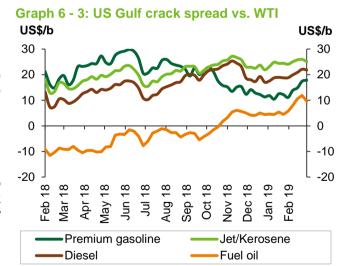
Product markets

US market

US gasoline cracks moved higher, with fundamentals strengthening due to substantial refinery maintenance. Tight supplies have caused inventory draws, supporting the market and allowing the gasoline crack spreads to continue strengthening, gaining \$3.80 m-o-m to average \$15.32 in February, down by \$3.36/b y-o-y.

The USGC **jet/kerosene crack** strengthened, supported by a \$4.44 m-o-m price rise and inventory drawdowns towards the end of the month despite a significant recovery in stock levels to around mid-February. The US jet/kerosene crack spread against WTI averaged \$25.31/b, up by \$1.09 m-o-m and by \$8.98 y-o-y.

US **gasoil crack spreads** against WTI trended upwards due to bullish sentiment fuelled by refinery outages and higher prices. The US gasoil crack spread against WTI averaged \$20.88/b, up by \$2.31 m-o-m and by \$10.58 y-o-y.



Sources: Argus Media and OPEC Secretariat.

US **fuel oil crack spreads** against WTI rose, exhibiting the strongest positive performance across the barrel as lower product availability along with concerns over lower imports of heavy crudes led to a tighter fuel oil balance, supporting prices. In February, the US fuel oil crack spread against WTI averaged \$9.54/b, up by \$4.63 m-o-m and by \$18.28 y-o-y.

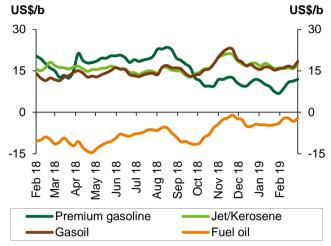
European market

The gasoline crack spreads in Rotterdam reversed trends and gained some ground after three consecutive months of declines. Concerns over refinery outages and reduced gasoline outputs due to scheduled refinery maintenance supported cracks. In addition, a pick-up in gasoline exports, which resulted in a 2% fall in inventory levels m-o-m provided further support to the gasoline cracks in Europe. Despite these positive developments, gasoline inventories levels remained well sustained.

The gasoline crack spread against Brent averaged \$10.43/b in February, up by \$1.57 m-o-m but was down by \$7.21 y-o-y.

The iet/kerosene crack spreads against Brent lost some ground over the month, pressured by increased imports mainly from the Middle East, which drove inventory levels higher. This rise in

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

product availability led to weakening in the jet/kerosene markets despite a decline in domestic supply attributed to turnarounds. The Rotterdam jet/kerosene crack spread against Brent averaged \$16.16/b, down by 54 ¢ m-o-m and by 33 ¢ y-o-y.

European gasoil crack spreads against Brent recovered in February, supported by inventory drawdowns in ARA amid a 6% decline in imports into the region. Strong stock build of strategic reserves in Germany, that had remained restricted for several months due to low Rhine river levels, reached a peak around mid-February. The gasoil crack spread against Brent averaged \$16.75/b, which was higher by 88¢ m-o-m and by \$4.46 v-o-v.

At the bottom of the barrel, fuel oil 3.5% cracks spreads in Rotterdam gained strength on the back of a drop in ARA inventory levels,. Lower outputs from Russia also contributed to the tightening market and supported fuel oil margins. In Europe, fuel oil cracks averaged minus \$7.34/b in February, gaining \$1.65 m-om, and \$5.78 y-o-y.

Asian market

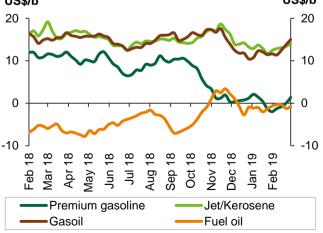
The Asian gasoline 92 crack spread against Dubai continued the declining trend for the fifth consecutive month, reaching new multi-year record lows as the gasoline surplus prevailed.

In late February, gasoline inventory levels eased causing a reversal of trends in gasoline cracks. As output remains constrained, gasoline is on track for further upside in the near term.

The Singapore gasoline crack spread against Oman in February averaged minus 6¢/b, down by 11¢ m-o-m and by \$11.52 y-o-y.

Singapore light distillate naphtha crack spreads fell, reflecting the gasoline weakness amid tempered regional demand from the petrochemical industry. Maintenance work caused stream cracker outages, exerting pressure on cracks by keeping

Graph 6 - 5: Singapore crack spreads vs. Dubai US\$/b US\$/b 20



Sources: Argus Media and OPEC Secretariat.

naphtha intakes depressed. The Singapore naphtha crack spread against Oman averaged minus \$7.88/b. having declined by 77¢ m-o-m, and by \$6.60 y-o-y.

With regard to the middle of the barrel, the **jet/kerosene** crack spreads in Asia recovered from the losses seen in the previous month supported by higher jet A fuel demand during the Lunar New Year holidays, China's peak travelling season. Relatively weak exports, a closed arbitrage window and poor kerosene demand for the heating sector capped further gains. The Singapore jet/kerosene crack spread against Oman averaged \$13.51/b, up by 83¢ m-o-m but down by \$3.81 y-o-y.

The Singapore **gasoil crack spread** strengthened during the month, on the back of strong export opportunities to Europe. A wider price differential between gasoil in Asia and Europe in February encouraged trade flows from Asia to the West, providing support to the regional market. The Singapore gasoil crack spread against Oman averaged \$14.02/b, up by \$1.08 m-o-m but down by \$1.24 y-o-y.

The Singapore **fuel oil crack spread** gained some ground, supported by a fall in arrivals from Northwest Europe, Russia and the US, leading to a 22% drop in total imports in February amid reports of higher onshore inventory levels. In addition, bullish sentiment fuelled a tighter balance due to the start-up of ADNOC's 127 tb/d RFCC, supporting fuel oil prices and cracks in the region. Singapore fuel oil cracks against Oman averaged minus 56¢/b, up by 72¢ m-o-m and by \$5.17 y-o-y.

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

Event	Time frame	<u>Asia</u>	<u>Europe</u>	<u>US</u>	<u>Observations</u>
Spring peak maintenance season	Mar 19 – Apr 19	↑ Some positive impact on product markets	♠ Some positive impact on product markets	♠ Some positive impact on product markets	Support expected to be softened by relatively high global stock levels, particularly at the top of the barrel, as well as the slow-down in demand.
Weaker Asian and European refining economics (y-o-y)	Mid-term		◆ Some negative impacts on product markets	-	Refiners may have to reduce crude intakes, or rationalize processing to maximize profits. Alternatively, closures of least lucrative plants may also be expected, if the margins continue to dive deeper into negative territory y-o-y.
Lower heavy crude availability	Mid-term	↑ Some positive impacts on heavy products	↑ Some positive impacts on heavy products	↑ Some positive impacts on heavy products	It may support prices of heavier products and cracks.

Table 6 - 2: Refinery operations in selected OECD countries

	Re	efinery throu	ıghput, mb/	/d		Refinery us	tilization, %	
	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Change Feb/Jan	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Change <u>Feb/Jan</u>
US	17.81	16.94	15.89	-1.05	95.74	92.64	86.89	-5.8 pp
Euro-16	10.54	10.58	10.52	-0.06	85.02	85.36	84.89	-0.5 pp
France	1.13	1.13	1.16	0.03	90.26	90.26	92.66	2.4 pp
Germany	1.75	1.72	1.77	0.05	79.75	78.56	81.03	2.5 pp
Italy	1.38	1.37	1.23	-0.14	67.50	66.76	59.87	-6.9 pp
UK	1.15	1.10	1.12	0.03	87.74	83.40	85.38	2.0 pp
Selected								
Asia*	21.13	21.78	21.68	-0.10	76.78	79.13	77.32	-1.8 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>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>1Q19</u>
Total OECD	37.43	38.13	37.99	37.60	37.58	38.89	37.90	37.82
OECD Americas	18.78	19.09	19.33	18.79	19.50	19.79	19.24	19.14
of which US	16.51	16.88	17.32	16.75	17.50	17.68	17.35	16.74
OECD Europe	11.91	12.24	11.96	11.89	11.69	12.43	11.84	11.87
of which:								
France	1.14	1.17	1.10	1.12	0.94	1.21	1.15	1.06
Germany	1.93	1.91	1.79	1.89	1.86	1.78	1.61	1.78
Italy	1.30	1.40	1.35	1.35	1.33	1.37	1.35	1.30
UK	1.09	1.10	1.06	0.93	1.04	1.14	1.14	0.99
OECD Asia Pacific	6.75	6.80	6.70	6.92	6.39	6.66	6.82	6.80
of which Japan	3.28	3.22	3.11	3.33	2.85	3.07	3.20	3.17
Total Non-OECD	41.41	42.27	43.63	43.29	43.58	44.19	44.43	44.53
of which:								
China	10.77	11.35	12.03	11.75	12.04	12.10	12.25	12.17
Middle East	6.93	7.06	7.27	7.08	7.22	7.67	7.89	7.73
Russia	5.58	5.59	5.72	5.69	5.65	5.81	5.73	5.81
Latin America	4.66	4.54	4.47	4.47	4.54	4.46	3.96	4.00
India	4.68	4.73	4.83	4.93	4.80	4.78	4.83	5.20
Africa	2.20	2.21	2.15	2.18	2.26	2.06	2.31	2.31
Total world	78.84	80.39	81.63	80.89	81.16	83.08	82.33	82.35

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>Jan 19</u>	Feb 19	Feb/Jan	<u>2018</u>	<u>2019</u>
US Gulf (Cargoes FOB):						
Naphtha*		51.22	57.25	6.03	68.51	54.24
Premium gasoline	(unleaded 93)	63.15	70.30	7.15	85.78	66.73
Regular gasoline	(unleaded 87)	57.63	64.42	6.79	80.17	61.03
Jet/Kerosene		75.85	80.29	4.44	85.35	78.07
Gasoil	(0.2% S)	70.20	75.86	5.66	80.99	73.03
Fuel oil	(3.0% S)	54.94	62.87	7.93	60.17	58.91
Rotterdam (Barges FoB) :					
Naphtha		50.52	55.14	4.62	66.47	52.83
Premium gasoline	(unleaded 98)	68.23	74.43	6.20	87.34	71.33
Jet/Kerosene		76.07	80.16	4.09	86.93	78.12
Gasoil/Diesel	(10 ppm)	75.24	80.75	5.51	85.94	78.00
Fuel oil	(1.0% S)	54.90	61.41	6.51	62.33	58.16
Fuel oil	(3.5% S)	50.38	56.66	6.28	59.04	53.52
Mediterranean (Cargoe	s FOB):					
Naphtha		49.09	53.98	4.89	65.79	51.54
Premium gasoline**		59.22	64.40	5.18	79.08	61.81
Jet/Kerosene		73.81	77.75	3.94	85.10	75.78
Diesel		74.88	80.88	6.00	85.66	77.88
Fuel oil	(1.0% S)	57.80	64.13	6.33	63.53	60.97
Fuel oil	(3.5% S)	51.91	58.69	6.78	60.36	55.30
Singapore (Cargoes FO	B):					
Naphtha		51.96	56.54	4.58	67.24	54.25
Premium gasoline	(unleaded 95)	61.07	66.27	5.20	79.93	63.67
Regular gasoline	(unleaded 92)	59.12	64.36	5.24	77.66	61.74
Jet/Kerosene		71.75	77.93	6.18	84.81	74.84
Gasoil/Diesel	(50 ppm)	72.01	78.44	6.43	84.67	75.23
Fuel oil	(180 cst)	57.79	63.86	6.07	65.24	60.83
Fuel oil	(380 cst 3.5% S)	58.10	63.79	5.69	64.74	60.95

Note: * Barges.

Sources: Argus Media and OPEC Secretariat.

^{**} Cost, insurance and freight (CIF).

Tanker Market

Following the same trend seen in the tanker market in the previous month, average **dirty tanker spot freight rates** continued to decline in February, dropping by 18%. Lower rates were seen in all reported dirty classes during the month for most of the reported routes. The drop in rates came on the back of holidays in the East, reduced port and transit delays, thin market activity in general, as well as an increase in prompt vessel supply. Dirty tanker freight rates for VLCC, Suezmax and Aframax classes declined by an average of 5%, 20% and 22%, respectively.

Clean tanker spot freight rates were equally affected by the weakening trend as they were impacted by general bearish sentiment prevailing in the tanker market in February. A lack of activity was seen dominating different classes, with average clean tanker spot freight rates declining by 12% from the month before, affected mostly by low tonnage demand in the East.

Spot fixtures

According to preliminary data, **global fixtures** increased by 12.8% in February compared to the previous month. **OPEC spot fixtures** were up by 9%, or 1.24 mb/d, to average 14.98 mb/d.

Fixtures on the **Middle East-to-East** route averaged 8.29 mb/d in February, up by 0.39 mb/d from a month ago, while those on the **Middle East-to-West route** averaged 1.81 mb/d.

Outside of the Middle East, fixtures averaged 4.89 mb/d, rising by 0.43 mb/d m-o-m, and showing an increase of 19.3% compared with the same period a year earlier.

Table 7 - 1: Spot fixtures, mb/d

				Change
	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Feb 19/Jan 19
All areas	20.55	19.73	22.25	2.52
OPEC	14.21	13.74	14.98	1.24
Middle East/East	8.04	7.90	8.29	0.39
Middle East/West	1.51	1.38	1.81	0.43
Outside Middle East	4.66	4.46	4.89	0.43

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

Preliminary data shows **OPEC sailings** were 0.3% lower m-o-m in February to average 25.25 mb/d. This was 0.78 mb/d above the same month a year ago. **Middle East sailings** increased by 0.1% from the previous month and by 4% compared with the same period a year earlier.

February **crude arrivals** saw a mixed performance, with an increase of 6.9% in **Europe** m-o-m, while arrivals in other regions showed declines. **North American, Far Eastern and West Asian** ports decreased from the previous month by 3.5%, 0.5% and 1.5%, to average 9.87 mb/d, 9.15 mb/d and 4.38 mb/d, respectively.

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

	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Change Feb 19/Jan 19
Sailings				
OPEC	25.27	25.32	25.25	-0.08
Middle East	18.48	18.47	18.48	0.01
Arrivals				
North America	9.55	10.23	9.87	-0.36
Europe	11.68	11.11	11.87	0.76
Far East	8.89	9.20	9.15	-0.05
West Asia	4.54	4.44	4.38	-0.07

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

Following the drop in January, **VLCC freight rates** saw a further softening in February as rates weakened on average by 5% m-o-m. The decline was mainly driven by a lack of cargo requirements, mainly in the East, while tonnage availability was extensive. Slow movement in the VLCC chartering market was seen across different routes.

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

	Size				Change
	1,000 DWT	<u>Dec 18</u>	<u>Jan 19</u>	Feb 19	Feb 19/Jan 19
Middle East/East	230-280	87	56	52	-4
Middle East/West	270-285	38	24	26	2
West Africa/East	260	87	56	52	-4

Sources: Argus Media and OPEC Secretariat.

Freight rates registered for tankers operating on the **Middle East-to-East route** declined by 7% from the previous month to stand at WS52 points.

Similarly, **West Africa-to-East routes** dropped by 7% from a month ago to average WS52 points, impacted by the downward pressure in the region.

On the other hand, **Middle East-to-West routes** rose by 6% m-o-m to stand at WS26 points, as the market in the West – mainly the US Gulf Coast (USGC) – was relatively balanced and rates started to pick up, mostly in the second half of the month.

Overall, the VLCC freight rates were pressured by fewer cargo loading requirements and a sustained tonnage list. Nevertheless, VLCC average freight rates in February remained 29% above the levels seen in the same month a year before.

Suezmax

In line with the general downward trend, **Suezmax average spot freight rates** experienced an even larger drop than VLCCs in February. The Suezmax market was mostly quiet with few inquiries and limited tonnage demand.

Chartering activities in several areas were bearish, with the Mediterranean and Black Sea mostly quiet, as inquiries were met with many offers. Similarly, the North and Baltic Sea regions showed an excess in vessel supply and prompt ship availability increasing in the area. Therefore, Suezmax rates dropped in February,

despite owners' repeated attempts to resist the drop in rates. However those attempts were not supported by market fundamentals and ample tonnage availability. Moreover, Suezmax rates were negatively affected by reduced delays at the Turkish Straits and a declining Aframax market.

As a result, rates for tankers operating on the **West Africa-to-USGC route** decreased by 18% m-o-m to average WS63 points in February and rates on the **Northwest Europe (NWE)-to-USGC route** fell by 22% m-o-m to average WS50 points.

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

	Size				Change
	1,000 DWT	Dec 18	<u>Jan 19</u>	Feb 19	Feb 19/Jan 19
West Africa/US Gulf Coast	130-135	111	77	63	-14
Northwest Europe/US Gulf Coast	130-135	95	65	50	-15

Sources: Argus Media and OPEC Secretariat.

Aframax

Average **Aframax spot freight rates** saw the highest drop among tankers in the dirty tanker market, declining by 22% in February from the previous month, to average WS105 points.

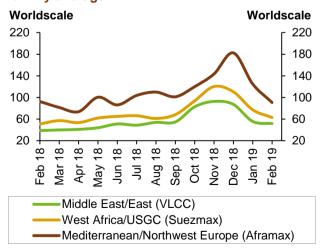
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size				Change
	1,000 DWT	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	<u>Feb 19/Jan 19</u>
Indonesia/East	80-85	138	112	93	-19
Caribbean/US East Coast	80-85	188	168	141	-28
Mediterranean/Mediterranean	80-85	195	131	95	-36
Mediterranean/Northwest Europe	80-85	183	125	91	-34

Sources: Argus Media and OPEC Secretariat.

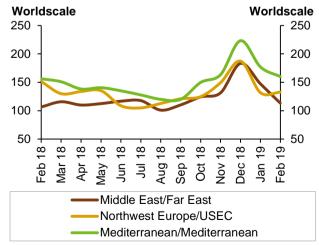
Freight rates on all reported routes showed declines from the previous month, despite some scattered gains during the month. Like the larger ships, the Aframax class suffered from depressed tonnage demand, holidays in Asia and reduced transit delays, which supported spot tonnage availability. Nevertheless, Aframax benefited from some improvements in trading volumes in NWE and the North Sea, however these increases were short-lived and thus rates dropped on average.

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



Sources: Argus Media and OPEC Secretariat.

Rates in the Mediterranean continued to decline dramatically as seen in the previous month. Spot freight rates for **Mediterranean-to-Mediterranean** and **Mediterranean-to-NWE routes** declined by 27% m-o-m each to stand at WS95 points and WS91 points, respectively, in February.

The Caribbean's Aframax charter market dropped on average as tonnage demand remained depressed, hence **Caribbean-to-US East Coast (USEC) average rates** dropped by WS28 points from the previous month to stand at WS141 points.

Aframax freight rates in the East dropped on the **Indonesia-to-East route** by 17% m-o-m to average WS93 points partially on the back of holidays in the East.

Clean tanker freight rates

Clean spot tanker freight rates also weakened in February and on almost all reported routes. The drop in rates was mainly driven by slow activity in the market, which could partially be attributed to the holidays in the East. On the other hand, reduced weather delays also led to the drop in rates, by supporting increasing prompt tonnage availability.

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

	Size 1,000 DWT	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Change Feb 19/Jan 19
East of Suez					
Middle East/East	30-35	183	147	113	-34
Singapore/East	30-35	180	186	154	-31
West of Suez					
Northwest Europe/US East Coast	33-37	187	132	133	1
Mediterranean/Mediterranean	30-35	223	177	160	-17
Mediterranean/Northwest Europe	30-35	233	187	170	-17

Sources: Argus Media and OPEC Secretariat.

In the **East of Suez**, average clean tanker freight rates in February dropped by 20% from the previous month, as holidays in the East created a general slowdown in tanker movement in different classes. Rates for tankers trading on the **Singapore-to-East route** dropped by 17% m-o-m, and rates for the **Middle East-to-East route** showed a decline of 23% m-o-m to stand at WS154 points and WS113 points, respectively.

In the **West of Suez**, average spot freight rates experienced a drop of 7% m-o-m to average WS154 points in February. In the Mediterranean, lower tonnage demand, mainly for medium-range tankers in the Black Sea, drove the drop in rates, as average freight rates for clean tankers trading on both the **Mediterranean-to-NWE** declined by 10% and 9% m-o-m, to stand at WS160 and WS170 points, respectively. The drop in the West of Suez rates was stabilized by a steady market in NWE, where freight rates on the **NWE-to-USEC route** remained broadly flat compared to the previous month and stood at WS133 points in February.

Oil Trade

In February, preliminary data shows that **US** crude oil imports declined by 876 tb/d, or 12%, from the previous month to average 6.7 mb/d, and show a decline of 825 tb/d, or 11%, y-o-y. US product imports dropped by 192 tb/d, or 9%, m-o-m to average 2.0 mb/d, and y-o-y they dropped by 89 tb/d, or 4%.

Japan's crude oil imports in January increased by 255 tb/d, or 9%, m-o-m to average 3.2 mb/d. Y-o-y, crude imports declined by 171 tb/d, or 5%. Japan's refinery crude intake stayed broadly stable from the previous month. On the other hand, total product imports, not including LPG, declined in January by 65 tb/d to average 600 tb/d, reflecting a drop of 10% m-o-m and 17% y-o-y.

China's crude oil imports dropped in January, down by 279 tb/d, or 3%, from the previous month to average 10.1 mb/d. The drop in China's crude imports in January was relative, as they remain at high levels. Y-o-y, China's crude imports increased by 463 tb/d, or 5%. The drop in imports came despite China's refinery intake increasing by 160 tb/d in January. On the other hand, China's product imports increased in January for the second consecutive month.

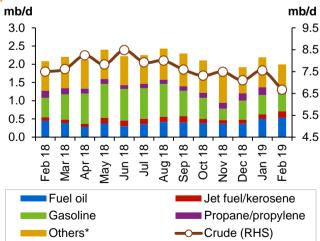
In January, **India**'s crude oil imports rose by 34 tb/d, or 1%, from the previous month to average 4.6 mb/d, while showing an annual drop of 90 tb/d, or 2%. At the same time, India's refinery intake showed an increase from one month before by 460 tb/d in January. India's product imports in January saw a decrease of 77 tb/d, or 9%, m-o-m to average 795 tb/d. Y-o-y, India's product imports declined by 15 tb/d, or 2%.

US

In February, preliminary data shows that **US** crude oil imports declined by 876 tb/d, or 12%, from the previous month to average 6.7 mb/d. Y-o-y, crude imports decreased by 825 tb/d, or 11%. The decline in crude imports was met with a significant drop in refinery crude intake.

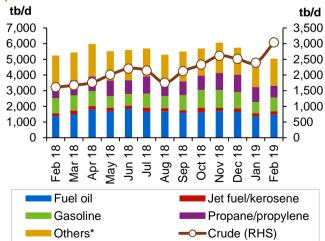
US product imports dropped by 192 tb/d, or 9%, m-o-m to average 2.0 mb/d, and y-o-y they dropped by 89 tb/d, or 4%. Year-to-date (y-t-d) both crude and product imports declined by 8% and 4%, respectively.





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.

Graph 8 - 2: US exports 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.

In February, **US crude exports** soared to a record-high of 3.04 mb/d. At the same time, **US product exports** registered a drop of 89 tb/d, or 2%, from the previous month to average 5 mb/d. On an annual comparison, exports decreased by 207 tb/d, or 4%, y-o-y.

As a result, **US** total net imports declined in February from the previous month to average 598 tb/d, significantly lower than last year's level.

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

Total crude and products	772	2,401	598	-1,803
Total products	-3,816	-2,753	-3,034	-281
Crude oil	4,588	5,154	3,632	-1,522
	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Change Feb 19/Jan 19

Sources: US EIA and OPEC Secretariat.

In December, Canada remained the **top crude supplier to the US** accounting for 52% of total US crude imports, despite lower monthly exports to the US by 136 tb/d, or 4%, compared to a month earlier. Saudi Arabia came in as second-largest supplier, holding a share of 12% of total US crude imports. Mexico was the third largest supplier to US, with a slight increase of 10 tb/d, or 2%, from the previous month.

US crude imports from OPEC Member Countries (MCs) in December dropped by 252 tb/d, or 10%, from a month earlier, mainly due to fewer imports from Iraq, Saudi Arabia and Venezuela. Crude imports from OPEC MCs accounted for 31% of total US crude imports.

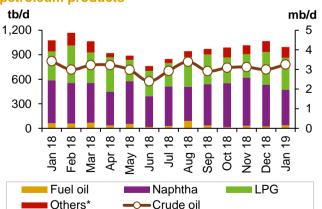
On the other hand, **product imports from OPEC MCs** rose by 69 tb/d from the previous month in December.

As to the **product supplier share**, Canada, Russia and Algeria maintained their positions as first, second and third suppliers to the US in December. Canada raised its exported volumes to the US by 17%, while imports from Russia and Algeria declined from a month earlier.

Japan

Japan's crude oil imports in January rose by 255 tb/d, or 9%, to average 3.2 mb/d. Y-o-y, crude imports declined by 171 tb/d, or 5%. Japan's refinery crude intake stayed broadly stable from the previous month.

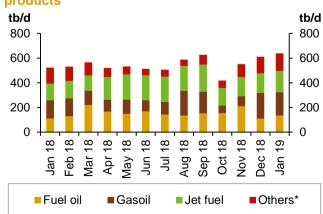
Graph 8 - 3: Japan's imports of crude and petroleum products



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 - 4: 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.

As to **Japan's crude supplier share**, Saudi Arabia, the UAE and Qatar were the top suppliers in January. Saudi Arabia remained the top crude supplier, holding a share 42% of Japan's total crude imports. The UAE was the second-largest supplier with a share of 26% of total crude imports. Qatar held third position with a share of 8%. Both Saudi Arabia and the UAE shower higher volumes imported by Japan from the previous month by 7% and 15%, respectively, while Qatar saw lower export volumes to Japan by 26 tb/d, or 9%, from the previous month.

On the other hand, **Japan's product imports**, not including LPG, declined by 65 tb/d to average 600 tb/d in January, reflecting a drop of 10% m-o-m and a decline of 17% y-o-y. Japan's product imports were the lowest since August 2018, and domestic product sales dropped by 4% y-o-y.

As to **Japan's product exports**, they increased in January by 28 tb/d, or 5%, to average 639 tb/d. Y-o-y, product exports rose by 116 tb/d, or 22%.

Accordingly, **Japan's net imports increased in January by 162 tb/d to average 3.2 mb/d**, reflecting a monthly gain of 5%, but showing a y-o-y drop of 409 tb/d.

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

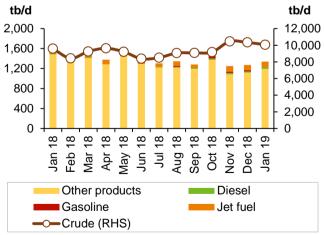
	<u>Nov 18</u>	<u>Dec 18</u>	<u>Jan 19</u>	Change Jan 19/Dec 18
Crude oil	3,120	2,995	3,250	255
Total products	179	54	-39	-93
Total crude and products	3,299	3,049	3,211	162

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

China

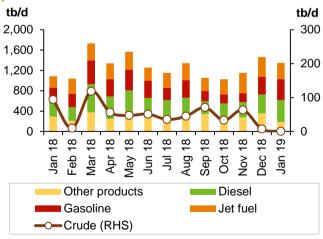
China's crude oil imports dropped in January, down by 279 tb/d, or 3%, from the previous month to average 10.1 mb/d. The drop in Chinese crude imports in January was relative as they remain at high levels. Y-o-y, China's crude imports increased by 463 tb/d, or 5%. The drop in imports came despite China's refinery intake increasing by 160 tb/d in January.

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



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

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



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

On the other hand, **China's product imports** increased in January for the second consecutive month as the country prepares for the Chinese Lunar New Year holidays. Product imports rose by 66 tb/d to average 1.3 mb/d, reflecting a gain of 5% m-o-m, while showing a drop of 14% y-o-y.

China did not **export** any **crude oil** in January. At the same time, **product exports** dropped by 110 tb/d, or 8%, m-o-m, but remain higher by 264 tb/d, or 24%, from the previous year.

As a result, China's net oil imports dropped by only 96 tb/d, or 1%, from the previous month to average 10 mb/d.

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

	<u>Nov 18</u>	<u>Dec 18</u>	<u>Jan 19</u>	Change Jan 19/Dec 18
Crude oil	10,397	10,331	10,059	-272
Total products	99	-189	-13	176
Total crude and products	10,496	10,142	10,046	-96

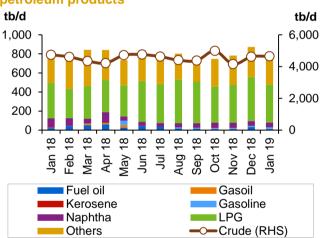
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

In January, **India's crude oil imports** rose by 34 tb/d, or 1%, from the previous month to average 4.6 mb/d, while showing an annual drop of 90 tb/d, or 2%. At the same time, India's refinery intake showed an increase from one month before by 460 tb/d in January.

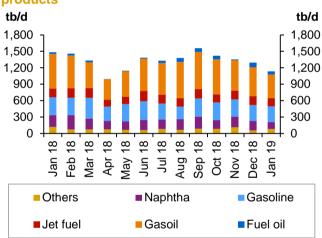
India's product imports in January saw a decrease of 77 tb/d, or 9%, m-o-m to average 795 tb/d. Y-o-y, product imports declined by 15 tb/d, or 2%. The drop seen in monthly product imports came mainly as a result of reduced imports of LPG and fuel oil.





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

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



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

India's product exports went down in January by 162 tb/d, or 13%, to average 1.1 mb/d. Y-o-y, product exports dropped by 352 tb/d, or 24%, product exports drop was mostly driven by lower exports of diesel, followed by naphtha and gasoline.

Consequently, India's net imports increased by 119 tb/d in January to average 4.3 mb/d, reflecting a gain of 3% m-o-m and 6% y-o-y.

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

				Change
	<u>Nov 18</u>	<u>Dec 18</u>	<u>Jan 19</u>	Jan 19/Dec 18
Crude oil	4,151	4,615	4,648	34
Total products	-571	-423	-337	85
Total crude and products	3,580	4,192	4,311	119

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.

Former Soviet Union (FSU)

In January, total crude oil exports from the FSU declined by 239 tb/d, or 3%, to average 7 mb/d.

In the **Transneft system**, crude oil exports through Russian pipelines saw a drop of 183 tb/d, or 4%, m-o-m to average 4.1 mb/d. In **Europe**, Total shipments from the Black Sea dropped by 123 tb/d, or 20%, from the previous month to average 486 tb/d. Total Baltic Sea exports declined by 93 tb/d m-o-m in January, as result of lower shipments from the Primorsk port terminal. Druzhba pipeline total shipments declined by 46 tb/d m-o-m to average 994 tb/d. In **Asia**, Kozmino shipments increased by 44 tb/d, or 7%, to average 658 tb/d.

Exports through the **Lukoil system** increased in the Barents Sea from the previous month, where the Varandey offshore platform showed higher exports by 38 tb/d m-o-m in January, while shipments from the Baltic Sea were unchanged from a month before and averaged just 6 tb/d.

Regarding **other routes in Asia**, Russian Far East total exports in January were stable from the previous month to average 389 tb/d in January. Central Asian total exports stood at 228 tb/d, showing a slight increase of 6 tb/d m-o-m through the Kenkiyak-Alashankou pipeline. In **Europe**, Black Sea total exports dropped by 88 tb/d, on the back of a decline seen in the Novorossiysk port from the previous month. In the Mediterranean, Baku-Tbilisi-Ceyhan (BTC) supplies showed a decline of 16 tb/d, or 2%, from the previous month to average 661 tb/d.

FSU total product exports increased by 355 tb/d, or 12%, from the previous month to average 3.2 mb/d in January. This gain in product exports was seen in all products, with the exception of jet, which reported lower volumes than in the previous month by 13 tb/d. Exports of naphtha, gasoil, VGO, fuel oil and gasoline all increased in January from one month earlier.

Table 8 - 5: Recent FSU exports of crude and petroleum products by sources, tb/d

		2018	3Q18	4Q18	Dec 18	Jan 19
Transneft system		2010	<u>54.15</u>	44.10	<u> </u>	<u>oun ro</u>
Europe	Black Sea total	544	568	550	609	486
Lurope	Novorossiysk port terminal - total	544	568	550	609	486
	of which: Russian oil	383	402	407	429	314
	Others	160	167	143	180	173
	Baltic Sea total	1,306	1,227	1,413	1,391	1,298
	Primorsk port terminal - total	758	719	803	881	787
	of which: Russian oil	758	719	803	881	787
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	549	508	610	510	510
	of which: Russian oil	375	352	446	348	325
	Others	173	156	164	162	185
	Druzhba pipeline total	997	1,006	1,009	1,040	994
	of which: Russian oil	965	973	977	1,009	962
	Others	32	32	32	32	32
Asia	Pacific ocean total	619	632	628	614	658
	Kozmino port terminal - total	619	632	628	614	658
	China (via ESPO pipeline) total	577	600	601	601	637
	China Amur	577	600	601	601	637
Total Russia's	crude exports	4,043	4,032	4,202	4,255	4,072
Lukoil system						
Europe &	Barents Sea total	135	152	121	124	162
North America		135	152	121	124	162
Europe	Baltic Sea total	7	7	7	6	6
Ешторс	Kalinigrad port terminal	7	7	7	6	6
	rtainiigiad port terriinai	,	,	,	U	U
Other routes						
Asia	Russian Far East total	371	353	395	389	389
	Aniva Bay port terminal	119	89	119	117	115
	De Kastri port terminal	252	264	276	272	274
	Central Asia total	233	247	222	222	228
_	Kenkiyak-Alashankou	233	247	222	222	228
Europe	Black Sea total	1,386	1,299	1,457	1,598	1,510
	Novorossiysk port terminal (CPC)	1,323	1,251	1,392	1,520	1,433
	Supsa port terminal	61	45	65	77	77
	Batumi port terminal	2	3	0	0	0
	Kulevi port terminal	0	0	0	0	0
	Mediterranean Sea total	693	696	707	677	661
	Baku-Tbilisi-Ceyhan (BTC)	693	696	707	677	661
Russian rail						
	Russian rail	32	30	35	32	35
	of which: Russian oil	32	30	35	32	35
	Others	0	0	0	0	0
Total FSU crud	e exports	6,901	6,816	7,145	7,303	7,064
Products	•		,		,	,
<u>i Toducis</u>	Gasoline	212	211	208	204	221
	Naphtha	517	505	487	451	644
	Jet	37	42	36	39	26
	Gasoil	1,006	972	920	1,001	1,075
	Fuel oil	930	905	885	931	956
	VGO	277	261	250	232	291
Total ESII prod						
Total FSU prod		2,980	2,896	2,786	2,858	3,213
Total FSU oil exports		9,881	9,712	9,931	10,161	10,277

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

Preliminary data for January showed that total **OECD commercial oil stocks** rose by 22.1 mb m-o-m to stand at 2,880 mb, which is 4.3 mb higher than the same time one year ago and around 19.1 mb above the latest five-year average. Compared with the seasonal norm, crude indicated a surplus of around 47 mb, while product stocks showed a deficit of 27 mb. In terms of days of forward cover, OECD commercial stocks rose by 0.5 days m-o-m in January to stand at 60.1 days, which is 0.3 days below the same period in 2018 and 0.9 days below the latest five-year average.

Preliminary data for February showed that **US total commercial oil stocks** fell by 14.3 mb m-o-m to stand at 1,244.7 mb. At this level, total US commercial stocks stood at 34.7 mb above the same period a year ago and 31.9 mb higher than the latest five-year average. Within the components, crude stocks rose by 5.7 mb, while product stocks fell by 20.0 mb m-o-m.

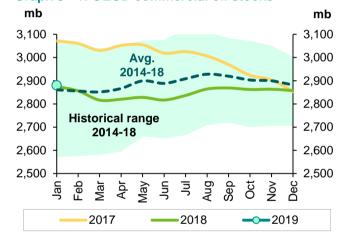
OECD

Preliminary data for January showed that **total OECD commercial oil stocks** rose by 22.1 mb m-o-m, reversing the stock draw of the previous month. At 2,880 mb, total OECD commercial oil stocks were 4.3 mb higher than the same time one year ago and 19.1 mb above the latest five-year average.

Within the components, crude stocks indicated a surplus of 46.6 mb, while product stocks were 27.4 mb below the latest five-year average. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 318 mb since January 2017.

In January 2019, OECD commercial crude and product stocks rose by 20.5 mb and 1.6 mb m-o-m, respectively.

Graph 9 - 1: OECD commercial oil stocks



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

Within the regions, total commercial oil stocks in OECD Americas and OECD Europe rose by 9.8 mb and 15.5 mb in January, respectively, while OECD Asia Pacific stocks fell by 3.3 mb m-o-m.

OECD commercial **crude stocks** rose by 20.5 mb m-o-m in January, ending the month at 1,443 mb. This was 26.5 mb above the same time a year ago and 46.6 mb higher than the latest five-year average. Compared with the previous month, all OECD regions experienced stock builds.

OECD total **product inventories** rose by 1.6 mb m-o-m in January to stand at 1,437 mb, which is 22.3 mb below the same time a year ago and 27.4 mb below the seasonal norm. Within the OECD regions, OECD Americas and OECD Europe experienced stock builds, while OECD Asia Pacific witnessed a stock draw m-o-m.

In terms of **days of forward cover**, OECD commercial stocks rose by 0.5 days m-o-m in January to stand at 60.1 days, which is 0.3 days below the same period in 2018 and 0.9 days below the latest five-year average.

Within the regions, OECD Americas had 0.5 days of forward cover higher than the historical average, to stand at 60.8 days in January. OECD Europe's stocks stood at 3.4 days below the latest five-year average to finish the month of January at 66.6 days. OECD Asia Pacific indicated a deficit of 1.6 days below the seasonal norm to stand at 47.1 days in January.

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

				Change	
	Nov 18	Dec 18	<u>Jan 19</u>	Jan 19/Dec 18	<u>Jan 18</u>
Crude oil	1,445	1,422	1,443	20.5	1,416
Products	1,418	1,435	1,437	1.6	1,459
Total	2,863	2,858	2,880	22.1	2,876
Days of forward cover	59.3	59.6	60.1	0.5	60.4

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 rose by 9.8 mb m-o-m in January for the second consecutive month. At 1,542 mb, they stood 60.5 mb above a year ago and 61.9 mb above the latest five-year average. Within the components, crude and product stocks rose by 5.8 mb and 4.0 mb m-o-m, respectively.

Commercial **crude oil stocks** in OECD Americas rose by 5.8 mb m-o-m in January to stand at 806 mb. This was 48 mb higher than the same time a year ago and 58 mb above the latest five-year average. The build in crude oil stocks came from lower US crude throughput, which decreased by 870 tb/d to average 16.9 mb/d. A slight increase in US crude imports also contributed to the build.

Total product stocks in OECD Americas rose by 4.0 mb m-o-m in January to stand at 735 mb. This was 12.7 mb above the same time one year ago and 3.5 mb above the seasonal norm. Lower consumption in the region was behind the build.

OECD Europe

OECD Europe's total commercial stocks rose by 15.5 mb m-o-m in January, ending the month at 947 mb, which is 39 mb lower than the same time a year ago and 24 mb below the latest five-year average. Crude and product stocks rose by 14.6 mb and 0.9 mb m-o-m, respectively.

OECD Europe's commercial **crude stocks** rose by 14.6 mb m-o-m in January, ending the month at 419 mb, which is 7.4 mb above a year earlier and 13.6 mb higher than the latest five-year average. The build in crude oil stocks could be attributed to ample supply in the region, despite higher refinery throughput in the Euro-16 countries, which rose by 40 tb/d m-o-m to average 10.58 mb/d.

OECD Europe's commercial **product stocks** rose by 0.9 mb m-o-m to end January at 528 mb, which is 46 mb below the same time a year ago and 38 mb below the seasonal norm. The build could be attributed to lower demand in the OECD Europe region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks fell by 3.3 mb m-o-m in January to stand at 392 mb, which is 17.5 mb lower than a year ago and 18.3 mb below the latest five-year average. Within the components, crude stocks rose by 0.1 mb, while product stocks fell by 3.3 mb, m-o-m.

OECD Asia Pacific's **crude inventories** rose slightly by 0.1 mb m-o-m to end the month of January at 217 mb, which is 28.6 mb below one year ago and 25.4 mb below the seasonal norm.

In contrast, OECD Asia Pacific's **total product inventories** fell by 3.3 mb m-o-m to end January at 174 mb, standing 11.2 mb above the same time a year ago and 7.2 mb higher than the seasonal norm.

US

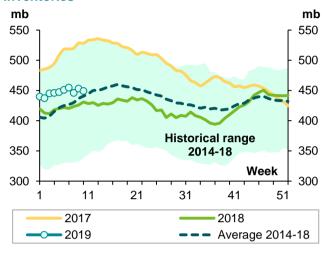
Preliminary data for February showed that **US total commercial oil stocks** fell by 14.3 mb m-o-m to stand at 1.244.7 mb, which is 34.7 mb, or 2.9%, above the same period a year ago and 31.9 mb, or 2.6%, higher than the latest five-year average. Within the components, crude stocks rose by 5.7 mb, while product stocks fell by 20.0 mb m-o-m.

US commercial crude stocks rose in February to stand at 452.9 mb, which is 29.4 mb, or 6.9%, above last year at the same time and 12.6 mb, or 2.9%, above the latest five-year average. This build came from lower crude throughput, which declined by nearly 1.0 mb/d to average 15.9 mb/d. In February, crude stocks at Cushing, Oklahoma, rose by 4.8 mb to end the month at 47.5 mb.

In contrast, total product stocks fell by 20.0 mb m-o-m in February to stand at 791.8 mb, which is 5.2 mb, or 0.7%, above the level seen at the same time in 2018, and 19.3 mb, or 2.5%, above the seasonal average. Within products, with the exception of jet fuel stocks, all other product inventories witnessed stock draws.

Gasoline stocks fell by 7.2 mb m-o-m in February to stand at 250.7 mb, which is 1.9 mb, or 0.7%, lower than levels seen at the same time last year.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

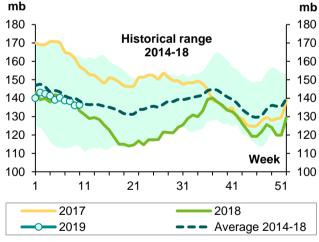
but 4.1 mb, or 1.6%, higher than the seasonal norm. This monthly drop came on the back of lower gasoline output, which decreased by around 110 tb/d to average 9.6 mb/d. Relatively lower gasoline consumption limited a further drop in gasoline stocks.

Distillate stocks fell by 3.0 mb m-o-m in February, reversing the builds of the last three months. At 136.0 mb, they stood at 2.6 mb, or 1.9%, below the same period a year ago, and 4.1 mb, or 3.0%, below the latest five-year average. The stock draw could be attributed to lower distillate output ,which decreased by around 370 tb/d to average 4.8 mb/d. Lower distillate demand limited a further drop in distillate stocks.

Residual fuel stocks also fell by 0.8 mb m-o-m, ending February at 28.0 mb, which is 4.7 mb, or 14.4%, below the same time a year ago and 9.9 mb. or 26.2%, below the latest five-year average.

In contrast, jet fuel stocks were up by 0.5 mb m-o-m to stand at 42.0 mb in February. At this level, they are 0.9 mb, or 2.2%, lower than a year ago at the same time, but 0.5 mb, or 1.2%, higher than the latest five-year average.

Graph 9 - 3: US weekly distillate inventories mb



Sources: US EIA and OPEC Secretariat.

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

				Change	
	<u>Dec 18</u>	<u>Jan 19</u>	<u>Feb 19</u>	Feb 19/Jan 19	<u>Feb 18</u>
Crude oil	441.4	447.2	452.9	5.7	423.5
Gasoline	240.0	257.9	250.7	-7.2	252.6
Distillate fuel	129.4	139.0	136.0	-3.0	138.6
Residual fuel oil	27.9	28.8	28.0	-0.8	32.8
Jet fuel	40.7	41.5	42.0	0.5	43.0
Total products	800.7	811.8	791.8	-20.0	786.5
Total	1,242.2	1,259.0	1,244.7	-14.3	1,210.1
SPR	649.1	649.1	649.1	0.0	665.5

Sources: US EIA and OPEC Secretariat.

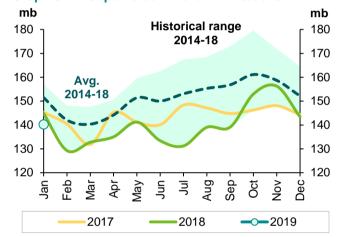
Japan

In **Japan**, **total commercial oil stocks** fell by 3.3 mb m-o-m in January for the second consecutive month. At 140.2 mb, they were 4.6 mb, or 3.2%, below one year ago and 11.3 mb, or 7.5%, below the latest five-year average. Within the components, crude stocks rose slightly, by 0.1 mb, while product stocks fell by around 3.3 mb m-o-m.

Japanese commercial **crude oil stocks** inched up in January to stand at 79.5 mb, which is 8.1 mb, or 9.2%, below the same period a year ago, and 8.6 mb, or 9.7%, below the seasonal norm. The build was driven by higher crude imports, which increased by 255 tb/d, or 9.0%. Lower refinery throughput also contributed to the build.

In contrast, Japan's **total product inventories** fell m-o-m by 3.3 mb to end January at 60.7 mb, which

Graph 9 - 4: Japan's commercial oil stocks



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

is 3.4 mb, or 6.0%, higher than the same month last year, but 2.7 mb, or 4.3%, below the seasonal norm. With the exception of gasoline, all products witnessed stock draws.

Gasoline stocks rose by 1.0 mb m-o-m to stand at 10.7 mb in January, which is 0.1 mb, or 0.5%, higher than a year ago, and 0.5 mb, or 4.2%, lower than the latest five-year average. The build was mainly driven by lower domestic sales, which declined by 13.6% from the previous month. However, lower gasoline output, which decreased by 5.6%, limited further builds in gasoline stocks.

In contrast, **distillate stocks** fell by 2.9 mb m-o-m to stand at 26.6 mb in January, which is 1.9 mb, or 7.7%, above the same time a year ago, but 1.9 mb, or 6.6%, below the seasonal average. Within the distillate components, jet fuel and kerosene fell m-o-m by 15.8% and 15.3%, respectively, while gasoil stocks rose m-o-m by 1.0% in January. Higher domestic sales combined with lower output were behind the fall in jet fuel and kerosene stocks. The build in gasoil stocks was caused by lower domestic sales.

Total residual fuel oil stocks fell by 0.2 mb m-o-m in January to stand at 14.0 mb, which is1.2 mb, or 9.8%, above the same period a year ago, and 0.1 mb, or 1.0%, higher than the latest five-year average. Within the fuel oil components, fuel oil A stocks fell by 8.8%, while fuel oil B.C rose by 2.9%. The drop in fuel oil A was driven by higher domestic sales, while the build in fuel oil B.C stocks could be attributed to lower domestic sales.

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

				Change	
	<u>Nov 18</u>	<u>Dec 18</u>	<u>Jan 19</u>	<u>Jan 19/Dec 18</u>	<u>Jan 18</u>
Crude oil	86.6	79.4	79.5	0.1	87.6
Gasoline	11.1	9.7	10.7	1.0	10.7
Naphtha	10.8	10.6	9.4	-1.2	9.2
Middle distillates	34.0	29.5	26.6	-2.9	24.7
Residual fuel oil	13.9	14.2	14.0	-0.2	12.8
Total products	69.7	64.0	60.7	-3.3	57.3
Total**	156.3	143.4	140.2	-3.3	144.8

Note: * At the end of the month.

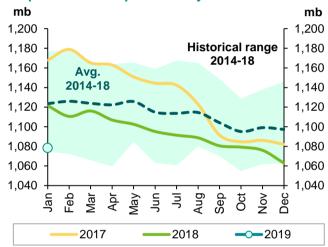
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

EU plus Norway

Preliminary data for January showed that **total European commercial oil stocks** rose by 15.5 mb m-o-m to stand at 1,078.4 mb, which is 43 mb, or 3.8% lower than the same time a year ago and 45 mb, or 4.0%, lower than the latest five-year average. Within the components, crude and product stocks rose by 14.6 mb and 0.9 mb, m-o-m, respectively.

European **crude inventories** rose in January to stand at 474.4 mb, which is 3.4 mb, or 0.7%, higher than the same period a year ago, but 0.1 mb higher than the latest five-year average. The build in crude oil stocks could be attributed to ample supply in the region, despite higher refinery throughput in EU countries, which increased by 40 tb/d to stand at 10.58 mb/d.

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



Sources: Argus, Euroilstock and OPEC Secretariat.

Total European **product stocks** rose by 0.9 mb m-o-m, ending January at 603.9 mb, which is 46.5 mb, or 7.2%, lower than the same time a year ago and 45.1 mb, or 7.0%, lower than the seasonal norm. Within products, gasoline witnessed a stock draw, while distillates and naphtha experienced stock builds. Residual fuel stocks remained unchanged.

Distillate stocks rose by 0.9 mb m-o-m in January to stand at 395.3 mb, which is 29 mb, or 6.8%, lower than the same time a year ago, and 27.6 mb, or 6.5%, below the latest five-year average.

Naphtha stocks increased by 0.9 mb m-o-m to end January at 30.8 mb, which is 2.2 mb, or 6.7%, lower than last year's level at the same time and about 1.8 mb, or 6.2%, higher than the latest five-year average.

In contrast, **gasoline stocks** fell by 0.9 mb in January to stand at 114.2 mb, which is 11 mb, or 8.8%, below last year at the same time and 8.1 mb, or 6.6%, below the seasonal norm. This drop could have been driven by higher domestic consumption in the region, combined with lower imports.

Residual fuel stocks remained unchanged to end January at 63.6 mb, which is 4.4 mb, or 6.4%, lower than the same time one year ago, and 11.2 mb, or 15%, lower than the seasonal norm.

^{**} Includes crude oil and main products only.

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

				Change	
	<u>Nov 18</u>	<u>Dec 18</u>	<u>Jan 19</u>	<u>Jan 19/Dec 18</u>	<u>Jan 18</u>
Crude oil	468.0	459.8	474.4	14.6	471.1
Gasoline	111.6	115.0	114.2	-0.9	125.2
Naphtha	30.4	29.9	30.8	0.9	33.0
Middle distillates	399.2	394.4	395.3	0.9	424.3
Fuel oils	66.9	63.6	63.6	0.0	68.0
Total products	608.0	603.0	603.9	0.9	650.5
Total	1,076.0	1,062.8	1,078.4	15.5	1,121.5

Sources: Argus, Euroilstock and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

Singapore

At the end of January, **total product stocks in Singapore** rose by 0.6 mb m-o-m for the third consecutive month to stand at 47.8 mb, which is 3.2 mb, or 7.2%, above the same period a year ago. Middle distillates and fuel oil stocks witnessed builds in January, while light distillates remained unchanged.

Middle distillate and residual fuel stocks rose by 0.4 mb and 0.2 mb m-o-m, ending January at 11.8 mb and 20.3 mb, respectively. Middle distillate stocks were 2.5 mb, or 27%, above the same period a year ago, while residual fuel stocks stood at a deficit of 2.2 mb, or 10%, compared with the same period last year.

Light distillate stocks remained unchanged m-o-m to stand at 15.7 mb in January, which is 2.9 mb, or 22.7%, above the same time a year ago.

ARA

Total product stocks in ARA rose by 2.0 mb in January for the second consecutive month to stand at 42.9 mb, which is 2.2 mb, or 4.9%, below the same time a year ago. Refined product stocks were mixed, with gasoline, gasoil and jet oil witnessing stock builds, while fuel oil saw a stock draw. Naphtha inventories remained unchanged.

Gasoline and gasoil stocks rose by 0.3 mb and 2.4 mb m-o-m in January to stand at 11.7 mb and 17.7 mb, respectively. Gasoline remained 2.8 mb above last year's level, while gasoil stocks were 4.6 mb below the same time last year. **Jet oil stocks** rose by 0.6 mb m-o-m in January, ending the month at 5.2 mb, which is 0.6 mb above a year ago at the same time.

By contrast, **fuel oil stocks** fell by 1.3 mb m-o-m in January to stand at 6.1 mb, which is 2.2 mb below last year's level at the same time.

Balance of Supply and Demand

Demand for OPEC crude in 2018 stood at 31.5 mb/d, which is 1.4 mb/d lower than the 2017 level and around 0.1 mb/d lower than in the last MOMR. In comparison, according to secondary sources, OPEC crude production averaged 31.8 mb/d and 31.6 mb/d in 1Q18 and 2Q18, respectively, which is in line with the demand for OPEC crude. OPEC crude production averaged 32.0 mb/d in 3Q18, which is around 0.1 mb/d higher than the demand for OPEC crude. In 4Q18, OPEC crude production stood at 32.1 mb/d, which is around 1.1 mb/d higher than the demand for OPEC crude.

Demand for OPEC crude in 2019 is forecast to decline by 1.1 mb/d to average 30.5 mb/d, which is around 0.1 mb/d lower than the last assessment.

Balance of supply and demand in 2018

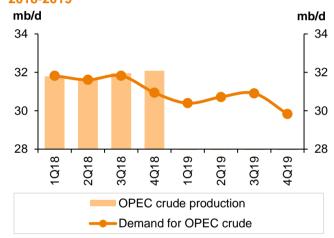
Demand for OPEC crude in 2018 was revised down by 0.1 mb/d from the previous report to stand at 31.5 mb/d, which is 1.4 mb/d lower than the 2017 level.

Compared with the last MOMR, 1Q18, 2Q18 and 3Q18 remained unchanged, while 4Q18 was revised down by 0.3 mb/d.

When compared to the same quarter in 2017, 1Q18 was 0.2 mb/d higher, while the second and third quarters were lower by 1.1 mb/d and 2.1 mb/d, respectively. The fourth quarter is estimated to have fallen by 2.4 mb/d.

In comparison, according to secondary sources, OPEC crude production averaged 31.8 mb/d and 31.6 mb/d in 1Q18 and 2Q18, respectively, which is in line with the demand for OPEC crude. In 3Q18,

Graph 10 - 1: Balance of supply and demand, 2018-2019*



Note: *2018 = Estimate and 2019 = Forecast. Source: OPEC Secretariat.

OPEC crude production averaged 32.0 mb/d, which is around 0.1 mb/d higher than the demand for OPEC crude. In 4Q18, OPEC crude production stood at 32.1 mb/d, which is around 1.1 mb/d higher than the demand for OPEC crude.

Table 10 - 1: Supply/demand balance for 2018*, mb/d

							Change
	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	2018/17
(a) World oil demand	97.29	97.80	98.02	99.35	99.68	98.72	1.43
Non-OPEC supply	59.45	61.06	61.44	62.55	63.69	62.19	2.74
OPEC NGLs and non-conventionals	4.94	4.92	4.96	4.98	5.06	4.98	0.04
(b) Total non-OPEC supply and OPEC NGLs	64.39	65.98	66.41	67.53	68.75	67.17	2.78
Difference (a-b)	32.90	31.82	31.61	31.82	30.94	31.55	-1.35
OPEC crude oil production	32.01	31.79	31.61	31.96	32.08	31.86	-0.15
Balance	-0.88	-0.03	0.00	0.14	1.14	0.32	1.20

Notes: * 2018 = Estimate.

Totals may not add up due to independent rounding.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Balance of supply and demand in 2019

Demand for OPEC crude in 2019 was revised down by 0.1 mb/d from the previous report to stand at 30.5 mb/d, which is 1.1 mb/d lower than the 2018 level.

Compared with the last MOMR, 1Q19 remained unchanged. Both 2Q19 and 3Q19 were revised down by 0.1 mb/d each. 4Q19 was revised down by 0.3 mb/d.

Compared with the same quarter in 2018, 1Q19 is forecast to fall by 1.4 mb/d, while 2Q19 and 3Q19 are expected to fall by 0.9 mb/d each. 4Q19 is projected to drop by 1.1 mb/d.

Table 10 - 2: Supply/demand balance for 2019*, mb/d

							Change
	<u>2018</u>	<u>1Q19</u>	2Q19	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>	2019/18
(a) World oil demand	98.72	99.02	99.21	100.62	100.95	99.96	1.24
Non-OPEC supply	62.19	63.59	63.44	64.64	66.01	64.43	2.24
OPEC NGLs and non-conventionals	4.98	5.04	5.05	5.08	5.11	5.07	0.09
(b) Total non-OPEC supply and OPEC NGLs	67.17	68.63	68.50	69.72	71.12	69.50	2.33
Difference (a-b)	31.55	30.39	30.72	30.91	29.83	30.46	-1.09
OPEC crude oil production	31.86						
Balance	0.32						

Notes: * 2018 = Estimate and 2019 = Forecast.

Totals may not add up due to independent rounding.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Appendix

Appendix

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

	<u>2015</u>	<u>2016</u>	2017	<u>1Q18</u>	2Q18	3Q18	4Q18	<u>2018</u>	<u>1Q19</u>	2Q19	3Q19	4Q19	2019
World demand													
OECD	46.52	46.97	47.42	47.69	47.24	48.16	48.22	47.83	47.94	47.43	48.43	48.46	48.07
Americas	24.59	24.87	25.06	25.20	25.40	25.78	25.74	25.53	25.43	25.64	26.06	26.00	25.79
Europe	13.83	13.99	14.30	13.95	14.19	14.68	14.32	14.29	13.97	14.18	14.69	14.32	14.29
Asia Pacific	8.10	8.11	8.06	8.54	7.65	7.70	8.16	8.01	8.53	7.61	7.68	8.13	7.99
DCs	30.89	31.51	32.13	32.44	32.60	32.86	32.56	32.61	32.98	33.15	33.42	33.12	33.17
FSU	4.58	4.63	4.70	4.66	4.65	4.94	5.01	4.82	4.75	4.74	5.03	5.11	4.91
Other Europe	0.67	0.70	0.72	0.73	0.69	0.73	0.82	0.74	0.75	0.71	0.75	0.84	0.76
China	11.49	11.80	12.32	12.28	12.84	12.65	13.07	12.71	12.61	13.18	12.99	13.42	13.05
(a) Total world demand	94.16	95.61	97.29	97.80	98.02	99.35	99.68	98.72	99.02	99.21	100.62	100.95	99.96
Non-OPEC supply													
OECD	25.36	24.86	25.71	27.25	27.47	28.57	29.28	28.15	29.04	29.12	30.14	31.11	29.86
Americas	21.08	20.57	21.49	22.93	23.36	24.51	25.05	23.97	24.80	25.04	25.95	26.68	25.63
Europe	3.82	3.86	3.83	3.92	3.73	3.63	3.79	3.77	3.79	3.62	3.71	3.94	3.77
Asia Pacific	0.46	0.42	0.39	0.41	0.38	0.42	0.44	0.41	0.45	0.46	0.47	0.49	0.47
DCs	13.79	13.53	13.38	13.40	13.47	13.34	13.45	13.41	13.62	13.64	13.80	14.05	13.78
FSU	13.69	13.85	14.05	14.10	14.14	14.33	14.57	14.29	14.55	14.35	14.37	14.50	14.45
Other Europe	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
China	4.40	4.09	3.97	3.94	4.00	3.94	4.02	3.97	3.99	3.94	3.93	3.95	3.95
Processing gains	2.17	2.19	2.21	2.25	2.25	2.25	2.25	2.25	2.28	2.28	2.28	2.28	2.28
Total non-OPEC supply	59.55	58.66	59.45	61.06	61.44	62.55	63.69	62.19	63.59	63.44	64.64	66.01	64.43
ODEO NOL -													
OPEC NGLs +													
OPEC NGLs + non-conventional oils	4.69	4.81	4.94	4.92	4.96	4.98	5.06	4.98	5.04	5.05	5.08	5.11	5.07
	4.69	4.81	4.94	4.92	4.96	4.98	5.06	4.98	5.04	5.05	5.08	5.11	5.07
non-conventional oils	4.69 64.24	4.81 63.47	4.94 64.39	4.92 65.98	4.96 66.41	4.98 67.53	5.06 68.75	4.98 67.17	5.04 68.63	5.05 68.50	5.08 69.72	5.11 71.12	5.07 69.50
non-conventional oils (b) Total non-OPEC supply													
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs													
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs OPEC crude oil production	64.24	63.47	64.39	65.98	66.41	67.53 31.96	68.75	67.17					
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs OPEC crude oil production (secondary sources) Total supply	64.24 31.24	63.47 32.21	64.39 32.01	65.98 31.79	31.61	67.53 31.96	68.75 32.08	67.17 31.86					
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs OPEC crude oil production (secondary sources)	64.24 31.24	63.47 32.21	64.39 32.01	65.98 31.79	31.61	67.53 31.96	68.75 32.08	67.17 31.86					
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs OPEC crude oil production (secondary sources) Total supply Balance (stock change and	31.24 95.48 1.32	63.47 32.21 95.68	64.39 32.01 96.40	65.98 31.79 97.77	66.41 31.61 98.02	67.53 31.96 99.49	32.08 100.83	67.17 31.86 99.04					
non-conventional oils (b) Total non-OPEC supply and OPEC NGLs OPEC crude oil production (secondary sources) Total supply Balance (stock change and miscellaneous)	31.24 95.48 1.32	63.47 32.21 95.68	32.01 96.40 -0.88	65.98 31.79 97.77 -0.03	31.61 98.02 0.00	67.53 31.96 99.49	32.08 100.83 1.14	31.86 99.04 0.32					
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, m	31.24 95.48 1.32	63.47 32.21 95.68 0.07	64.39 32.01 96.40	65.98 31.79 97.77	66.41 31.61 98.02	31.96 99.49 0.14	32.08 100.83	67.17 31.86 99.04					
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, m Commercial	31.24 95.48 1.32 b 2,989	63.47 32.21 95.68 0.07	64.39 32.01 96.40 -0.88 2,853	65.98 31.79 97.77 -0.03	31.61 98.02 0.00 2,817	67.53 31.96 99.49 0.14 2,869	68.75 32.08 100.83 1.14 2,858	67.17 31.86 99.04 0.32 2,858					
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, m Commercial SPR	31.24 95.48 1.32 b 2,989 1,588 4,577	32.21 95.68 0.07 3,002 1,600	32.01 96.40 -0.88 2,853 1,568	65.98 31.79 97.77 -0.03 2,816 1,575 4,391	31.61 98.02 0.00 2,817 1,570	67.53 31.96 99.49 0.14 2,869 1,565	32.08 100.83 1.14 2,858 1,546	31.86 99.04 0.32 2,858 1,546 4,403					
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, m Commercial SPR Total	31.24 95.48 1.32 b 2,989 1,588 4,577 1,017	32.21 95.68 0.07 3,002 1,600 4,602 1,102	32.01 96.40 -0.88 2,853 1,568 4,421	65.98 31.79 97.77 -0.03 2,816 1,575 4,391	31.61 98.02 0.00 2,817 1,570 4,386	31.96 99.49 0.14 2,869 1,565 4,434	32.08 100.83 1.14 2,858 1,546 4,403	31.86 99.04 0.32 2,858 1,546 4,403					
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, m Commercial SPR Total Oil-on-water	31.24 95.48 1.32 b 2,989 1,588 4,577 1,017	32.21 95.68 0.07 3,002 1,600 4,602 1,102	32.01 96.40 -0.88 2,853 1,568 4,421	65.98 31.79 97.77 -0.03 2,816 1,575 4,391	31.61 98.02 0.00 2,817 1,570 4,386	31.96 99.49 0.14 2,869 1,565 4,434	32.08 100.83 1.14 2,858 1,546 4,403	31.86 99.04 0.32 2,858 1,546 4,403					
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, machine commercial SPR Total Oil-on-water Days of forward consumption	31.24 95.48 1.32 b 2,989 1,588 4,577 1,017 in OEC	32.21 95.68 0.07 3,002 1,600 4,602 1,102 D, days 63	32.01 96.40 -0.88 2,853 1,568 4,421 1,025	31.79 97.77 -0.03 2,816 1,575 4,391 1,036	31.61 98.02 0.00 2,817 1,570 4,386 1,014	31.96 99.49 0.14 2,869 1,565 4,434 1,041	32.08 100.83 1.14 2,858 1,546 4,403 1,062	31.86 99.04 0.32 2,858 1,546 4,403 1,062					
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, m Commercial SPR Total Oil-on-water Days of forward consumption Commercial onland stocks	31.24 95.48 1.32 b 2,989 1,588 4,577 1,017 in OEC	32.21 95.68 0.07 3,002 1,600 4,602 1,102 D, <i>days</i>	32.01 96.40 -0.88 2,853 1,568 4,421 1,025	31.79 97.77 -0.03 2,816 1,575 4,391 1,036	31.61 98.02 0.00 2,817 1,570 4,386 1,014	31.96 99.49 0.14 2,869 1,565 4,434 1,041	32.08 100.83 1.14 2,858 1,546 4,403 1,062	31.86 99.04 0.32 2,858 1,546 4,403 1,062					
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, m Commercial SPR Total Oil-on-water Days of forward consumption Commercial onland stocks SPR Total	31.24 95.48 1.32 6 2,989 1,588 4,577 1,017 in OEC 64 34	32.21 95.68 0.07 3,002 1,600 4,602 1,102 D, days 63 34	32.01 96.40 -0.88 2,853 1,568 4,421 1,025 60 33	31.79 97.77 -0.03 2,816 1,575 4,391 1,036	31.61 98.02 0.00 2,817 1,570 4,386 1,014 58 33	31.96 99.49 0.14 2,869 1,565 4,434 1,041	32.08 100.83 1.14 2,858 1,546 4,403 1,062 60 32	31.86 99.04 0.32 2,858 1,546 4,403 1,062 59					
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, m Commercial SPR Total Oil-on-water Days of forward consumption Commercial onland stocks SPR	31.24 95.48 1.32 6 2,989 1,588 4,577 1,017 in OEC 64 34	32.21 95.68 0.07 3,002 1,600 4,602 1,102 D, days 63 34 97	32.01 96.40 -0.88 2,853 1,568 4,421 1,025 60 33 92	31.79 97.77 -0.03 2,816 1,575 4,391 1,036	31.61 98.02 0.00 2,817 1,570 4,386 1,014 58 33 91	31.96 99.49 0.14 2,869 1,565 4,434 1,041	32.08 100.83 1.14 2,858 1,546 4,403 1,062 60 32	31.86 99.04 0.32 2,858 1,546 4,403 1,062 59					

Note: Totals may not add up due to independent rounding. Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

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

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	<u>1Q19</u>	<u>2Q19</u>	<u>3Q19</u>	<u>4Q19</u>	<u>2019</u>
World demand													
OECD	-	-	-	-	-	0.05	-0.15	-0.03	-	-	0.05	-0.15	-0.03
Americas	-	-	-	-	-	0.05	-	0.01	-	-	0.05	-	0.01
Europe	-	-	-	-	-	-	-0.10	-0.03	-	-	-	-0.10	-0.03
Asia Pacific	-	-	-	-	-	-	-0.05	-0.01	-	-	-	-0.05	-0.01
DCs	-	-	-	-	-	-	-0.06	-0.02	-	-	-	-0.06	-0.02
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	-	-	0.05	-0.21	-0.04	-	-	0.05	-0.21	-0.04
Non-OPEC supply													
OECD	-	-	-	-	-	0.01	0.15	0.04	-0.06	0.11	0.11	0.11	0.07
Americas	-	-	-	-	-	-	0.16	0.04	-0.06	0.11	0.11	0.11	0.07
Europe	-	-	-	-	-	-	-0.01	_	-0.02	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	0.01	-	-	-	-
DCs	-	-	-	-0.01	-	-	-0.05	-0.02	0.03	0.03	-	-	0.02
FSU	-	-	-	-	-	-	-	-	0.02	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-		-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	_		_[-0.01		_	0.11	0.03	-0.01	0.14	0.11	0.11	0.09
				-0.01			0.11	0.03	-0.01	0.14	0.11	0.11	0.03
OPEC NGLs + non-conventionals	_	_			_			_		_		_	
		-	_				_	_				_	
(b) Total non-OPEC supply and OPEC NGLs	_	_	_	-0.01	_	_	0.11	0.03	-0.01	0.14	0.11	0.11	0.09
				-0.01			0.11	0.03	-0.01	0.17	0.11	0.11	0.03
OPEC crude oil production (secondary sources)		_		0.01	0.02	0.02	-0.01	0.01					
Total supply		<u> </u>	-	-0.01	0.02	0.02	0.10	0.01					
	-	-	_	-0.01	0.02	0.03	0.10	0.03					
Balance (stock change and miscellaneous)	_	_	_	-0.01	0.02	-0.02	0.31	0.07					
				0.01	0.02	0.02	0.01	0.07					
OECD closing stock levels (mb))						_	_					
Commercial	-	-	-	-	-	-	7	7					
SPR	-	-	-	-	-	-	- 5	-5					
Total	-	-	-	-	-	-	2	2					
Oil-on-water	-	-	-	-	-	-	-	-					
Days of forward consumption i	n OECD												
Commercial onland stocks	-	-		-	-	-	-	-					
SPR	-	-		-	-	-	-	-					
Total	-	-		-	-	-	-	-					
Memo items													
(a) - (b)	_	_	_	0.01	_	0.05	-0.32	-0.07	0.01	-0.14	-0.06	-0.32	-0.13

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

This table shows only where changes have occurred.

Non-OPEC supply includes Qatar.

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>4Q16</u>	<u>1Q17</u>	<u>2Q17</u>	3Q17	<u>4Q17</u>	<u>1Q18</u>	2Q18	3Q18	4Q18
Closing stock	c levels, mb												
OECD onland	l commercial	3,002	2,853	2,858	3,002	3,031	3,019	2,969	2,853	2,816	2,817	2,869	2,858
	Americas	1,598	1,498	1,532	1,598	1,606	1,596	1,571	1,498	1,468	1,471	1,541	1,532
	Europe	989	943	931	989	1,022	999	965	943	970	958	938	931
	Asia Pacific	414	412	395	414	404	424	433	412	378	388	390	395
OECD SPR		1,600	1,568	1,546	1,600	1,600	1,588	1,578	1,568	1,575	1,570	1,565	1,546
	Americas	697	665	651	697	694	681	676	665	667	662	662	651
	Europe	481	480	475	481	484	484	479	480	485	486	481	475
	Asia Pacific	421	423	420	421	422	423	423	423	422	422	422	420
OECD total		4,602	4,421	4,403	4.602	4,630	4.608	4,547	4.421	4,391	4,386	4.434	4,403
0_00 1010		.,	7,721	.,	.,	.,000	.,000	.,•	.,	.,	.,	.,	
Oil-on-water		1,102	1,025	1,062	1,102	1,043	1,052	998	1,025	1,036	1,014	1,041	1,062
Oil-on-water	ard consumptio	1,102	1,025	1,062	,		,					, -	
Oil-on-water		1,102	1,025	1,062	,		,					, -	
Oil-on-water Days of forwa		1,102 n in OEC	1,025 D, days	1,062	1,102	1,043	1,052	998	1,025	1,036	1,014	1,041	1,062
Oil-on-water Days of forwa	l commercial	1,102 n in OEC	1,025 D, days	1,062	1,102	1,043	1,052	998	1,025	1,036	1,014	1,041	1,062
Oil-on-water Days of forwa	I commercial Americas	1,102 n in OEC 63 64	1,025 D, days 60 59	1,062 59 59	1,102 64 65	1,043 64 64	63 63	998 62 62	60 59	60 58	1,014 59 57	59	1,062 60 60
Oil-on-water Days of forwa	Americas Europe	1,102 n in OEC 63 64 69	1,025 D, days 60 59 66	59 59 65	1,102 64 65 72	64 64 72	63 63 68	998 62 62 67	60 59 68	60 58 68	59 57 65	59 60 65	60 60 67
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	59 59 65 49	1,102 64 65 72 49	64 64 72 53	63 63 68 54	998 62 62 67 52	60 59 68 48	1,036 60 58 68 49	59 57 65 50	59 60 65 47	60 60 67 46
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	1,062 59 59 65 49	1,102 64 65 72 49 34	1,043 64 64 72 53 34	1,052 63 63 68 54 33	998 62 62 67 52 33	1,025 60 59 68 48 33	1,036 60 58 68 49 33	1,014 59 57 65 50 33	1,041 59 60 65 47 32	60 60 67 46 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	1,062 59 59 65 49 33 26	1,102 64 65 72 49 34 28	1,043 64 64 72 53 34 28	1,052 63 63 68 54 33 27	998 62 62 67 52 33 27	1,025 60 59 68 48 33 26	1,036 60 58 68 49 33 26	1,014 59 57 65 50 33 26	1,041 59 60 65 47 32 26	60 60 67 46 32 26

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

						•	Change						Change
	2015	2016	2017	3Q18	4Q18	2018		1Q19	2Q19	3Q19	4Q19	2019	19/18
US	14.1	13.6	14.4	17.2	17.6	16.6	2.2	17.7	18.0	18.6	19.4	18.5	1.8
Canada	4.4	4.5	4.9	5.3	5.4	5.2	0.4	5.2	5.1	5.4	5.3	5.2	0.0
Mexico	2.6	2.5	2.2	2.1	2.0	2.1	-0.2	1.9	1.9	1.9	1.9	1.9	-0.1
OECD Americas	21.1	20.6	21.5	24.5	25.1	24.0	2.5	24.8	25.0	26.0	26.7	25.6	1.7
Norway	1.9	2.0	2.0	1.8	1.9	1.8	-0.1	1.8	1.7	1.8	1.9	1.8	0.0
UK	1.0	1.0	1.0	1.0	1.1	1.1	0.0	1.1	1.1	1.0	1.2	1.1	0.1
Denmark	0.2	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	0.1	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	3.8	3.9	3.8	3.6	3.8	3.8	-0.1	3.8	3.6	3.7	3.9	3.8	0.0
Australia	0.4	0.3	0.3	0.3	0.4	0.3	0.0	0.4	0.4	0.4	0.4	0.4	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	0.5	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.5	0.5	0.5	0.5	0.1
Total OECD	25.4	24.9	25.7	28.6	29.3	28.1	2.4	29.0	29.1	30.1	31.1	29.9	1.7
Brunei India	0.1	0.1	0.1 0.9	0.1 0.8	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Indonesia	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	0.3	0.3	0.3	0.3	0.3	0.3	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	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	3.7	3.7	3.6	3.5	3.5	3.5	-0.1	3.5	3.4	3.5	3.5	3.5	-0.1
Argentina	0.7	0.7	0.6	0.7	0.7	0.7	0.0	0.7	0.6	0.6	0.6	0.6	0.0
Brazil	3.1	3.1	3.3	3.2	3.3	3.3	0.0	3.5	3.5	3.6	3.9	3.6	0.4
Colombia	1.0	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	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	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	5.2	5.1	5.2	5.1	5.2	5.2	0.0	5.4	5.4	5.5	5.7	5.5	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	2.0	2.0	1.9	2.0	2.0	2.0	0.1	2.0	2.0	2.0	2.0	2.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen Middle East	0.0 3.3	0.0 3.3	0.0 3.1	0.0 3.2	0.0 3.2	0.0 3.2	0.0 0.1	0.0 3.2	0.0 3.2	0.0 3.2	0.0 3.2	0.0 3.2	0.0 0.0
	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
Cameroon 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	0.1	0.7	0.1	0.7	0.7	0.7	0.0	0.7	0.6	0.7	0.1	0.1	0.0
Ghana	0.1	0.1	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	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.3	0.2	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa	1.6	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.6	1.6	1.6	1.6	0.1
Total DCs	13.8	13.5	13.4	13.3	13.4	13.4	0.0	13.6	13.6	13.8	14.0	13.8	0.4
FSU	13.7	13.9	14.1	14.3	14.6	14.3	0.2	14.6	14.4	14.4	14.5	14.4	0.2
Russia	10.8	11.1	11.2	11.4	11.6	11.3	0.2	11.6	11.4	11.5	11.5	11.5	0.1
Kazakhstan	1.6	1.6	1.7	1.8	1.8	1.8	0.1	1.9	1.9	1.8	1.9	1.9	0.0
Azerbaijan	0.9	8.0	0.8	0.8	0.8	0.8	0.0	0.8	8.0	0.8	0.8	0.8	0.0
FSU others	0.4	0.4	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	4.4	4.1	4.0	3.9	4.0	4.0	0.0	4.0	3.9	3.9	4.0	4.0	0.0
Non-OPEC production	57.4	56.5	57.2	60.3	61.4	59.9	2.7	61.3	61.2	62.4	63.7	62.2	2.2
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.3	2.3	2.3	2.3	2.3	0.0
Non-OPEC supply	59.5	58.7	59.5	62.5	63.7	62.2	2.7	63.6	63.4	64.6	66.0	64.4	2.2
OPEC NGL	4.6	4.7	4.8	4.8	4.9	4.8	0.0	4.9	4.9	4.9	5.0	4.9	0.1
OPEC Non-conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0		0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF)	4.7	4.8	4.9	5.0	5.1	5.0	0.0	5.0	5.1	5.1	5.1	5.1	0.1
Non-OPEC &				0.0	U. 1	5.5	0.0	5.0	<u> </u>	U 11	VII	U. 1	Ų.i
OPEC (NGL+NCF)	64.2	63.5	64.4	67.5	68.7	67.2	2.8	68.6	68.5	69.7	71.1	69.5	2.3
,													

Note: OECD Americas includes Chile. Middle East includes Qatar.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

				Change							Change
	<u>2016</u>	<u>2017</u>	<u>2018</u>	2018/17	<u>1Q18</u>	2Q18	3Q18	4Q18	<u>Jan 19</u>	Feb 19	Feb/Jan
US	509	875	1,031	157	964	1,037	1,051	1,073	1,065	1,048	-17
Canada	131	207	191	-15	273	106	208	177	175	230	55
Mexico	26	17	27	9	19	25	30	32	25	24	-1
OECD Americas	665	1,099	1,249	150	1,257	1,168	1,289	1,282	1,265	1,302	37
Norway	17	15	15	0	15	14	14	17	13	16	3
UK	9	9	7	-2	6	6	8	8	11	14	3
OECD Europe	96	92	85	-7	86	82	84	90	86	94	8
OECD Asia Pacific	7	15	21	5	16	21	22	23	24	25	1
Total OECD	768	1,206	1,355	149	1,359	1,271	1,395	1,396	1,375	1,421	46
Other Asia*	204	208	222	14	221	216	228	224	228	236	8
Latin America	111	112	123	11	123	120	126	123	132	123	-9
Middle East	75	68	65	-4	66	67	64	62	66	66	0
Africa	43	38	45	7	33	45	50	50	51	55	4
Total DCs	432	426	454	28	442	447	468	460	477	480	3
Non-OPEC rig count	1,200	1,632	1,809	177	1,801	1,718	1,863	1,855	1,852	1,901	49
Algeria	54	54	50	-4	53	52	48	47	44	44	0
Angola	6	3	4	1	3	3	4	5	5	5	0
Congo	2	2	3	1	3	3	3	4	3	4	1
Ecuador	4	6	8	2	6	6	9	11	11	8	-3
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	1	0
Gabon	1	1	3	3	3	4	3	4	7	7	0
lran**	143	156	157	2	157	157	157	157	157	157	0
Iraq	43	49	59	10	58	60	58	61	62	67	5
Kuwait	44	54	51	-3	54	54	50	45	46	44	-2
Libya	1	1	5	4	1	1	7	9	9	9	0
Nigeria	6	9	13	5	13	13	15	12	15	14	-1
Saudi Arabia	125	118	117	-1	114	112	119	123	123	116	-7
UAE	51	52	55	4	53	54	56	57	59	58	-1
Venezuela	58	49	32	-17	46	30	27	26	27	27	0
OPEC rig count	537	553	558	5	564	550	557	563	569	561	-8
World rig count***	1,737	2,185	2,368	183	2,365	2,268	2,419	2,418	2,421	2,462	41
of which:											
Oil	1,313	1,678	1,886	209	1,864	1,803	1,945	1,934	1,929	1,980	51
Gas	370	466	448	-17	468	432	440	453	466	457	-9
Others	54	42	33	-9	33	34	34	31	26	25	-1

Note: * Other Asia includes Indonesia.

Totals may not add up due to independent rounding.

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

^{**} Estimated data when Baker Hughes Incorporated did not reported the data.

^{***} 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

A

up 5.09 in February February 2019

January 2019

Year-to-date 61.16

February OPEC crude production

mb/d, according to secondary sources

63.83

58.74



down 0.22 in February

February 2019

30.55

January 2018

30.77

Economic growth rate									
	World	OECD	US	Japan	Euro-zone	China	India		
2018	3.6	2.3	2.9	0.7	1.8	6.6	7.3		
2019	3.3	1.8	2.5	0.7	1.3	6.1	7.1		

Supply and demand mb/d										
2018		18/17	2019		19/18					
World demand	98.7	1.4	World demand	100.0	1.2					
Non-OPEC supply	62.2	2.7	Non-OPEC supply	64.4	2.2					
OPEC NGLs	5.0	0.0	OPEC NGLs	5.1	0.1					
Difference	31.5	-1.4	Difference	30.5	-1.1					

OECD commercial stocks								
	Nov 18	Dec 18	Jan 19	Jan 19/Dec 18	Jan 18			
Crude oil	1,445	1,422	1,443	20.5	1,416			
Products	1,418	1,435	1,437	1.6	1,459			
Total	2,863	2,858	2,880	22.1	2,876			
Days of forward cover	59.3	59.6	60.1	0.5	60.4			