

# OPEC

## Monthly Oil Market Report

14 March 2018

***Feature article:***  
***Assessment of the global economy***

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# Oil Market Highlights

## Crude Oil Price Movements

In February, the ORB dropped 5% m-o-m, lower for the first time in six months, to average \$63.48/b, but remains above levels seen in more than two years. Year-to-date, the ORB was 23.4%, or \$12.37, higher than seen in the same period a year earlier, at \$65.25/b. Similarly, Dated Brent dropped by \$3.97 m-o-m to average \$65.16/b and spot WTI declined by \$1.55 to average \$62.15/b. Oil futures also ended lower, but by varying amounts. The sell-off in crude oil futures started early in the month with oil prices pulled lower, as major US stock markets declined sharply and the dollar firmed. The ICE Brent was \$3.35, or 4.8%, lower, at \$65.73/b, while NYMEX WTI slipped \$1.48, or 2.3%, to \$62.18/b compared to a month earlier. Year-to-date, ICE Brent was \$11.77 higher than the same period a year earlier at \$67.48/b, while NYMEX WTI rose by \$9.93 to \$62.96/b. The Brent-WTI spread narrowed significantly to around \$3/b by the end of the month, on steep declines in inventories in Cushing, Oklahoma. Hedge funds reduced net long positions in ICE Brent and NYMEX WTI to 1.01 million contracts. Brent and Dubai backwardation eased, while that of WTI strengthened. The sweet-sour differentials narrowed globally, except in Europe.

## World Economy

The global GDP growth forecast remains at 3.8% for both 2017 and 2018. US growth is expected to stand unchanged at 2.7% in 2018, after growth of 2.3% in 2017. Growth in the Euro-zone is expected to remain at 2.2% in 2018, following growth of 2.5% in 2017. Japan's 2018 growth forecast is revised down to 1.5%, after actual growth of 1.7% in 2017. India's GDP growth forecast remains unchanged at 7.2% in 2018, higher than actual growth for 2017 at 6.4%. China's GDP growth is projected to remain at 6.5% in 2018, after reported growth of 6.9% in 2017.

## World Oil Demand

In 2017, world oil demand growth is revised higher by 23 tb/d from February's assessment to reflect the latest data. Total world oil demand growth for 2017 is now pegged at 1.62 mb/d, averaging 97.04 mb/d. For 2018, oil demand growth is now forecasted at around 1.60 mb/d, marginally higher than February's projections, with total oil demand at 98.63 mb/d. Oil demand growth in the OECD region was revised higher in 1Q18, now showing growth of 0.32 mb/d for 2018. In the non-OECD region, growth projections were also adjusted higher by 20 tb/d in 1Q18, now showing growth of 1.27 mb/d in 2018.

## World Oil Supply

For 2017, non-OPEC supply is revised up slightly by 0.01 mb/d from February's assessment, mainly due to higher-than-expected output growth in 4Q17, representing growth of 0.87 mb/d y-o-y. For 2018, non-OPEC supply is revised up by 0.28 mb/d, representing y-o-y growth of 1.66 mb/d, with total non-OPEC supply reading 59.53 mb/d. The upward revision is mainly due to higher-than-expected output in 1Q18 by 360 tb/d in OECD (Americas and Europe), FSU and China. OPEC NGLs are now expected to grow by 0.18 mb/d in 2018, following 0.17 mb/d a year earlier. According to secondary sources, OPEC crude production decreased by 77 tb/d in February 2018, averaging 32.19 mb/d.

## Product Markets and Refining Operations

Product markets in all main trading hubs showed positive results last month, mainly driven by improved fundamentals. In the US, and despite losses seen through most of the month, refinery margins showed outstanding seasonal y-o-y growth on strong support from gasoline and diesel stocks, which fell by 0.8 mb/d and 0.6 mb/d, respectively, in the last week of the month, due to refinery maintenance. In Europe, product markets strengthened, supported by higher gasoline demand and improved fuel oil export opportunities. Similarly, product markets in Asia recorded gains all across the barrel, except in the diesel complex. Support came from higher product demand, in line with seasonal trends, and higher heating requirements due to colder weather in northeast Asia, amid firm jet fuel demand.

## Tanker Market

Tanker market spot freight rates continued to drop as seen in the previous months. Average dirty tanker spot freight rates declined further by 6% in February. Lower rates were seen in all reported dirty classes as limited tonnage demand and lengthy tonnage lists prevented rates from rising in several regions, despite some weather and ports delays. The clean tanker market was mostly quiet in February and spot freight rates were generally weak, due to holidays and insufficient activity despite cold weather and occasional delays.

### Stock Movements

Preliminary data for January showed that total OECD commercial stocks rose by 13.7 mb m-o-m to stand at 2,865 mb, which is 50 mb above the latest five-year average. Crude stocks indicated a surplus of 74 mb, while product stocks witnessed a deficit of 24 mb to the seasonal norm. In terms of days of forward cover, OECD commercial stocks fell slightly in January to stand at 60 days, which is 0.6 days lower than the last five-year average.

### Balance of Supply and Demand

In 2017, demand for OPEC crude is estimated to remain unchanged to stand at 32.9 mb/d, 0.6 mb/d higher than the 2016 level. In 2018, demand for OPEC crude is forecast at 32.6 mb/d, down by 0.2 mb/d from the previous assessment and 0.2 m/d lower than a year earlier.

## Feature Article

### Assessment of the global economy

**Global economic growth** has recovered significantly over the past year and is now forecast at 3.8% in both 2017 and 2018 (**Graph 1**). Positively, all major economies saw higher growth in 2017, with the exception of India, due to major economic structural reforms, and the UK, which was impacted by Brexit. This dynamic has been supported to a large extent by Central Banks' unprecedented monetary stimulus over the past years in major advanced economies. In addition, this dynamic is now buoyed by considerable fiscal stimulus measures in the US. However, growth limitations have become apparent with major Central Banks normalizing monetary policies, some economies reaching, or growing above, growth potential and FY 2017 GDP growth in some countries such as Japan, the UK, India and Russia, being lower than anticipated. Moreover, in addition to these limitations, the most recent US announcement to impose tariffs on steel and aluminum, as well as the potential consequences of the US fiscal stimulus on the nation's debt may dampen the growth momentum.

In the **OECD**, the US continues to show a solid underlying growth trend, supported by ongoing improvements in the labour market, transferring into healthy consumer and business sentiment. This, together with the existing fiscal stimulus is expected to push growth to 2.7% in 2018, following growth of 2.3% in 2017. However, political developments and decisions on monetary policy could dampen growth going forward. In the Euro-zone, GDP growth has also improved considerably, supported by the ECB's ongoing accommodative monetary policy and declining unemployment levels. GDP is forecast to grow at 2.2% in 2018, following 2.5% for 2017, although numerous political uncertainties in combination with ongoing high sovereign debt-levels and some weakness in the banking system remain. Japan is expected to see slightly lower growth of 1.5% in 2018, compared to 1.7% in 2017. Structural reforms and ongoing monetary stimulus, together with fiscal support all provide the basis for ongoing growth momentum in Japan, yet the upside is considered to be limited.

In the **emerging markets**, growth continues at a healthy level. China is forecast to grow at 6.5% in 2018, after reported strong growth of 6.9% in 2017. In light of the ongoing high provincial and private sector debt levels, China's government has confirmed it will continue to monitor and balance financial instabilities. India is forecast to recover to growth of 7.2% in 2018, after it reported only 6.4% in 2017, which was considerably impacted by the introduction of the Goods and Services Tax (GST) and demonetization. Meanwhile, Brazil and Russia are forecast to continue to recover with 2018 growth of 1.9% and 1.8% respectively, after 1.0% and 1.6% in 2017. Uncertainties remain, however, ranging from domestic political challenges in Brazil to external political challenges and commodity price development in Russia.

The gradual normalization of **monetary policies** in the major OECD economies is likely to continue. In fact, considering the US fiscal stimulus, the Fed has signalled that it may accelerate its monetary policy normalization. This could negatively impact emerging economies, leading to capital outflows, while foreign investments have been an important source of funding for economic activity, supporting oil demand in the past years. In addition this may become more accentuated as the US administration has incentivized the repatriation of foreign holdings of around \$2.6 trillion in its latest tax bill. The ECB may also normalize its monetary policies faster than anticipated as growth has accelerated considerably. However, inflation remains low and wages have not improved significantly.

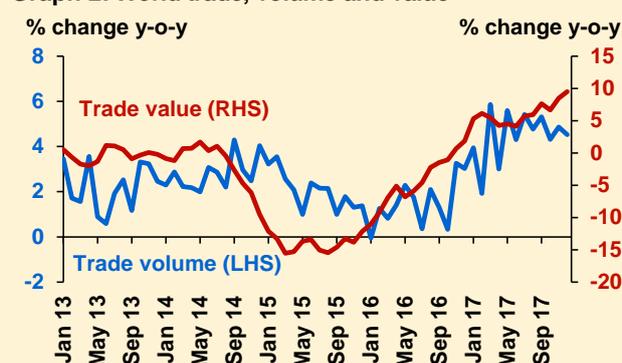
Low interest rates have been an important driver for increased investments in the oil industry, particularly in the development of tight oil and other unconventional resources. However, this may change if interest rates rise quicker. Given the improvements in economic activity across the world, oil demand will be well supported in 2018. However the most recent trade-related developments may provide challenges to the growth momentum as global trade has been an important factor contributing to the world economy (**Graph 2**). Nevertheless, the current healthy momentum in the global economy, together with the efforts undertaken by the OPEC and non-OPEC oil producing countries under the Declaration of Cooperation, is supporting the rebalancing of the oil market fundamentals.

**Graph 1: Global economic growth**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 2: World trade, volume and value**



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



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## Crude Oil Price Movements

The OPEC Reference Basket (ORB) ended lower in February for the first time in six months, tumbling by 5% m-o-m to \$63.48/b, but remained higher than seen in more than two years. Prices started to soften as US production rose to near record levels and demand looked to be waning ahead of the start of the refinery maintenance season. Oil prices were also pressured as the dollar surged following the publication of strong US jobs numbers, although the Declaration of Cooperation and rising global demand kept much of the early year oil rally in place. Compared to the previous year, the year-to-date (y-t-d) ORB value was 23.4%, or \$12.37 higher, at \$65.25/b.

Crude oil futures ended lower, but by varying amounts. The sell-off in crude oil futures started early in the month, pulled lower by sharp moves in equities and currencies, as major US stock markets declined sharply and the dollar firmed. ICE Brent averaged February \$3.35, or 4.8%, lower at \$65.73/b, while NYMEX WTI slipped \$1.48, or 2.3%, to average \$62.18/b. Y-t-d, ICE Brent is \$11.77, or 21.1%, higher at \$67.48/b, while NYMEX WTI rose by \$9.93, or 18.7%, to \$62.96/b. The spread between ICE Brent and NYMEX WTI narrowed significantly on ongoing steep declines in inventories in Cushing, Oklahoma, threatening the viability of US crude exports to Europe and Asia. The spread narrowed by as much as 50% compared to the levels seen in January, dropping by \$1.87 m-o-m to average 3.55/b in February.

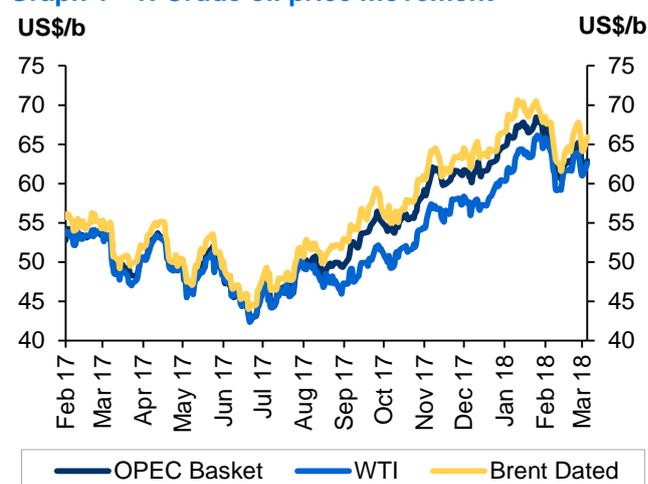
While money managers remained overwhelmingly bullish overall in oil, by the week ending 27 February they cut combined futures and options long positions in NYMEX WTI by 30,150 contracts from the end of January level, to 465,825 lots. Similarly, speculators cut net long positions in ICE Brent by 33,826 contracts to 544,372 lots, off its all-time high record. The long-to-short ratio in ICE Brent dropped from 14.6:1 to 14.3:1, while that of NYMEX WTI increased to 16:8 from 13.7:1. The total open interest volume decreased almost 5% at 6.16 million contracts.

Although the market structure of all three major oil benchmarks – Brent, Dubai and WTI – remained in backwardation, lower seasonal crude demand in Asia and Europe along with abundant supplies lessened the backwardation in the Brent and Dubai markets. However, the WTI backwardation strengthened further on the back of ongoing draws in the crude oil stocks in Cushing, Oklahoma. The sweet/sour differentials narrowed globally, except in Europe where the spread widened four-fold as Russian Urals came under strong pressure not seen in more than three years.

## OPEC Reference Basket

The ORB ended lower for the first time in six months, tumbling 5% m-o-m, but remained well above \$60/b, a high level not seen in more than two years. Prices started to soften as US production rose to near-record levels and demand looked to be waning ahead of the start of the refinery maintenance season. The *Energy Information Administration's (EIA)* weekly data showed a 300 tb/d hike in US crude production, taking weekly output past the 10 mb/d mark in the first week of February. This followed the agency's monthly short-term Energy Outlook report forecasting the biggest-ever rise in US crude output, from 9.3 mb/d in 2017 to 10.6 mb/d this year. Oil prices were also pressured as the dollar surged following strong US jobs numbers, although the Declaration of Cooperation and rising global demand kept much of the early-year oil rally in place. Refinery maintenance reduced crude oil demand, particularly in Europe and Asia.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

## Crude Oil Price Movements

M-o-m, the ORB value slipped \$3.37, or 5%, to settle at \$63.48/b on a monthly average. Y-t-d, the ORB value was 23.4%, or \$12.37 higher, at \$65.25/b.

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

	Jan 18	Feb 18	Change		Year-to-date	
			Feb/Jan	%	2017	2018
<b>Basket</b>	<b>66.85</b>	<b>63.48</b>	<b>-3.37</b>	<b>-5.0</b>	<b>52.87</b>	<b>65.25</b>
Arab Light	67.42	64.03	-3.39	-5.0	52.94	65.81
Basrah Light	66.11	62.31	-3.80	-5.7	52.15	64.30
Bonny Light	69.92	66.02	-3.90	-5.6	55.11	68.06
Es Sider	68.23	64.36	-3.87	-5.7	53.27	66.38
Girassol	69.77	66.09	-3.68	-5.3	54.80	68.01
Iran Heavy	65.85	62.27	-3.58	-5.4	52.51	64.14
Kuwait Export	65.74	62.14	-3.60	-5.5	52.15	64.03
Qatar Marine	66.36	63.14	-3.22	-4.9	53.78	64.82
Merey	59.14	57.68	-1.46	-2.5	46.92	58.45
Murban	68.81	65.88	-2.93	-4.3	56.14	67.41
Oriente	63.53	60.28	-3.25	-5.1	49.35	61.98
Rabi Light	68.16	64.19	-3.97	-5.8	53.58	66.26
Sahara Blend	69.93	66.01	-3.92	-5.6	54.95	68.06
Zafiro	69.23	65.19	-4.04	-5.8	54.26	67.31
<b>Other Crudes</b>						
Dated Brent	69.13	65.16	-3.97	-5.7	54.82	67.23
Dubai	66.15	62.69	-3.46	-5.2	54.05	64.50
Isthmus	67.57	64.83	-2.74	-4.1	55.52	66.26
LLS	67.80	64.43	-3.37	-5.0	54.58	66.20
Mars	64.10	60.93	-3.17	-4.9	50.59	62.59
Minas	60.91	58.15	-2.76	-4.5	50.90	59.60
Urals	68.69	63.01	-5.68	-8.3	53.54	65.99
WTI	63.70	62.15	-1.55	-2.4	52.94	62.96
<b>Differentials</b>						
Brent/WTI	5.43	3.01	-2.42	-	1.88	4.27
Brent/LLS	1.33	0.73	-0.60	-	0.23	1.04
Brent/Dubai	2.98	2.47	-0.51	-	0.77	2.74

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

The **ORB component values** deteriorated along with relevant crude oil benchmarks, particularly the Brent and Dubai-related crudes. Crude oil physical benchmarks Dated Brent, Dubai and WTI spot prices decreased by \$3.97, \$3.46 and \$1.55, respectively. Despite improvements in the pricing differentials due to healthy demand for these grades in all regions, the sizable decrease in the related benchmark – Dated Brent – which dropped by 5.7%, caused the crude price differentials of the light sweet crude Basket components from **West and North Africa** to edge lower. Saharan Blend, Es Sider, Girassol, Bonny Light, Equatorial Guinea's Zafiro and Gabon's Rabi values decreased on average by \$3.90, or 5.6%, to \$65.31/b.

**Latin American ORB components** Venezuelan Merey and Ecuador's Oriente were down to \$57.68/b and \$60.28/b, respectively, losing \$1.46, or 2.5%, and \$3.25, or 5.1%. Nevertheless, despite more refineries being offline due to maintenance, tight sour crude supplies in the USGC continue to support these grades, amid considerably lower imports of heavy sour crudes from OPEC Member Countries as well as firm regional demand for a cheaper alternative to USGC output and demand for a heavier feedstock to blend with coastal light sweet crudes.

Despite tighter supplies, poor demand negatively affected the value of **multiple-region destination grades** Arab Light, Basrah Light, Iran Heavy and Kuwait Export. On average, these grades' values decreased by \$3.59, or 5.4%, for the month, to \$62.69/b.

Similarly, **Middle Eastern spot components**, Murban and Qatar Marine, saw their values deteriorating by \$2.93, or 4.3%, to \$65.88/b and \$3.22, or 4.9%, to \$63.14/b, respectively. The Middle East crude market fell to multi-month lows, in response to a drop in demand from Asia during the peak refinery maintenance season in the second quarter. Sellers were also adding to the pressure on prices by trying to offload as much supplies as possible before the start of the Chinese Lunar New Year holidays. A potential rise in arbitrage supplies also weighed on the Middle East crude market.

On 13 March, the ORB stood at \$62.15/b, \$1.33 below the February average.

## The oil futures market

**Crude oil futures** ended February lower, but by varying magnitudes. The sell-off in crude oil futures started early in the month, pulled lower by sharp moves in equities and currencies, as major US stock market averages declined sharply and the dollar firmed against a basket of major currencies. The US benchmark S&P 500 then slumped by 4.1% and the Dow Jones dropped by 4.6%, suffering their biggest percentage losses since August 2011. Crude oil futures continued to deteriorate, as sharp swings in equities rattled global financial markets, maintaining a risk-off rally that has placed selling pressure on oil prices. Oil prices fell further to a one-month low after US data showed a build in inventories and record-high crude production, raising worries of more selling that could expose speculators with big bets on upward momentum in crude prices. US crude production hit 10.25 mb/d as reported in the week to 7 February. The oil complex continued its February-long slide, with NYMEX March WTI settling below \$60/b for the first time since December, after Baker Hughes rig count data confirmed analysts suspicions of US crude output resilience and after the IEA forecast that supply could outstrip demand this year.

Nevertheless, the crude market remains in positive territory for the year, even after Wall Street equities posted their largest one-day fall since late 2011. Crude markets began to steady late in the month as global equities began to recoup some losses from their biggest one-week decline in two years and the US dollar started to weaken. Demand remains a supportive factor in the oil market. The global economy is growing more rapidly, despite the volatility of the stock market. China's net crude imports rose by nearly 1 mb/d in January, along with strong conformity within the Declaration of Cooperation, which also helped support prices.

Oil prices rebounded, shaking off earlier weakness coming from monthly inflation data, as US crude stocks rose less than expected. Markets also benefited from more weakness in the dollar, which dropped by 0.7% after the release of stronger-than-expected US consumer inflation figures. Just before the month came to close, oil prices rose to their highest in more than two weeks, as the oil complex continued to make a V-shaped recovery, buoyed by newly found stability in equity markets. Oil was also supported by reduced output in Libya and upbeat comments from Saudi Arabia that it would continue to curb exports in line with the OPEC-led effort to adjust global supplies.

**ICE Brent** averaged February \$3.35, or 4.8% lower, at \$65.73/b, while **NYMEX WTI** slipped \$1.48, or 2.3%, to average \$62.18/b. Y-t-d, ICE Brent is \$11.77, or 21.1%, higher at \$67.48/b, while NYMEX WTI rose by \$9.93, or 18.7%, to \$62.96/b. In line with the deterioration in the crude oil futures, **DME Oman** also fell \$3.46/b or 5.2% over the month to settle at \$62.95/b, on a monthly average bases. For the year, DME Oman was up \$10.39/b or 19.1% at \$64.76/b.

On 13 March, ICE Brent stood at \$64.64/b and NYMEX WTI at \$60.71/b.

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

	Jan 18	Feb 18	Change		Year-to-date	
			Feb/Jan	%	2017	2018
<b>NYMEX WTI</b>	63.66	62.18	-1.48	-2.3	53.02	62.96
<b>ICE Brent</b>	69.08	65.73	-3.35	-4.8	55.72	67.48
<b>DME Oman</b>	66.41	62.95	-3.46	-5.2	54.35	64.76
<b>Transatlantic spread (ICE Brent-NYMEX WTI)</b>	<b>5.42</b>	<b>3.55</b>	<b>-1.87</b>	<b>-34.6</b>	<b>2.69</b>	<b>4.53</b>

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

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

## Crude Oil Price Movements

By the week to 20 February, when oil prices started to rebound, **hedge funds and money managers** had cut their bullish bets on higher prices for four consecutive weeks as prices deteriorated. The speculator group cuts its combined futures and options positions in **NYMEX WTI** by 51,605 contracts or 10.4%, from the end-January level, to 444,370 lots, down from the highest-ever record level, the *US Commodity Futures Trading Commission (CFTC)* said. But gross short positions also continued to drop to the lowest since July 2014 at 29,641 contracts, while gross long positions dropped, off the highest level, to 474,011 lots, data showed.

Similarly, hedge funds and money managers cut their combined futures and options net length position **ICE Brent** by 54,903 lots, or 10%, to 523,295 contracts, off the all-time high record, according to the *Intercontinental Exchange*. Most of the drop was in the gross long positions.

During the last week of the month, hedge funds and money managers upped their bullish wagers on US crude oil for the first time in four weeks as prices rallied on a weaker dollar and expectations for continued cooperation from top producers to adjust output. Money managers raised their **combined futures and options position** in NYMEX WTI and ICE Brent by 21,455 and 21,077 lots to 465,825 and 544,372 contracts, respectively, in the week to 27 February.

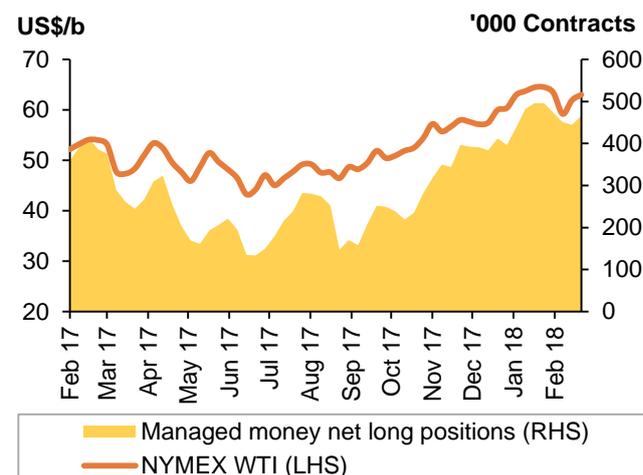
The **long-to-short ratio** in ICE Brent speculative positions dropped from 14.6:1 to 14.3:1, while that of NYMEX WTI increased to 16:8 from 13.7:1 in the week to 27 February.

**Total futures and options open interest volume** in the two exchanges decreased by 308,334 lots or 4.8% to 6.16 million contracts.

The **daily average traded volume** for NYMEX WTI contracts increased further by 52,306 lots, or 3.9%, to 1,409,632 contracts, while that of ICE Brent was 83,404 contracts higher, up by 9.6% at 949,731 lots.

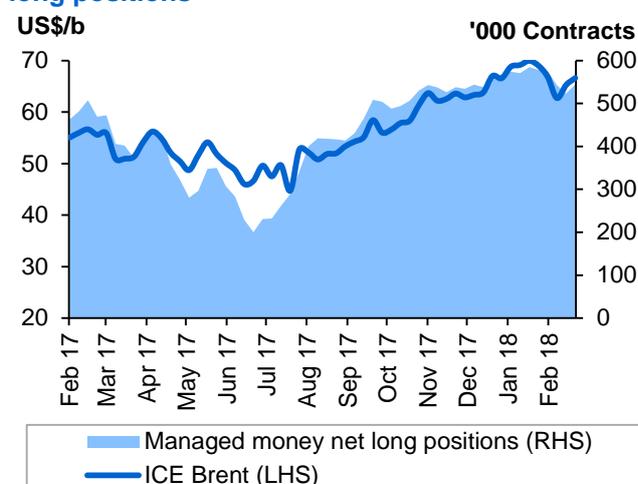
**Daily aggregate traded volume** for both crude oil futures markets increased by 135,710 contracts to 2.4 million futures contracts, or about 2.4 billion b/d of crude oil. Due to shorter trading days in February and the holidays, the total traded volume in NYMEX WTI was 6% lower at 26.78 million contracts, while in ICE Brent it was 0.3% lower at 19 million contracts.

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



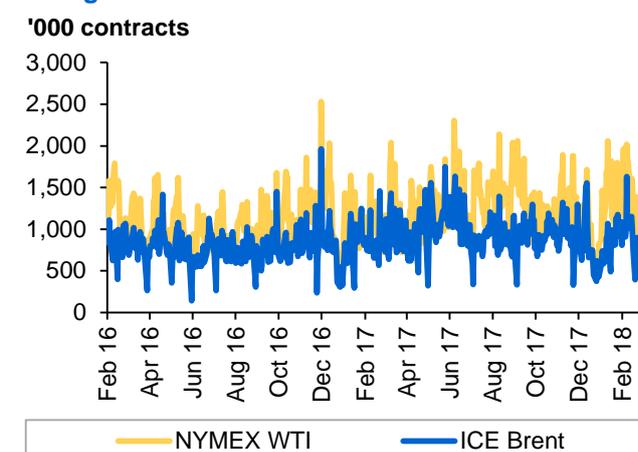
Sources: CFTC, CME Group and OPEC Secretariat.

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



Sources: Intercontinental Exchange and OPEC Secretariat.

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



Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

## The futures market structure

Although the **market structure** of all three major oil benchmarks – Brent, Dubai and WTI – remained in backwardation, lower seasonal crude demand in Asia and Europe and abundant supplies lessened the backwardation in the Brent and Dubai markets. However, the WTI backwardation strengthened further on the back of the ongoing draws in crude oil stocks in Cushing, Oklahoma.

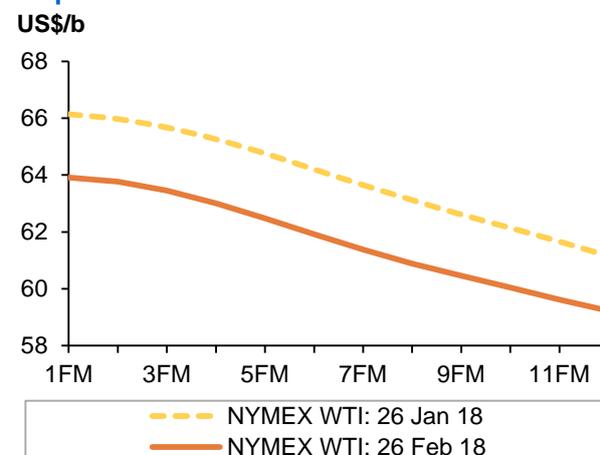
**WTI** crude price saw some support from lower inventories at the grade's Cushing hub in the US midcontinent. In the week to 23 February, stocks continued to fall by 1.2 mb in Cushing, Oklahoma, the 10th consecutive week of declines, the *EIA* reported. Inventories in Cushing now sit at just 28.2 mb, and have been halved over the last two-plus months. In the week to 16 February, exports of US crude jumped to just above 2 mb/d, close to a record high of 2.1 mb/d hit in October. The big jump in crude exports is likely due to the *EIA* including the first export cargo from Louisiana Offshore Oil Port (LOOP) in the week's number. LOOP, the largest privately-owned crude terminal in the US, has completed the first very large crude carrier (VLCC) crude oil loading operation at its deepwater port. The supertankers can ship about 2 mb of oil.

**Brent** and **Dubai** backwardation eased in February, coming under pressure from abundant supply and softer demand. Refinery maintenance curbed demand in the Asia-Pacific and Europe regions. North Sea Dated has come under further pressure from higher Libyan output and weaker gasoline and diesel margins. Libya's production has risen to 1.15 mb/d. Gasoline margins have come under pressure from slow demand in Europe, although this is being partly offset by interest in exporting cargoes to the US and East of Suez.

The North Sea Brent **M1/M3** 88¢/b backwardation decreased to 60¢/b, down 28¢. The Dubai M1/M3 79¢/b premium decreased to 28¢/b, easing 41¢. In the US, the WTI backwardation of 27¢/b improved, where M1/M3 widened 20¢ to 47¢/b.

The **transatlantic spread** between the benchmarks – NYMEX WTI and ICE Brent – narrowed significantly by \$1.87 over the month to average \$3.55/b, on the back of the ongoing steep declines in inventories at Cushing, Oklahoma. Since the New Year, WTI has outperformed its global rival Brent, as concerns over rising US crude output were brushed off. Instead, the WTI complex was lifted by the accelerating drawdown of stockpiles at the Cushing delivery hub. Bottlenecks in Canada, coupled with the start-up of the Diamond Pipeline, have helped to drain Cushing inventories. Stocks are half of what they were in November. As a result, the Brent-WTI spread has narrowed by close to 50% since the start of the year to a seven-month low of around \$3/b. The same trend is observed, albeit to a lesser extent, with WTI Midland, which better reflects crude prices on the USGC export hub. The upshot is that firmer WTI pricing differentials now risk challenging once-healthy arbitrage economics. The squeeze on the spread between the two crude benchmarks is also shown in the shape of the Brent-WTI forward curve, which has flipped from a narrowing Brent premium over M1-M6 to a widening one, a sign that there is some additional caution emerging as a result of US supply growth indicators.

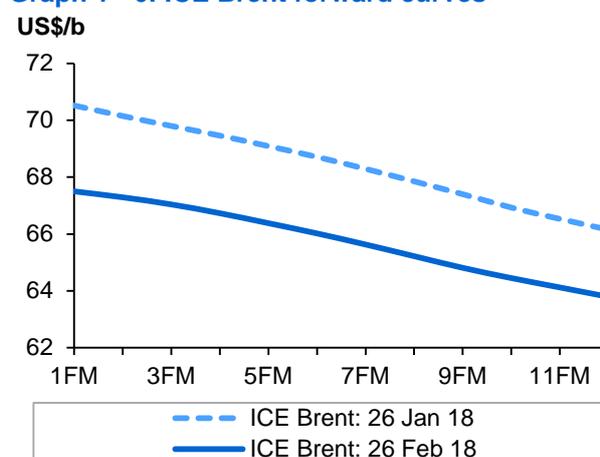
**Graph 1 - 5: NYMEX WTI forward curves**



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

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



Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

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

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	26 Jan 18	66.14	65.97	65.67	64.20	61.15	-4.99
	26 Feb 18	63.91	63.77	63.45	61.92	59.22	-4.69
	<b>Change</b>	<b>-2.23</b>	<b>-2.20</b>	<b>-2.22</b>	<b>-2.28</b>	<b>-1.93</b>	<b>0.30</b>
ICE Brent	26 Jan 18	70.52	70.15	69.80	68.71	66.15	-4.37
	26 Feb 18	67.50	67.29	67.04	66.02	63.79	-3.71
	<b>Change</b>	<b>-3.02</b>	<b>-2.86</b>	<b>-2.76</b>	<b>-2.69</b>	<b>-2.36</b>	<b>0.66</b>
DME Oman	26 Jan 18	67.50	67.53	67.15	66.21	63.68	-3.82
	26 Feb 18	64.70	64.63	64.32	63.47	61.26	-3.44
	<b>Change</b>	<b>-2.80</b>	<b>-2.90</b>	<b>-2.83</b>	<b>-2.74</b>	<b>-2.42</b>	<b>0.38</b>

Note: FM = future month.

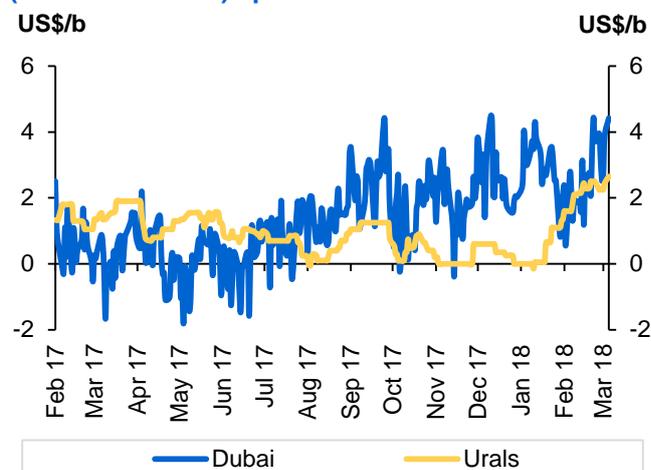
Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

## The light sweet/medium sour crude spread

The **sweet/sour differentials** narrowed globally, except in Europe where the spread widened four-fold as Russian Urals came under strong pressure not seen in more than three years.

In **Europe**, the light sweet North Sea Brent premium to Urals medium sour crude soared to a record high not seen since June 2014. The spread increased by \$1.17, to the advantage of Brent, to average \$2.15/b, from only 44¢/b in the previous month. Refinery maintenance and competition from other sour crudes have pressured Russian medium-sour Urals. A combination of weaker fuel oil margins, as well as a drop in seasonal demand with the upcoming start of the maintenance season in Europe has led to the downward correction. Furthermore, the exceptionally busy maintenance schedule in the Middle East might have allowed for a higher availability of Middle Eastern crude in the Mediterranean market. Moreover, Russian crude flows to the Far-East have led to a steady increase of sulphur in the Urals stream, which resulted in a larger quality discount in the Urals price.

Graph 1 - 7: Brent Dated vs. sour grades (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

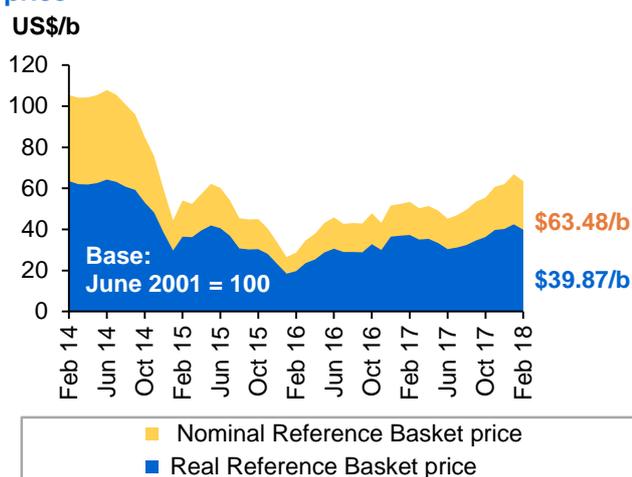
In **Asia**, the Tapis premium over Dubai decreased this month as domestic light sweet crudes became less competitive due to a narrowing Brent-Dubai spread. The Brent-Dubai spread narrowed, encouraging the flow of west-east arbitrage for Atlantic-Basin crudes. The Asia-Pacific crude oil market also weakened as refinery maintenance in the region reduced demand from refiners. The Tapis/Dubai spread narrowed by \$1.03 to \$4.31/b, while the Dated Brent/Dubai spread also narrowed by 51¢ to \$2.47/b from \$2.98/b in the previous month.

In the **USGC**, the LLS premium over medium-sour Mars decreased by 20¢ to \$3.50/b, partially on limited sour crude imports and lower refinery runs. Moreover, the sour crude discount widened as fuel oil margins in the USGC pressured heavier crudes.

## Impact of US dollar and inflation on oil prices

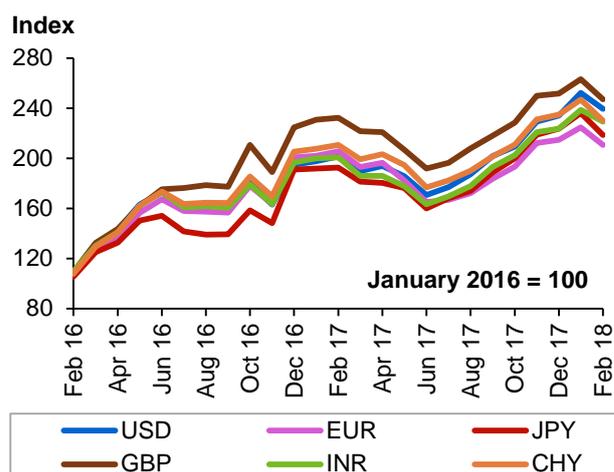
On average, the **US dollar (USD)** generally declined against its major counterparts. Against the euro the dollar decreased on average by 1.2% m-o-m, on the expectation of a gradual shift by the ECB towards a less accommodative stance, which was partly reflected in its March statement with the removal of the quantitative easing bias. However, at the same time, some concerns about potential acceleration of inflation in the US has translated into expectations that a faster pace of tightening by the US Fed may be required, which provided some support for the dollar. Meanwhile, amid increased volatility in equity markets, the dollar declined considerably against the Japanese yen and the Swiss franc by 2.6% and 2.7%, respectively. Against the pound sterling it declined by 1.2%, as the Bank of England signalled a faster-than-expected pace of rate hikes in order to tame rising inflation. The dollar recently weakened at the beginning of March on uncertainty related to the imposition of trade tariffs by the US administration – and the potential backlash from other countries – on the US economic performance.

**Graph 1 - 8: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price**



Source: OPEC Secretariat.

**Graph 1 - 9: ORB crude oil price index comparing to different currencies**



Sources: IMF and OPEC Secretariat.

On average, the US dollar declined against the Chinese yuan in February by 1.9%. The dollar advanced by 1.2% m-o-m against the Indian rupee. Against commodity exporters' currencies, the dollar advanced by 1.0% m-o-m against the Brazilian real while against the Russian ruble it increased slightly 0.1% in February.

Against NAFTA member currencies, the dollar was mixed. It advanced by 1.3% against the Canadian dollar, partly due to some perceived deceleration in the Canadian economy at the beginning of the year, while it lost 2.0% against the Mexican peso.

In **nominal terms**, the price of the OPEC Reference Basket (ORB) decreased by \$3.37, or 5.0%, from \$66.85/b in January to \$63.48/b in February

In **real terms**, after accounting for inflation and currency fluctuations, the ORB decreased to \$39.87/b in February from \$42.51/b (base June 2001=100) in the previous month. Over the same period, the US dollar decreased by 1.1% against the import-weighted modified Geneva I + US dollar basket\*, while inflation was relatively stable m-o-m.

\* The "Modified Geneva I + US\$ Basket" includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to merchandise imports by OPEC Member Countries from the countries in the basket.

## Commodity Markets

In February, energy commodity prices experienced a broad-based decline, with sharp falls in natural gas prices, especially in the US, as a result of warmer-than-anticipated weather. In the group of non-energy commodities, base metals were mixed with copper and aluminium down, but increases posted in zinc and nickel. With the exception of agricultural commodities, commodity prices fell sharply in the midst of the sell-off in equity markets experienced at the beginning of the month, though as equity markets recovered some ground, some of the losses in commodity prices were recovered as well. In the group of precious metals, gold prices were volatile following the swings in the both the equities and FX markets.

### Trends in selected commodity markets

Average **energy prices** in February decreased by around 5.4% – the first m-o-m decline since June 2017 – with all group components down, m-o-m. The declines were particularly steep for natural gas prices in the US, which lost the gains achieved in January.

**Table 2 - 1: Commodity price data**

Commodity	Unit	Monthly averages			% Change	Year-to-date	
		Dec 17	Jan 18	Feb 18	Feb 18/Jan 18	2017	2018
<b>Energy*</b>		<b>77.8</b>	<b>85.0</b>	<b>80.5</b>	<b>-5.4</b>	<b>69.2</b>	<b>82.8</b>
Coal, Australia	US\$/mt	102.1	106.9	104.7	-2.0	82.1	105.8
Crude oil, average	US\$/b	61.2	66.2	63.5	-4.2	54.0	64.8
Natural gas, US	US\$/mbtu	2.8	3.5	2.7	-24.6	3.0	3.1
Natural gas, Europe	US\$/mbtu	6.6	7.6	6.9	-9.1	5.9	7.2
<b>Non-energy*</b>		<b>84.5</b>	<b>87.5</b>	<b>88.5</b>	<b>1.2</b>	<b>85.3</b>	<b>88.0</b>
<b>Base metal*</b>		<b>92.2</b>	<b>97.0</b>	<b>96.9</b>	<b>-0.1</b>	<b>80.4</b>	<b>96.9</b>
<b>Precious metals*</b>		<b>97.4</b>	<b>102.7</b>	<b>102.1</b>	<b>-0.5</b>	<b>95.4</b>	<b>102.4</b>

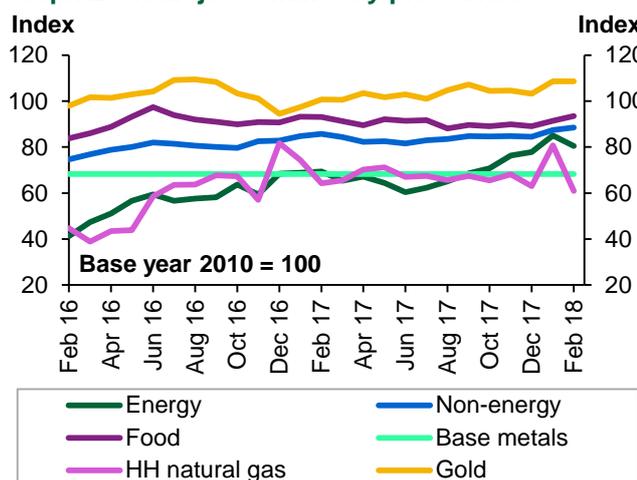
Note: \* World Bank commodity price indices (2010 = 100).

Source: World Bank, Commodity price data.

In February, the **Henry Hub natural gas index** was down 87¢, or 24.6%, at \$2.67/mmbtu, after trading at an average of \$3.57/mmbtu in the previous month. At the beginning of the month, prices declined on a milder weather outlook for February, while at the same time output increased significantly, standing around 9% above a year ago. This has taken the focus away from the inventory situation, which is significantly below the five-year average. Furthermore, amid the aforementioned increase in temperatures, the pace of withdrawals from underground inventories slowed. In its last storage report during the month, the *US EIA* said utilities withdrew 78 bcf of working gas from underground storage during the week ending 23 February 2018. Median analysis expectation was of a 76 bcf withdrawal. This withdrawal contrasts with a five-year average withdrawal of 118 bcf for the same week. Total working gas in underground storage stood at 1,682 bcf, 18.1% lower than the previous five-year average.

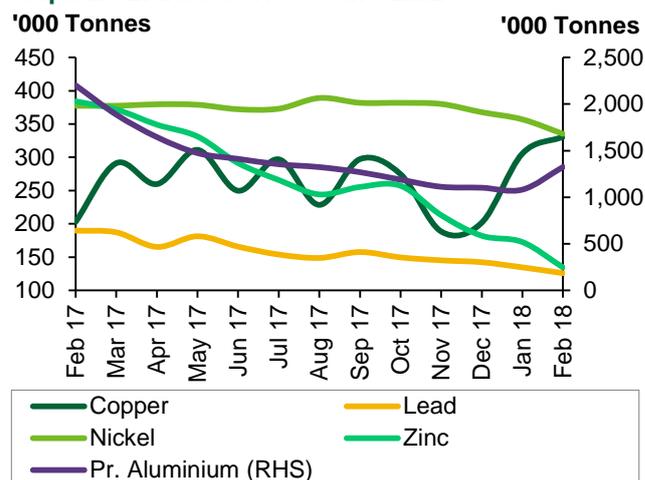
**Natural gas import prices in Europe** decreased, with average prices down by 9.1% to \$6.87/mmbtu. However, spot prices jumped towards the end of the month on the arrival of arctic weather in the last week of the month, which decreased inventories. Natural gas inventories for EU Member States dropped to 29.26% at the end of February – the same level as a year earlier – from close to 49.39% in the previous month, according to *Gas Infrastructure Europe*.

Graph 2 - 1: Major commodity price indices



Source: World Bank, Commodity price data.

Graph 2 - 2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

Australian **thermal coal prices** decreased to an average of \$104.7/Mt in February and were also affected by the sell-off in global financial markets at the beginning of the month. During the month, price controls put in place by Chinese authorities -which capped prices at the Qinhuangdao port – helped weakened prices, especially after the Lunar New Year holiday. The measures were enacted after price spikes in January in the midst of freezing temperatures, which spurred a large increase in imports that month. In February, official data showed that imports retreated to 20.9 MMT from 27.8 MMT in the previous month, but were still 18.2% higher than in the same month of the previous year, though the Chinese New Year holiday may skew the comparison. China's natural gas imports fell to 6.94 MMT in February from 7.77 MMT, but are still up 41% from a year ago, supported by the fuel substitution plan of the government.

**Average base metal prices** decreased by 0.1% in February amid mixed movement in the group's components. The group was affected by the increased volatility experienced in financial markets. At the beginning of the month, metals declined heavily following the sell-off in equity markets and some strengthening of the dollar, but recovered some ground following improvements in the equity markets. Furthermore, global manufacturing remained strong in February, despite some decline following the highs of the previous two months. The JP Morgan global manufacturing Purchasing Managers' Index (PMI) stood at 54.2, down from 54.4 in January, mainly due to a slight deceleration in the Eurozone, Japan and the US, but still close to the seven-year high of 54.5 in December. In largest metal consumer China, PMI surveys showed opposite trends with Caixin Manufacturing improving slightly to 51.6, while the official PMI stood at 50.3 in February from 51.3 the previous month pointing to deceleration. During the month, large increases in copper and aluminium stocks in the LME warehouse system were reported, which also weighed on prices, which were down by 0.8% and 1.3%, respectively. In February, Chinese unwrought copper imports declined to 352kMT, or 20%, from the previous month, though they were up by 3.5% y-o-y, due to the impact of winter pollution restrictions on refined copper supply. Meanwhile, aluminium exports in the first two months of the year were 25.8% higher compared to a year ago. Nickel and Zinc on the contrary were among the best performers increasing by 5.7% and 2.7% m-o-m respectively, with lower LME inventories suggesting tighter supplies.

**Iron ore prices** increased by 1.5% m-o-m on a recovery in steel prices at the end of the month, as some additional restrictions on heavy industries were expected, even after the end of winter. Chinese imports of iron ore decreased by 16% m-o-m to 84.3 MMT in February, but were slightly up from January 2017. Most recently the imposition of tariffs of 25% and 10% to Steel and Aluminium products imports by the US administration have resulted in price increases in the US, however, in contrast prices in China have fallen amid increasing inventories and concerns about potential escalation of trade related disputes,

Meanwhile, **gold prices** experienced significant volatility during the month, especially following the swings in global equity markets. Towards the end of the month prices declined on the prospect of a higher-than-anticipated pace of interest rate hikes in the US due to some acceleration in consumer inflation.

## Investment flows into commodities

**Open interest (OI)** declined in February for selected US commodity futures markets such as natural gas, crude oil, precious metals and copper. Meanwhile, in monthly average terms, speculative net length positions increased for crude oil and natural gas but declined for copper and precious metals.

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

	Open interest		Net length			
	Jan 18	Feb 18	Jan 18	%OI	Feb 18	%OI
Crude oil	2,575	2,503	453	18	454	18
Natural gas	1,428	1,369	110	8	120	9
Precious metals	753	726	220	29	161	22
Copper	288	266	86	30	45	17
<b>Total</b>	<b>5,043</b>	<b>4,864</b>	<b>571</b>	<b>100</b>	<b>895</b>	<b>86</b>

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

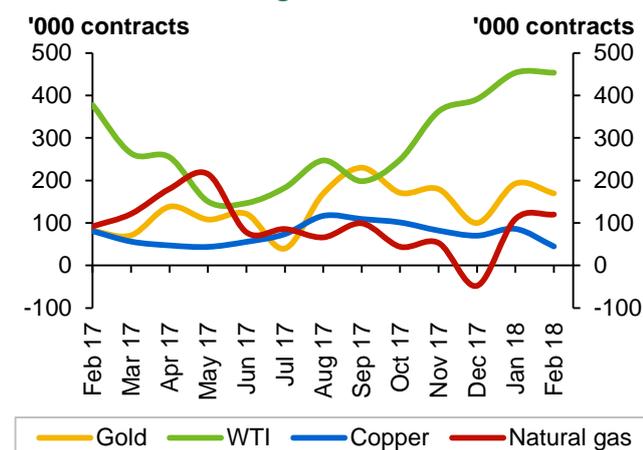
Source: US Commodity Futures Trading Commission.

**Henry Hub's natural gas OI** decreased by 2.8% m-o-m in February. Money managers' average net long positions increased by 9% to 119,910 contracts, however when comparing last weeks of the month, managed money net length declined more than 60%, as a result of warmer temperatures.

**Copper's OI** decreased by 7.6% m-o-m in February. Money managers decreased their net long positions by 48% to an average of 44,476 contracts, partly as a result of large deliveries to inventories, though managed money positions were volatile during the month.

**Precious metals' OI** decreased by 3.6% in February. Money managers decreased their bullish bets by 26.8% during the month to 161,482 contracts on average.

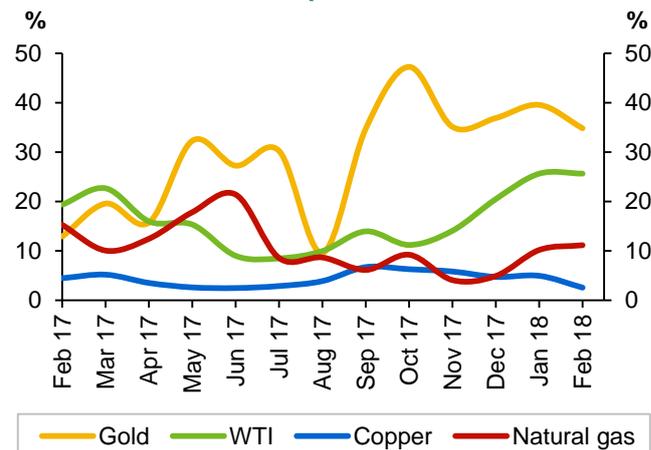
**Graph 2 - 3: Money managers' activity in key commodities, net length**



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

Source: US Commodity Futures Trading Commission.

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



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

Source: US Commodity Futures Trading Commission.

## World Economy

Strong growth momentum, which started in the previous year, has lifted global growth significantly to a level of 3.8% for both 2018 and 2017, compared with lower growth levels in earlier years. This global growth level remains unchanged from the previous month, but indications have become visible that some economies have reached growth limitations, albeit at high levels. Furthermore, the potential sovereign debt-related consequences of the fiscal stimulus in the US, in combination with the latest trade-related developments, may lead to some economic challenges. While still growing solidly, lower-than-expected output numbers in 2017 for Japan, the UK, India and Russia point at limitations of the ongoing global growth dynamic. Positively, the shortfall of growth in these economies was compensated with better-than-anticipated growth in the Eastern European economies and rising growth levels in Asia Pacific. In general, the synchronised global growth trend continues, but challenges to a continuation of this trend may become more noticeable in the near-term.

The 2018 OECD growth forecast remains unchanged at 2.4%, after growth of 2.5% in 2017. Underlying growth in the US continues, however the additional support of the US tax cut and the improving business and consumer sentiment, may be dampened by potential negative consequences of a rising budget deficit to finance the stimulus and probably more rapidly rising inflation. Also, the most recent trade-related initiatives may have a negative impact on the US economy. For now, the 2018 GDP growth forecast remains unchanged at 2.7%, following growth of 2.3% in 2017. Growth in Japan remains robust. However, the most recently published lower-than-expected 2017 growth level of 1.7%, has led to a similar downward revision of the 2018 growth forecast to 1.5%. The Eurozone's forecast remained unchanged at 2.2% for 2018, after reported growth of 2.5% in 2017. The UK reported lower-than-expected growth in 2017 at 1.7%, while the 2018 GDP growth forecast remained unchanged at 1.5%.

In the emerging economies, the major economies' 2018 growth forecasts remained unchanged this month, but lower-than-expected 2017 growth levels in India and Russia were taken into consideration. India's growth forecast remains at 7.2% in 2018, following downward-revised growth of 6.4% in 2017. Russia is forecast to continue its recovery in 2018 with growth of 1.8%, after downward-revised growth of 1.5% in 2017. As the Brazilian economy continues to recover, economic growth remained unchanged for both 2018 and 2017, to stand at 1.9% and 1.0%, respectively. China's GDP growth expectation remains unchanged at 6.5% in 2018, after reported growth of 6.9% in 2017.

As some major economies seem to have reached their growth potential, further upside for global growth seems to be limited. Numerous challenges remain and are mainly related to the political sphere and the upcoming monetary policy decisions in the US and the Euro-zone, in combination with ongoing asset market volatility.

**Table 3 - 1: Economic growth rate and revision, 2017-2018\*, %**

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
<b>2017</b>	<b>3.8</b>	<b>2.5</b>	<b>2.3</b>	<b>1.7</b>	<b>2.5</b>	<b>1.7</b>	<b>6.9</b>	<b>6.4</b>	<b>1.0</b>	<b>1.5</b>
Change from previous month	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.4
<b>2018</b>	<b>3.8</b>	<b>2.4</b>	<b>2.7</b>	<b>1.5</b>	<b>2.2</b>	<b>1.5</b>	<b>6.5</b>	<b>7.2</b>	<b>1.9</b>	<b>1.8</b>
Change from previous month	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Note: \* 2017 = Estimate and 2018 = Forecast.

Source: OPEC Secretariat.

## OECD

### OECD Americas

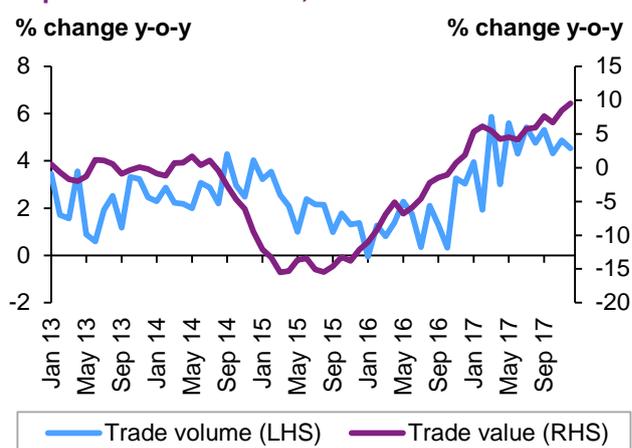
#### US

While the US economy continues to show a **solid underlying growth trend**, fiscal and trade policies, in combination with upcoming monetary policy decisions, are increasingly taking centre-stage in US economic development. There is some rising uncertainty, which has also been reflected in a surge in asset market volatility, as the likely increase in federal debt, together with the relatively unexpected announcement of trade tariffs on steel and aluminium by the US President and the probably faster-than-anticipated monetary normalisation may dampen the growth dynamic going forward. However, for the time being, the economic indicators point at healthy underlying growth with the labour market continuously improving, business and consumer sentiment at high levels and the ongoing fiscal stimulus supporting economic growth. While this dynamic is expected to continue and improve in the current year, the federal debt situation may worsen, causing some dampening effect probably later in the year, but more likely in the year to follow. Moreover, the uncertainty about the future development of trade-related initiatives, ranging from the introduction of steel and aluminium tariffs to re-negotiating NAFTA and other trade agreements, are adding some concern. Also, the latest comments from the Fed indicate that the normalisation of monetary policies may go forward more rapidly. Moreover, a rising deficit, in combination with a deteriorating sovereign credit profile, as well as an overheating labour market, leading to quicker-than-anticipated monetary tightening, would subsequently impact the oil-market. This may affect asset market valuations as well as economic activity in general, but particularly emerging and developing economies may be impacted via capital outflows from these economies, a subject that the Fed as highlighted numerous times as a key consequence of its policy. What seems clear for now is that the considerable support that the US economy is currently enjoying via fiscal and monetary stimulus may not continue beyond the current year.

Some uncertainty comes from the recently announced **tariffs on steel and aluminium**. So far the first-round effects of the initiated tariffs are expected to be minor for the US, and also for the global economy. The relative size of international trade in those two products is relatively small on a global level and already large steel exporters, such as Canada, Mexico and Australia, have been exempted from these tariffs. Another mitigating factor is that the oversupply in the global steel-market and the economic deceleration in China could cause global steel prices to decline this year, while the tariffs themselves will also pressure global prices. Hence, a levy on what could be lower prices would be even less significant for US consumers. Still, the EU, which constitutes the group of countries holding the largest share of steel imports to the US, remains affected and while first-round effects may be minor for the US and the global economy, potential second-order effects – due to retaliatory measures from affected economies – could have more serious economic consequences, leading to rising global inflation, declining business sentiment and other effects that may dampen the ongoing global recovery. In this respect it is important to highlight that world trade had a significant positive impact on past years' economic developments.

**GDP** growth remains healthy in 4Q17, showing growth of 2.5% q-o-q seasonally adjusted annualised rate (SAAR) in the second of three releases for the quarter, very slightly below the first estimate of 2.6% q-o-q SAAR. Within the GDP subsections, household consumption remained the key-driver, expanding by 3.8% q-o-q SAAR and contributing the largest single share to 4Q17 GDP growth, unchanged from the first estimate. The changes in private inventories negatively impacted 4Q17 GDP by 0.7 percentage points (pp) and, given the ongoing strong momentum in the US economy, this situation will rebound and support GDP growth in 1Q18.

**Graph 3 - 1: World trade, volume and value**



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

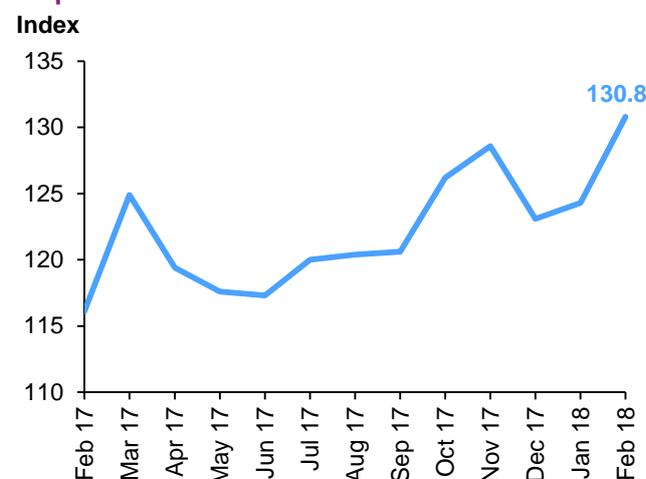
While the underlying economy continues to do well, fiscal and monetary policies are becoming a focus of interest, as fiscal policy decisions have become a very influential factor in the US economy following the implemented tax cuts, the February bi-partisan agreement on budget spending and the most recently announced tariffs on steel and aluminium. This will probably also influence the Fed's **monetary policy**. While the Fed laid out in its last meeting that a gradual normalisation will continue in 2018, the newly appointed Chairman of the Fed implicitly hinted at some possibility of a more rapid normalisation of monetary policy, if necessary, in his recent testimony to Congress. **Inflation** numbers remain healthy, but not too high, and hence do not necessarily imply an urgent need to move beyond the current gradual normalisation of monetary policies. Inflation remained at 2.1% in January, now the fifth consecutive month of inflation above 2%. Core inflation – excluding volatile items such as food and energy – remained at 1.8% in January.

The improvements in the **labour market** continued in February. Non-farm payrolls increased by 313,000 in February after an upwardly-revised 239,000 in January. The unemployment rate remained at 4.1%, while the hourly earnings growth for the private sector slowed down slightly. Earnings rose by 2.6% y-o-y, compared to a downward revised 2.8% y-o-y in January. The January data of hourly earnings was widely discussed last month as the originally announced growth number of 2.9% y-o-y constituted the largest growth number since the financial crisis in 2009. So while earnings have gradually improved over the past years, it seems that a more considerable growth trend has not yet been established. Also positively, long-term unemployment numbers fell further to stand at 20.7% in February, compared to 21.5% in January, 22.9% in December and 23.9% a month earlier, indicating a structural shift in the labour market. This now is the lowest level since the Lehman Brothers bankruptcy in September 2008. Another important element in the labour market mix, the participation rate, improved to stand at 63.0%, moving up by 0.3 pp in February.

**Industrial production** saw a strong rise in January, moving to 3.7% y-o-y growth from an already strong December level of 3.4% y-o-y. While **domestic demand** held up well in January, it was lower than in the previous months. January retail sales grew by 3.6% y-o-y, compared to December growth of 5.2% y-o-y.

The generally positive trend on the domestic side of the economy was also underscored by the rising Conference Board's **Consumer Confidence Index**, which rose to a new 10-year high of 130.8 in February, coming from 124.3 in January.

**Graph 3 - 2: US consumer confidence index**

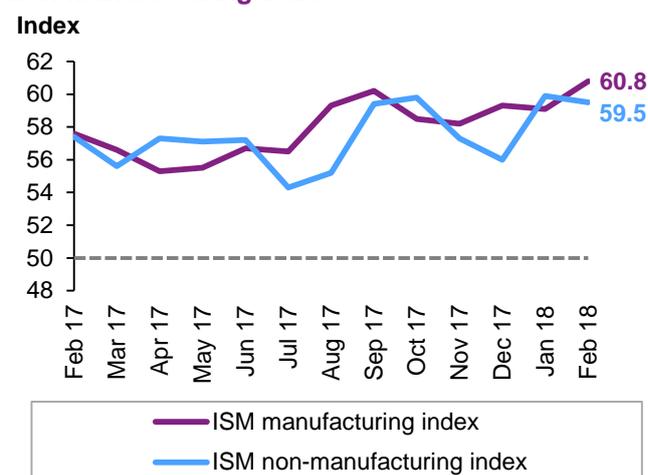


Sources: The Conference Board and Haver Analytics.

January's **PMI** for the manufacturing sector, as provided by the ISM, also indicated ongoing strong support in the underlying economy. The manufacturing PMI rose to 60.8 in February, rising from 59.1 in January. Also, the important index for the services sector, which constitutes more than 70% of the US economy, held up very well as it remained almost unchanged, standing at 59.5, compared to 59.9 in January.

While the underlying economic growth momentum continues, fiscal and monetary challenges remain. Taking this situation into consideration and as the forecast already shows a considerable growth trend in the current year, 2018 **GDP growth** expectations remain at 2.7%, after growth of 2.3% in 2017.

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



Sources: Institute for Supply Management and Haver Analytics.

### Canada

Over the past weeks, Canada's trade relationship with the US has been moved to the spotlight. Following the recent announcement of the US President to impose steel and aluminium tariffs, Canada was exempted at the last minute, along with Mexico and Australia. Also NAFTA negotiations are dragging on, now in the seventh round of talks, with the more challenging issues remaining. In the meantime, **industrial production** rose by a considerable level of 4.4% y-o-y in December, after an already high 4.3% y-o-y in November, as per latest available monthly data. The mining and oil-sector remains an important supporting factor, showing output growth of 5.7% y-o-y in December. **Retail trade** continued to expand at a considerable level of 5.8% in December, after 6.5% y-o-y in November and 6.1% y-o-y in October, all at a nominal seasonally-adjusted level. The PMI index for manufacturing confirms strong momentum, remaining almost unchanged at 55.6 in February, a high level, compared to 55.9 in January. Nevertheless, some deceleration in economic activity was observed in 2H17, following strong momentum in 1H17. This somewhat softer trend is expected to carry over into the current year.

With the this momentum already incorporated, **Canada's GDP growth** forecast for 2018 remains at 2.2%, following growth of 3.0% in 2017.

### OECD Asia Pacific

#### Japan

Economic growth in **Japan remains well supported**, while some slowdown from last year's relatively considerable pickup is expected. Some indicators have already slightly decelerated, coming from high levels in 2H17. The healthy 2H17 growth, in combination with rising energy prices, has had a positive effect on inflation, which remains an important concern in Japan, given its decade-long sluggish development. Labour market shortages also should support inflation, while this may be limited, given muted wage growth expectations. These limitations of the labour market, i.e. shortages in the labour force, are an important factor keeping the economy from expanding at a significantly higher rate than past years' averages. In light of this situation, the government continues with labour market reforms and structural changes, including the support of higher female participation in the labour force. Earnings for workers have been, however, sluggish and are forecast to pick up only modestly, despite government efforts to raise wages by up to 3%. The shortage in the labour force, in combination with a slow pick-up in earnings, will lead to only gradual growth in domestic consumption, which, together with somewhat slowing exports to China, should result in expected lower GDP growth in 2018. While the government continues to provide selective fiscal stimulus, the BoJ continues its accommodative monetary stimulus policies. This is expected to continue, with the recent reappointment of the Governor of the BoJ confirming the past years' policy. In the meantime, exports were holding up well, an important element, considering the importance of external trading for the Japanese economy.

In this regard, the relative strength of the Japanese yen versus the US dollar since the beginning of the year will need monitoring, as it may impact the competitiveness of Japanese products. This currency market development may also have been the result of market expectations that the BoJ could alter its currently very accommodative monetary policy. However, for the time being, the **BoJ continues its monetary stimulus**, indicating that this will not change in the near-term. In its statement in March, the BoJ noted that Japan's economy is expanding moderately. This is likely to continue on the back of highly accommodative financial conditions and on the back of the government's past stimulus measures. Inflation is expected to continue improving with medium- to long-term inflation expectations projected to rise and also supported by an improvement in the output-gap. The BoJ confirmed that it will continue with its quantitative and qualitative monetary easing (QQE) measures with Yield Curve Control as long as necessary. It will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI - all items less fresh food - exceeds 2% and stays above this target in a stable manner. For the time being, the BoJ will keep its long-term cap on 10-year bonds, which is currently at around zero, to support bank lending. The short-term interest rate remains at minus 0.1% and the cap on 10-year bond yields remains at "around zero" as the BoJ will continue to buy assets at a pace of ¥80 trillion a year.

Positively, **inflation** increased considerably in the latest months, to now stand at 1.3% in January, compared with 1.1% y-o-y in December and only 0.5% y-o-y in November. The main support came from the rise in energy prices, a healthy development for the Japanese economy. Moreover, some additional support came from improving wage growth. In January, monthly earnings rose by 0.8% y-o-y, following growth of 0.9% y-o-y in December. The January number continues a positive trend with 4Q17 quarterly earnings growth marking the largest rise in the past year at 0.6% y-o-y. Core inflation – which excludes food and energy – and is more wage-dependent, remained stagnant, rising by only 0.1% y-o-y in December in the third consecutive month. Given the tightness in the labour market, the **unemployment rate fell again significantly to an ultra-low level** of only 2.4% y-o-y in January, the lowest level in 25 years.

**Japanese exports** were a considerable support for the economy in January. External trade rose by 12.3% y-o-y in January, compared to 9.3% y-o-y in December. However, growth in **industrial production** retracted significantly. It expanded by only 1.1% y-o-y, after a rise of 5.7% y-o-y in December. Manufacturing orders have also pointed at some slow-down, falling by a considerable 5.6% y-o-y in December. This is a sharp decline after growth levels of 6.4% y-o-y in November and 13.4% y-o-y in October.

**Domestic retail demand** growth weakened in January, growing by 1.6% y-o-y, after 3.6% y-o-y in December and 2.1% y-o-y in November. After a 0.2% y-o-y dip of retail demand in October, it seems that some of the momentum is losing steam.

The latest **PMI numbers** confirm an ongoing, albeit slightly slower expansion. The manufacturing PMI declined to 54.1 in February from 54.8 in January, but remains better than the December number of 54.0. The services sector PMI dipped to 51.7 in February from 51.9 in January.

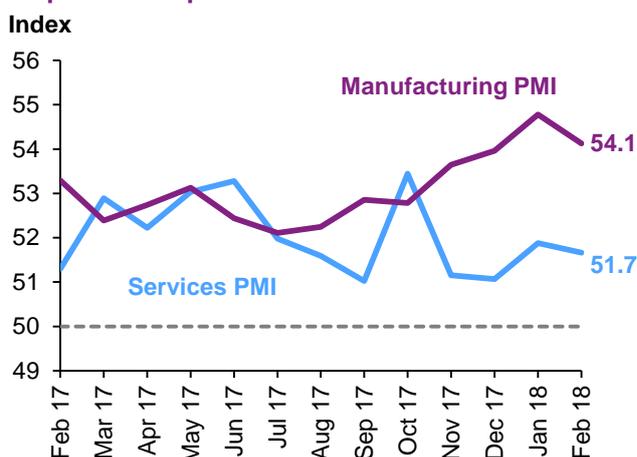
While some slow-down has become apparent, the most recent developments confirm a solid underlying growth dynamic in the Japanese economy. However, growth numbers were slightly adjusted as a somewhat weaker 4Q17 GDP level of only 0.5% q-o-q SAAR is causing a downward revision for 2017 growth to 1.7%, compared to last month's forecast of 1.8%. Following the somewhat weakening trend on the domestic side, the 2018 forecast was also slightly adjusted downwards to 1.4%, compared to a 1.5% forecast in the previous month. Some challenges in the economy remain, and given the tight labour market situation and high capacity utilisation rates, further growth potential seems limited for now, as highlighted also by the BoJ, saying that the economy is growing above potential.

**Graph 3 - 4: Japanese retail trade**



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

**Graph 3 - 5: Japanese Markit/Nikkei PMIs**



Sources: IHS Markit, Nikkei and Haver Analytics.

### South Korea

The South Korean economy continues to do well, albeit at a slightly slowing pace. Positively, political developments point at some easing of tensions on the Korean Peninsula. While weaker indicators for the South Korean economy were released lately, the general performance seems to be relatively well supported. Industrial output rose by 1.5% y-o-y in December, still a low number, but trending up from 1.1% in November. This is at the non-seasonally adjusted level. Export growth continued in February at 4.2% y-o-y, after an almost similar level of 4.5% y-o-y in January. The unemployment rate fell to 3.6% – a very low level – from 3.7% a month earlier. Consequently, the consumer sentiment index held up very well at 108 compared to only a marginally higher January number of 110. While holding up well, the latest **PMI** number for the manufacturing sector shows some slowing trend, standing at 50.3 in February, after 50.7 in January.

This slow-down in 2018 **GDP growth** has already been reflected in the latest GDP growth assumptions, which remain unchanged at 2.6% y-o-y for 2018, after growth of 3.1% y-o-y for 2017.

### OECD Europe

#### Euro-zone

The economy in the Euro-zone continues to expand at a healthy level and indicators point at a continuation of this trend. Some political challenges remain, but so far have not materially altered the economic development. After month-long negotiations in Germany to build a government, Italian elections did not provide a clear majority and with EU-sceptic parties winning the largest share of the votes, it will be important to see how negotiations among the parties in Italy will develop. In the meantime, the Euro-zone's labour market continues to improve and output numbers remain strong. While the ongoing monetary stimulus is expected to be reduced it will continue to be an important element in the Euro-zone economic upswing as a sharp tapering should not be expected as long as inflation remains low and clearly below the ECB's target.

**Business sentiment** remained high as the European Commission's economic sentiment index stood at 114.1 in February, but it should be noted that this is the second month in a row with a lower number. In January the index stood at 114.7, slightly below the 115.3 seen in December, which constituted a peak level for more than 10 years. While the level is still showing considerable confidence, the trend will need to be monitored.

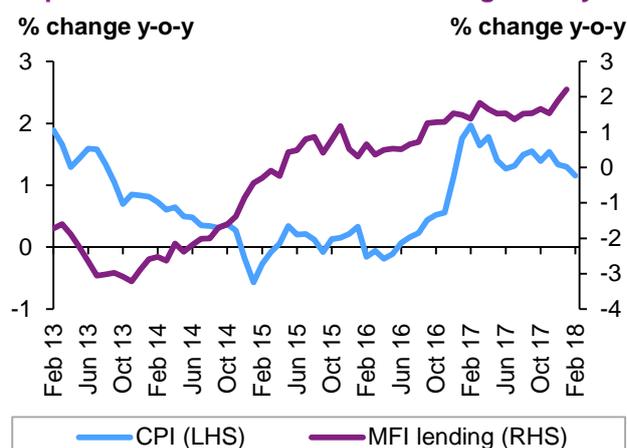
**Labour market** developments continued to improve. The unemployment rate remained at 8.6% for a second consecutive month in January, another low after the onset of the financial crisis in 2009. This compares with an average unemployment rate in 2017 of 9.1% and 10.0% in 2016. While in Germany, the unemployment rate remained at a low of 3.6%, it rose in Italy to 11.1% and in France it remained at 9.0%. But while there is a large delta in the various Euro-zone member countries, the levels of unemployment are largely the lowest since 2009. Wages, another important force to the recovery, should also pick up in the near-term, given the continued improvements in the labour market. However, with still-high unemployment numbers, it may be still too early for such a development.

Inflation remains low and will continue to impact the **monetary policy of the ECB**. So far, it is still well below the ECB's target of inflation at around 2%. Still, as economic growth has maintained considerable momentum, the ECB may consider some further monetary tightening. However, comments after the last ECB meeting in March were relatively noncommittal as it was mentioned that future policy decisions will be largely data-dependent. So far it continues QE purchases of €30 billion, which will run until September 2018, while it is still possible that QE could be continued beyond that time, if necessary. The main policy rate stands at 0.00% and the rate for deposit facilities at -0.4%. Despite some areas of the Euro-zone's banking sector remain weak, the growth dynamic of the liquidity line has been solid and lending of financial intermediaries to the private sector has maintained its solid trend in January, rising by 2.2% y-o-y, after an increase of 1.8% y-o-y in the previous month. This is the highest growth rate since 2011. Amid the balance-sheet weakness of the banking sector, impacted still be carrying bad loans in some institutions, the ECB has discussed tougher capital rules. As this would affect particularly Italy's banking sector, Italy's political development will need close monitoring also from this angle.

**Inflation** fell to reach 1.2% y-o-y in February, again a decline from the previous month, when it stood at 1.3% y-o-y. This is the third consecutive month of decline and the lowest inflation rate in more than a year and compares to last year's average of an already low 1.5% y-o-y. Wage pressure is expected to filter through in the coming months, but it may still be too early for this development.

**Core inflation** – that is, the consumer price index (CPI), excluding energy, and food – remained low, as it remained at 1.0%, the same level as in January. So, all inflation indicators remain well below the ECB's approximate 2% inflation target.

**Graph 3 - 6: Euro-zone CPI and lending activity**



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

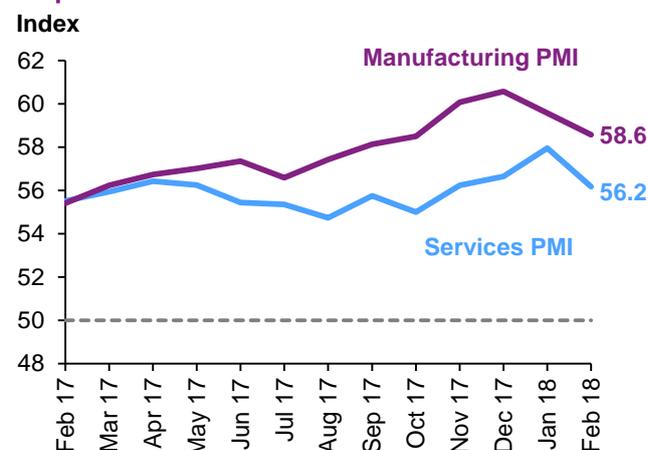
**Retail sales** continued to perform relatively well over the past months. They expanded by 2.8% y-o-y in January, comparing to 3.4% y-o-y in December and 4.6% in November and also remain above last year's low point of 1.7% y-o-y growth in October.

**Industrial production** grew by a healthy 5.2% y-o-y, comparing to already strong growth numbers of 3.6% y-o-y in November and 4.0% y-o-y in October, a healthy trend in continuation of the previous months.

The latest **PMI** indicators have confirmed the ongoing improvement in the Euro-zone. The manufacturing PMI fell slightly in February, but remained at a high level of 58.6, after January's level of 59.6. The important PMI for the services sector, which constitutes the largest sector in the Euro-zone, fell to 56.2 in February, comparing to 58.0 in January,

As the forecast is already reflecting a strong growth momentum and given some areas of the economy that have softened recently, the 2018 **GDP growth** forecast remains unchanged at 2.2%. This comes after the release of better-than-expected 2017 growth of 2.5%. Political uncertainties, Brexit procedures, the weakness in the banking sector as well as monetary policies remain important factors to monitor.

**Graph 3 - 7: Euro-zone IHS Markit PMIs**



Sources: IHS Markit and Haver Analytics.

## UK

The impending Brexit approaches, with a due date for negotiations to be finalised by March 2019. However, a solution to some important key-issues is not in sight. While a divorce settlement bill had been discussed and negotiations now moved into the second phase, sensitive issues remain unclear, and the EU has indicated that these issues need settlement first. In open words the President of the European Council made clear that it is not in the EU's interest to make Brexit a success. The most likely route for further negotiation will be a free-trade agreement (FTA). Based on available forecasts on such a scenario the UK will likely grow less economically within such an agreement, given that trade is currently flowing frictionless and that even in a FTA there will be more regulation. Moreover, the EU made clear that at least in the current stage of negotiations financial services will not be included in an EU-UK free trade deal. It is obvious that the outcome is likely to be very different from Britain's current status as a member of the EU. Another very sensitive issue is the border issue between Northern Ireland and the Republic of Ireland. While the UK would like to keep a soft border, it remains unclear how this will be structured as the UK would like to avoid supervision by the EU and also avoid providing special rights to EU citizens for an extended period of time. Hence the EU has highlighted that it looks forward to receiving a proposal on that matter by the UK and added that as long as the

UK doesn't present such a solution, it is very difficult to imagine substantive progress in Brexit negotiations. Furthermore, the President of the European Council Such said that such a proposal should be specific and realistic.

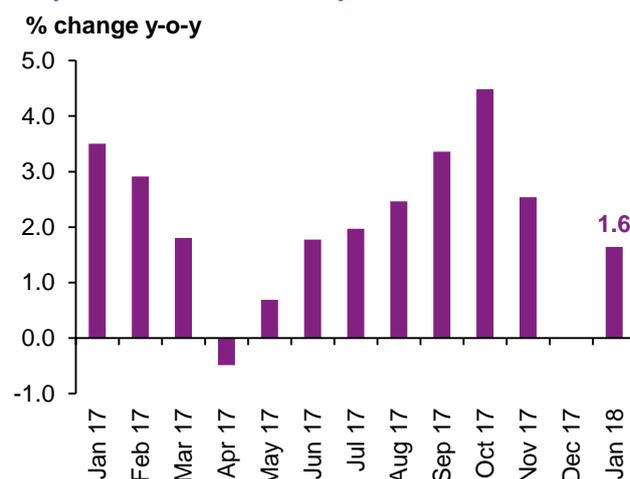
The current economic growth trend remains impacted by Brexit, as it continued to slow-down and the latest 4Q17 **GDP growth** number was softer than previously expected. UK GDP growth in 4Q17 was reported at 0.4% q-o-q seasonally adjusted (sa) growth rate, below the 0.5% q-o-q sa that was reported in a first estimate by the statistical office.

The **unemployment rate** remained surprisingly low at 4.3% in November, as per the latest available data. After some slowing wage growth in November at a growth rate of only 2.2% y-o-y, the measure recovered again in December as it grew by 2.8% y-o-y. So, the labour market's developments keep inflation well supported as it remained at 3.0% y-o-y in January. These inflation rates may continue impacting negatively potential future consumption as real wage growth remained negative as a consequence.

Despite this situation the Bank of England indicated that it will continue raising interest rates to fight inflation in the near future, after it raised its key policy rate for the first time in more than 10 years, by 25 bp in its meeting in November. The BoE's chief economist told lawmakers recently that the BoE could end up needing to raise interest rates faster than investors expect.

After no growth in December, **industrial production** recovered, growing by 1.6% y-o-y growth in January, supported by exports and the weakening pound sterling. Exports grew by 7.3% y-o-y in January. Also retail trade was holding up well as it rose by 4.4% y-o-y in January, after 4.5% y-o-y in December.

**Graph 3 - 8: UK industrial production**

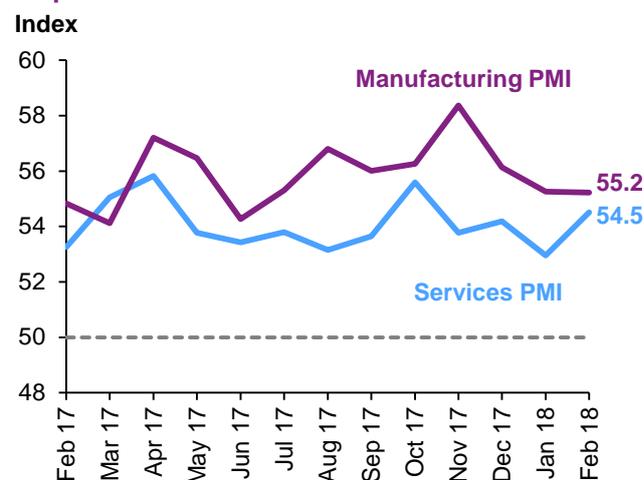


Sources: Office for National Statistics and Haver Analytics.

In connection with the most recent economic developments, the **PMI** for manufacturing remained at a considerably high level of 55.2 in February, almost unchanged from the last month, when it stood at 55.3. The very important services sector, which constitutes the majority of the UK's economy, improved to 54.5 in February, after it stood at 52.9 in January.

Taking into consideration the slightly lower 4Q17 GDP level, **GDP growth** in 2017 was revised down to 1.7%, comparing to 1.8% in the previous month. The 2018 GDP growth forecast remains unchanged at 1.5%.

**Graph 3 - 9: UK IHS Markit PMIs**



Sources: CIPS, IHS Markit and Haver Analytics.

## Non-OECD

### BRICs

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2017-2018\*

	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US\$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
<b>Brazil</b>	1.0	1.9	3.4	3.6	-9.8	-34.7	-8.0	-6.6	74.0	77.4
<b>Russia</b>	1.5	1.8	3.7	3.9	32.7	51.4	-1.5	-1.1	11.5	12.0
<b>India</b>	6.4	7.2	3.3	5.1	-45.3	-59.0	-3.3	-3.4	50.4	49.3
<b>China</b>	6.9	6.5	1.5	2.5	120.1	151.9	-4.3	-4.4	18.7	21.6

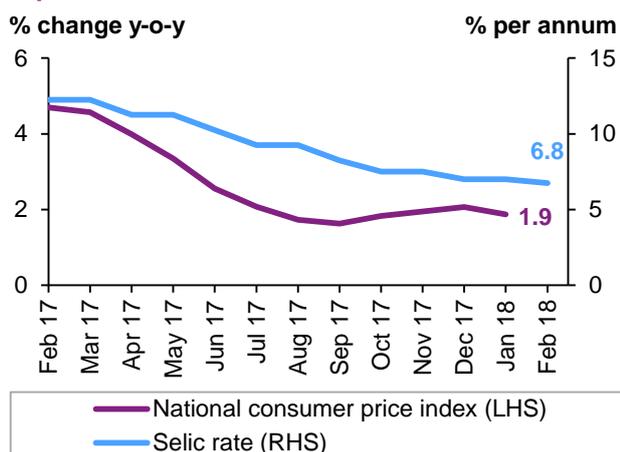
Note: \* 2017 = Estimate and 2018 = Forecast.

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

### Brazil

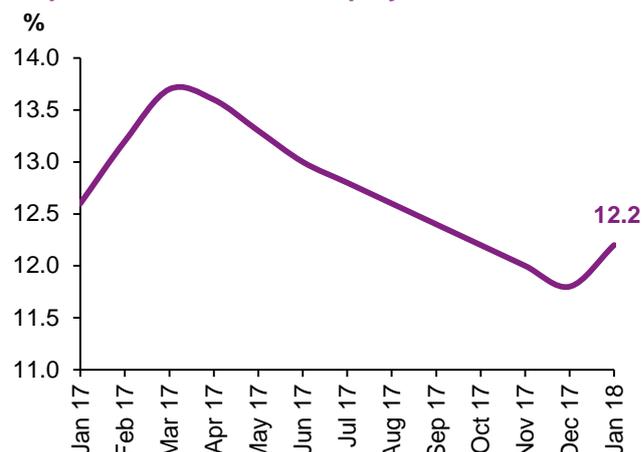
GDP grew in 4Q17 for the third quarter in a row, by 2.1% y-o-y. This brings 2017 growth to 1.0% y-o-y, signalling the first annual increase in GDP since 2014, when the economy grew by 0.5% y-o-y. Private consumption, GFCF and exports were supportive to growth. Private consumption grew by 2.6% y-o-y in 4Q17, up from a 2.2% increase in the previous quarter. GFCF posted the first increase since 1Q14, rising by 3.8% y-o-y in 4Q17. Exports went up by 9.1% y-o-y in 4Q17, after growing by 7.6% in the previous quarter. Government consumption continued falling for the sixth consecutive quarter in 4Q17, declining by 0.4% y-o-y. Brazil's imports rose by 8.1% in 4Q17, up from 5.7% in 3Q17.

Graph 3 - 10: Brazil's inflation vs. interest rate



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

Graph 3 - 11: Brazil's unemployment rate



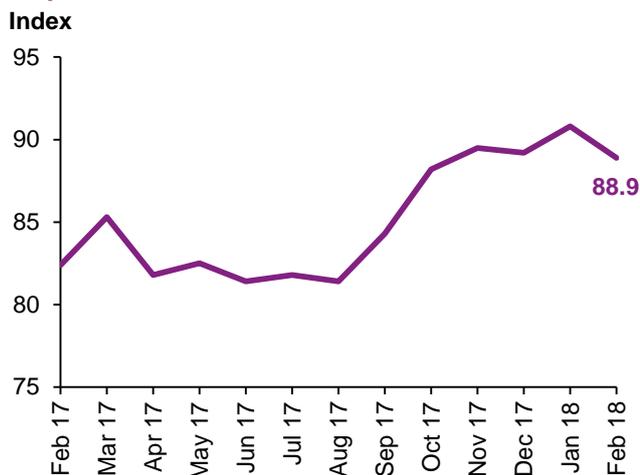
Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

**Inflation** eased to 1.9% y-o-y in January 2018, down from 2.1% and 2.0% in December and November, respectively. The central bank lowered its benchmark interest rate to 6.75% in February, after lowering it to 7.00% in December from 7.50% previously. The trend of falling unemployment rate that started in March 2017 was interrupted at the beginning of 2018, with the rate of unemployment increasing to 12.2% in January, up from 11.8% a month earlier. In February 2018, the **consumer confidence index** dropped to 88.9, after surpassing 90-points in January for the first time since October 2014, at 90.8.

In February 2017, the **manufacturing** sector continued to grow as business conditions improved, supported by the fastest jobs rise since March 2011. The IHS Markit Brazil Manufacturing PMI posted 53.2 in February, up from 51.2 in January. The survey outcome showed a robust increase in manufacturing output together with highest rates of job creation growth for nearly seven years. Inventories of finished goods stabilized in

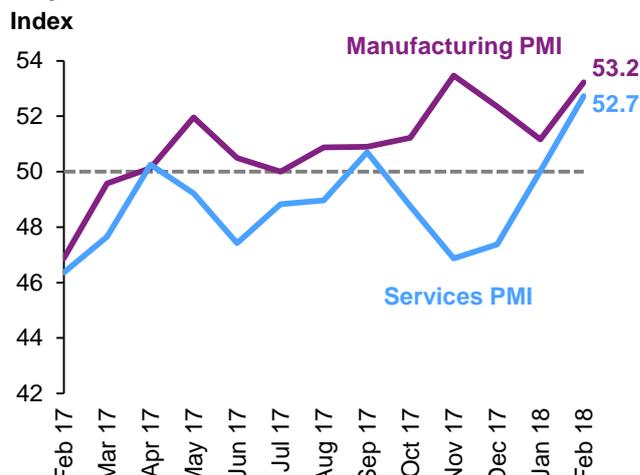
February due to improved demand and longer lead-times for suppliers. The survey also showed that improved domestic demand helped offset a moderate decline in new export sales. The IHS Markit Brazil **Services** PMI Business Activity Index rose to 52.7 in February, from 50.0 in January, highlighting the strongest rate of growth in more than five years.

**Graph 3 - 12: Brazil's consumer confidence index**



Sources: Fundação Getúlio Vargas and Haver Analytics.

**Graph 3 - 13: Brazil's IHS Markit PMIs**



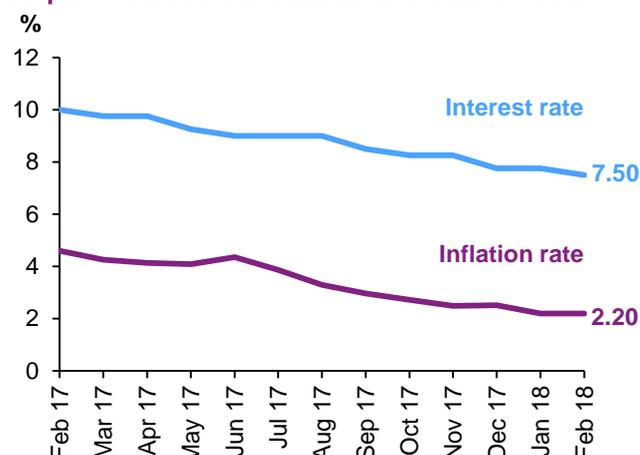
Sources: IHS Markit and Haver Analytics.

The economy of Brazil started 2018 on a positive note. The rebound in services activity, coupled with a sustained expansion in manufacturing production, led to an upturn in private sector output. This, alongside positive indications in terms of stabilizing inflation and reduced interest rates, lent support to the forecast for notably higher growth in 2018 vis-à-vis 2017. **Brazil's GDP** is estimated to have grown by 1.0% in 2017 and is expected to grow by 1.9% in 2018.

## Russia

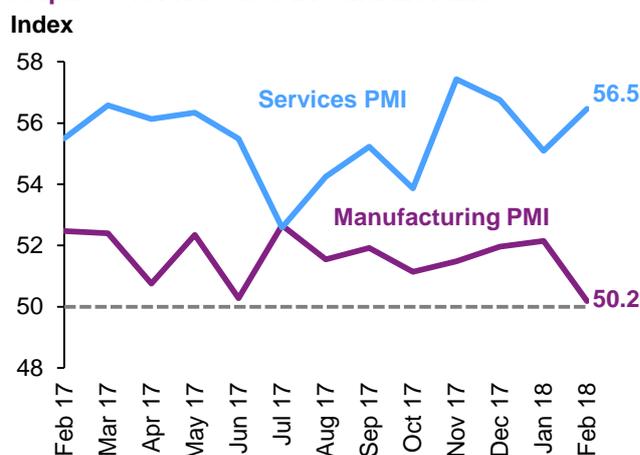
**Russia's trade surplus** rose by 16.5% y-o-y in December 2017 to \$13.7 billion, from \$11.8 billion in December 2016, as exports increased faster than imports. The trade surplus increased by nearly 28% y-o-y in 2017. **GDP** grew by 1.8% y-o-y in 3Q17, the second-highest since the beginning of 2014, as reported by *the Federal State Statistics Service*. Household consumption continued its upward trend in 3Q17, rising by 5.2% y-o-y, from 4.4% in the previous quarter, while growth in GFCF slowed to 3.9% in 3Q17, from 6.3% in 2Q17. Exports went up by 4.5% and imports accelerated by 16.3% in 3Q17. GDP posted growth of 2.5% y-o-y in 2Q17, up from 0.5% growth in the previous quarter. This represents the fastest rate of growth since 3Q12.

**Graph 3 - 14: Russia's inflation vs. interest rate**



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

**Graph 3 - 15: Russia's IHS Markit PMIs**

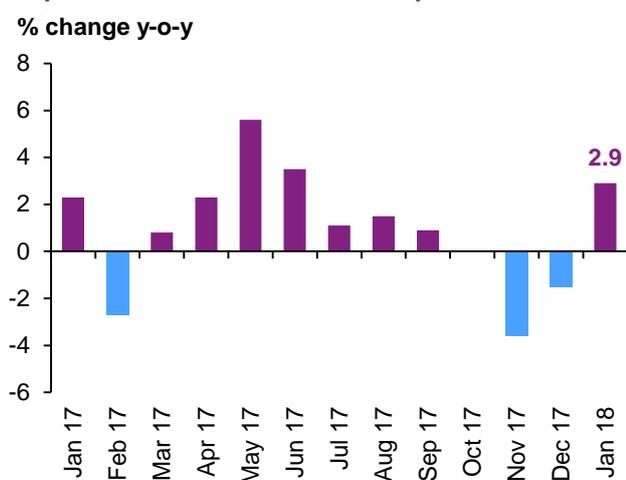


Sources: IHS Markit and Haver Analytics.

The **ruble** was largely stable in February, depreciating by less than 0.1% m-o-m versus the dollar, after appreciating by 3.1% m-o-m in January. Y-o-y, the ruble was 2.7% higher in February 2018 from its level a year earlier. **Inflation** eased from 2.5% y-o-y in December to average 2.2% y-o-y in January. The rise in crop productivity and shortage of long-term storage facilities put downward pressure on inflation in 4Q17. In February, the central bank lowered its benchmark one-week repo rate to 7.50% from December's 7.75%.

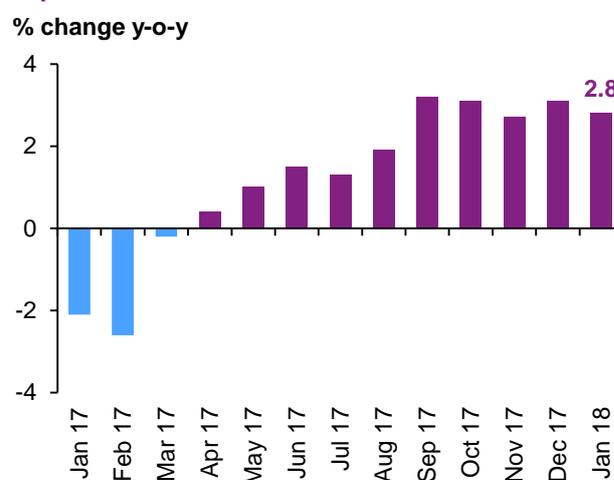
The IHS Markit Russia **manufacturing** PMI fell in February to its lowest reading since July 2016 due to the ease in the growth of production and new orders. The index barely remained in the growth territory at 50.2 in February, down from 52.1 in the previous month. The index survey signalled weaker growth in output in February, following three months of strengthening. This marks the slowest expansion in manufacturing production since October 2017. New business also showed a slower increase in February in eight months. However, new export orders received by manufacturers accelerated at the fastest pace since November 2011, signalling higher demand from abroad. Moreover, the survey revealed that employment fell in February for the second month in a row. Nevertheless, the survey indicated improved business confidence in February, reaching a five-month high due to an improved global demand outlook. **Industrial production** returned to growth in January 2018, following two months of contraction due to lower natural gas production on higher than average temperatures. Industrial production increased by 2.9% y-o-y in January. The **services** activity PMI suggests solid overall improvement in February. The index posted 56.5 in February, up from 55.1 in January. The survey highlighted that new orders growth rose to a three-month high alongside acceleration in employment to the fastest pace since December 2012. The survey also revealed that the rise in services output was the strongest in the past five years. Business confidence was reported to have hit highest level since July 2011. For the ninth month in a row, **retail sales** increased in January, up by 2.8% y-o-y, from 3.1% y-o-y in December.

**Graph 3 - 16: Russia's industrial production**



Sources: Federal State Statistics Service and Haver Analytics.

**Graph 3 - 17: Russia's retail sales**



Sources: Federal State Statistics Service and Haver Analytics.

Considering that the services sector saw a solid start in 2018, with strong expansions in output and new business alongside rising optimism among firms in the manufacturing sector toward the year-ahead outlook and the broad-base improvements noted in the economy of Russia in 2017, Russia is anticipated to grow by 1.8% y-o-y in 2018.

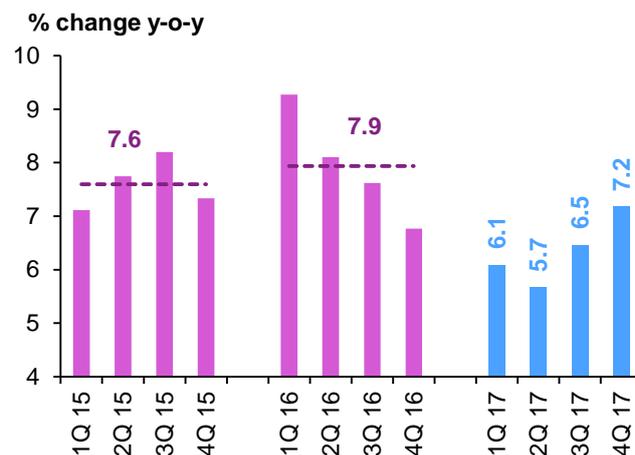
## India

India's **GDP growth** rebounds to 7.2% in the 4Q17, led by improving investment and manufacturing growth. However India's GDP growth is about 6.4% in the whole year of 2017 (0.1 pp lower than our expectation in last months). Growth was led by a strong recovery in fixed investment and manufacturing, although private consumption cooled.

**Gross fixed capital formation (GFCF)** surged 12% compared to a 6.9% rise in the previous period; stocks went up 6.9%, above 5.8% in 3Q17; and government spending expanded 6.0%, also higher than 2.9% in 3Q17. On the other hand, a slowdown was seen for private consumption (5.6% compared to 6.6% in 3Q17).

Exports also rose less (2.5% compared to 6.5%) while imports growth accelerated (8.7 % compared to 5.4 %). Gross value added, that is, GDP excluding taxes expanded 6.7%, higher than 6.2% in 3Q17. Faster growth was recorded for agriculture, forestry and fishing (4.1% compared to 2.7% in 3Q17); manufacturing (8.1% compared to 6.9%); construction (6.8% compared to 2.8%); finance, real estate and professional services (6.7% compared to 6.4%); and public administration and defence (7.2% compared to 5.6%). On the other hand, slowdowns were recorded for utilities (6.1% compared to 7.7%); and trade, hotels, transport, communication and services related to broadcasting (9.0% compared to 9.3%); and mining and quarrying fell 0.1% after a 7.1% jump in 3Q.

Graph 3 - 18: India's GDP growth



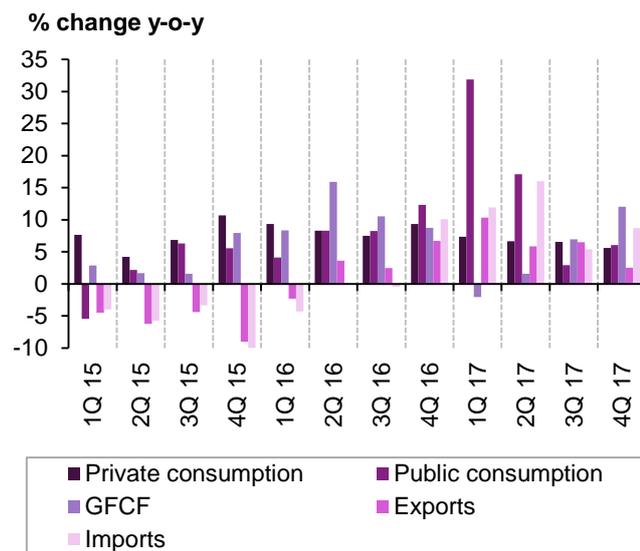
Sources: National Informatics Centre (NIC) and Haver Analytics.

It seems a supportive monetary and fiscal policies environment and a positive global conditions to incentive growth further 4Q17 and this year. In 4Q17, fastest-growing major economy driven by higher government spending and a pick-up in manufacturing and services.

The Reserve Bank of India (RBI) left the policy rate unchanged at the February 2018 policy meeting and maintained a neutral stance. Oil and commodities price play an important roles for the India's GDP growth in the year 2018.

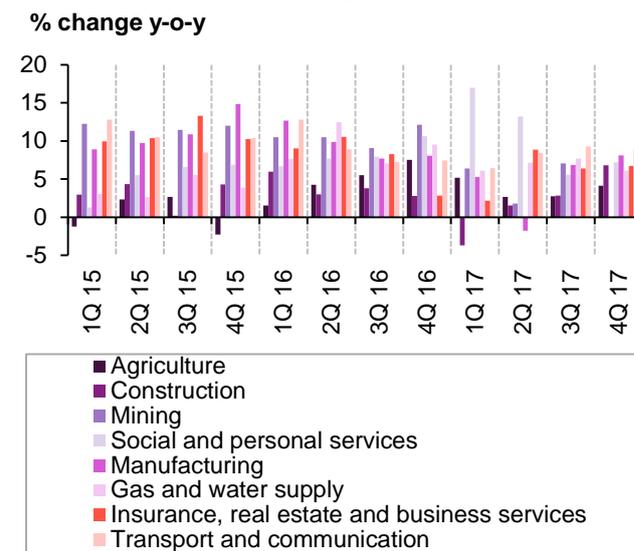
India's government is worried that higher global crude oil and commodity prices for pose a major risk to its efforts to regain growth momentum as this could hit domestic investment and push up consumer price inflation. But a sustained rise in oil prices would threaten this threshold and could even lead to a re-emergence of some of the external and FX risks that existed prior to 2014.

Graph 3 - 19: India's GDP growth by demand side



Sources: Central Statistics Office and Haver Analytics.

Graph 3 - 20: India's GDP growth by supply side



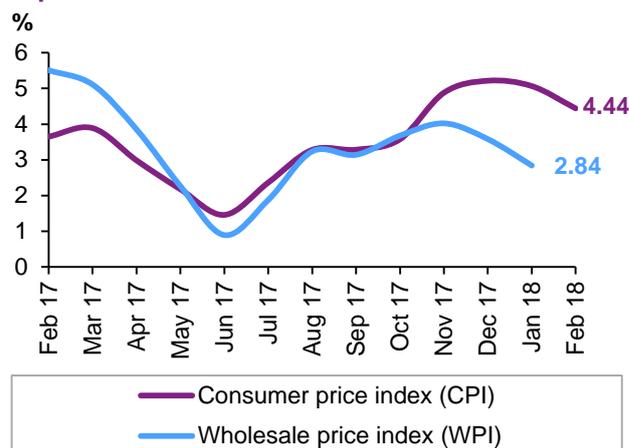
Sources: Central Statistics Office and Haver Analytics.

Bottom-up indicators clearly show that consumption has recovered from the lows affected after demonetisation, notwithstanding with some delay **Goods and Services Tax (GST)** impact in early 4Q17. Total auto sales remained strong in January. While car sales contracted for the second consecutive month (-1.2% y-o-y), this was more than offset by a strong rise in sales of SUVs, keeping passenger vehicles sales growth in positive territory (7.6% y-o-y). Meanwhile, two-wheelers (a widely followed proxy measure of India's rural demand) posted strong double-digit annual growth for the third consecutive month (albeit in part due to favourable base effects). On a three-month moving average basis, growth in passenger vehicles and two-wheeler sales remains firmly in positive territory, indicating robust consumer spending.

According to the FY18 economic survey, 4 million additional tax payers have registered since demonetisation, while the GST has resulted in a 50% increase in new taxpayer registrations. This supports our long-held view of demonetisation and GST leading to a structural improvement in India's fiscal health.

India's **CPI** inflation increased 4.44% y-o-y in February of 2018, below 5.07% in January. It is the lowest inflation rate in four months but above the 4% medium-term target of the central bank. Cost went up at a slower pace for food and beverages (3.38% from 4.58% in January). The food index alone rose 3.26%, below 4.7% in the previous month. Inflation eased for vegetables (17.57% from 26.97%) and fruits (4.8% from 6.24%). Inflation was also lower for fuel and light (6.8% from 7.73%) and housing (8.28% from 8.33%). On the other hand, prices went up slightly more for clothing and footwear (5% from 4.94%). The corresponding provisional inflation rates for rural and urban areas are 4.37% and 4.52% (5.21% and 4.93%, respectively, in January).

Graph 3 - 21: India's inflation



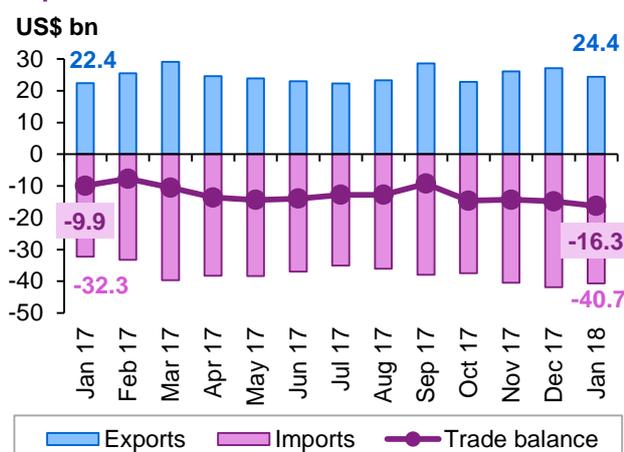
Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

India's **wholesale price index (WPI)** rose by 2.84% y-o-y in January of 2018, after a 3.58% increase in the prior month and below market expectation. It was the lowest WPI since July 2017, mainly due to softer rises in cost of food and fuel. On a monthly basis, WPI increased by 0.1%, after a 0.5% fall in December 2017.

India's government is trying to accelerate growth through higher **state spending** including INR2.1 trillion (\$32.36 billion) for recapitalisation of state banks, affected with mounting bad loans of nearly \$148 billion. It has stepped up spending on infrastructure and welfare projects to boost growth ahead of national elections in 2019. This has widened the fiscal deficit for the current fiscal year, ending in March, to 3.5% of GDP, instead of the earlier projected 3.2%.

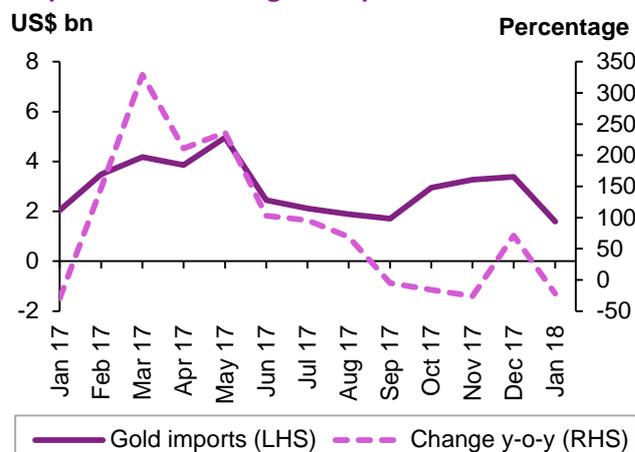
India's **investment rate** fell close to 30% of GDP in 2017 from a peak of 40% in 2011 but it seems it slightly will improve according to GST and demonetisation impact in 2Q17.

Graph 3 - 22: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3 - 23: India's gold imports



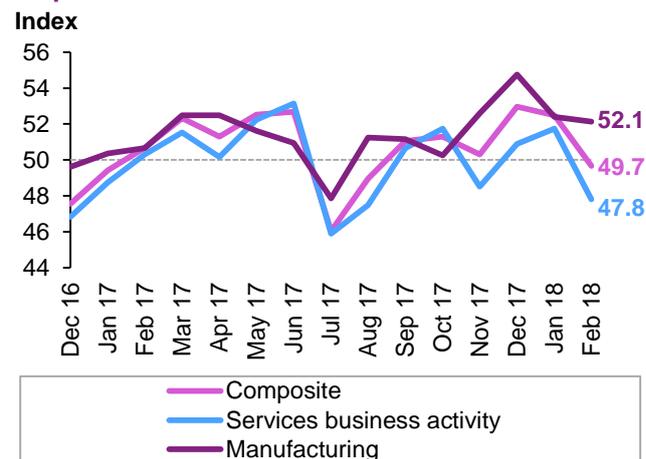
Sources: Ministry of Commerce and Industry and Haver Analytics.

Indian **trade** deficit widened to \$16.3 billion in January 2018 from a \$9.9 billion y-o-y. It is the highest trade deficit since May 2013. Merchandise imports jumped 26.1% y-o-y to \$40.68 billion as purchases rose for: petroleum, crude and products (42.6%); electronic goods (12.2%); machinery, electrical and non-electrical (29.1%); pearls, precious and semi-precious stones (55.7%); and coal, coke and briquettes (31.7%). In contrast, gold imports slumped 22.1%. Merchandise exports increased 9.1% to \$24.4 billion, boosted by sales of engineering goods (15.8%); petroleum products (39.5%); oil (42.6%); gems and jewellery (0.9%);

organic and inorganic chemicals (33.6%); and drugs and pharmaceuticals (8.6%). Considering the April 2017-January 2018 period, the country's trade gap widened to \$131.2 billion from \$88.3 billion a year earlier.

India's business conditions improve further in February. The **Nikkei India Manufacturing PMI** in India unexpectedly fell to 52.1 in February 2018 from 52.4 in the prior month and missing market consensus of 52.8. The reading pointed to the weakest expansion in manufacturing sector since October 2017, as output and new export orders increased at softer paces, while new orders rose the least in four months. Also, buying activity went up at the slowest pace since a decline in October 2017. Meantime, employment grew slightly more than in a month earlier and business sentiment remained optimistic.

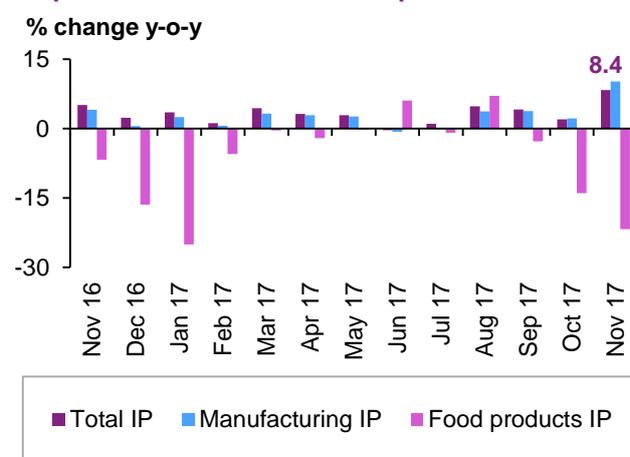
**Graph 3 - 24: India's Nikkei PMIs**



Sources: Nikkei, IHS Markit and Haver Analytics.

On the price front, cost inflation accelerated to the fastest since February 2017. Manufacturers raised their output charges as part of attempts to pass through higher cost burdens to clients. GST It was promising to see that India's manufacturing sector remained in growth territory, as the impact of July's GST continues to dissipate. The expansion was primarily driven by a marked rise in manufacturing production, whilst there were reports of improved underlying demand, with domestic and external sources driving new business gains. Cost inflation accelerated to the sharpest since February 2017, adding to expectations that inflationary risks will continue over the coming months. Furthermore, amid a stronger oil price forecast and growing fiscal risks. It seems CPI will improve more than 5% in 2018.

**Graph 3 - 25: India's industrial productions**



Sources: Central Statistical Organisation of India and Haver Analytics.

We kept unchanged India's **GDP growth** at 7.2% for 2018.

## China

**China's economy** comfortably beat the government's target of around 6.5% growth for 2017, expanding by a solid 6.6%. Last year's performance was bolstered by the performances of export amid a surge in global demand for semiconductors and other electronic equipment. By contrast, growth in fixed asset investment continued to slip, slowing to 7.2% last year, down from 8.1% in 2016. Growing other leading sectors such as retail sales edged down slightly to 10.2%, while industrial production achieved up a 6.6% expansion.

Growth in China's manufacturing sector in February cooled to the weakest in over 1½ years, raising concerns of a sharper-than-expected slowdown in the world's second biggest economy this year as regulators tighten the screws on financial risks.

The weakness was driven by disruption to business activity due to the Lunar New Year holidays and curbs to factory output from tougher pollution rules, but there are worries of a bigger loss in momentum. "Although a recovery looks possible in the short-run as the anti-pollution campaign winds down, the risk is still that the economy fares worse this year than is generally expected."

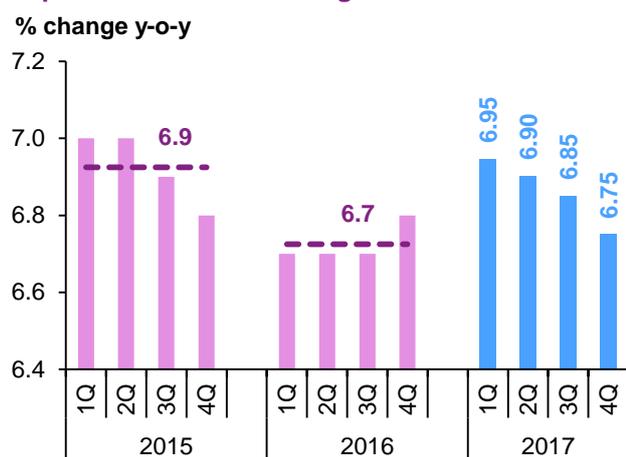
Globally, solid demand has kept many export-reliant economies humming over the past year or so, though a move towards tighter policy in advanced nations could cut into growth this year.

China will maintain cautious monetary policy and reasonable loan growth in 2018. In a new year's message, Governor Zhou said that in 2017 the People's Bank of China (PBoC) had strengthened macroeconomic controls, deepened financial reform, prevented systemic financial risks and promoted finance to serve the real economy. It seems the central bank to keep policy slightly tight in 2018 even as that has lifted market rates to multiyear highs – to support a broader deleveraging drive to contain risks in the world's second-largest economy.

China will “fight the critical battle of addressing major risks with the priority on managing and preventing financial risk” over the next three years.

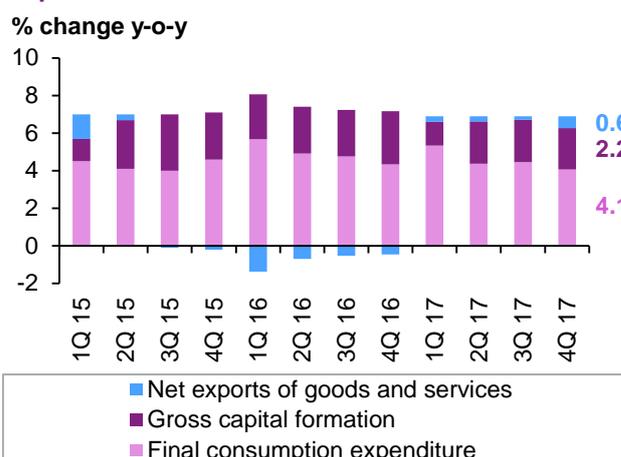
China cuts budget deficit ratio for first time since 2012. China's first reduction in its budget deficit target in six years does not suggest less government spending this year or signal an intensified effort to reduce central government debt. China's cut the budget deficit target to 2.6% of GDP from 3.0% in 2017. Beijing has vowed to control financial risks and has tightened controls on new local government debt following a borrowing binge after the global financial crisis.

**Graph 3 - 26: China's GDP growth**



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

**Graph 3 - 27: China's GDP breakdown**

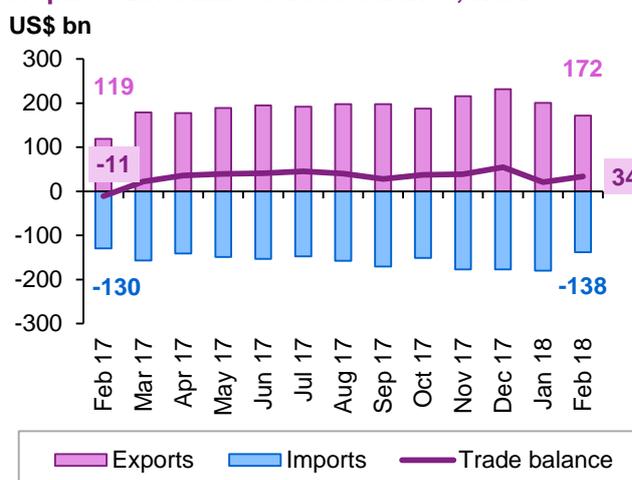


Sources: China National Bureau of Statistics and Haver Analytics.

China's **trade** unexpectedly reported a trade surplus of \$33.74 billion in February of 2018, compared to a \$0.1 billion gap in the same month a year earlier while markets estimated a \$2.3 billion deficit.

**Exports** jumped by 44.5% y-o-y to \$171.6 billion while imports rose 6.3%, or \$137.9 billion. The trade surplus with the US, China's largest export market, narrowed slightly to \$21.0 billion from \$21.9 billion in January. Trade in January and February can be distorted by the Lunar New Year holiday, with business slowing down weeks ahead of time and companies scaling back operations. This year, the holiday fell on February 16th. Considering January-February combined, the trade surplus came in at \$54.3 billion, an increase of 43.6% from January-February 2017. Exports in the period grew by 24.4%, much higher than a 4% growth y-o-y. **Imports** advanced 21.7%.

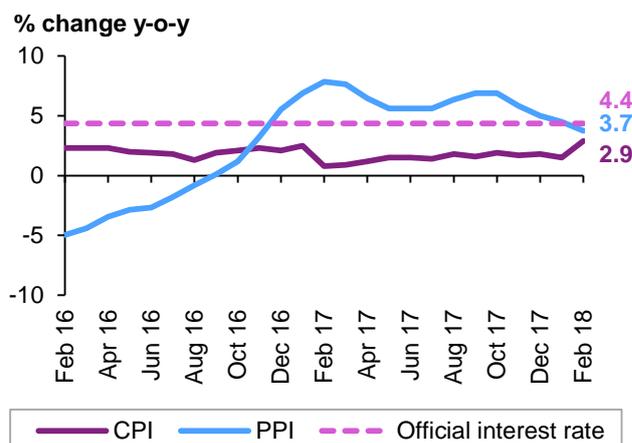
**Graph 3 - 28: Chinese trade balance, NSA**



Sources: China Customs and Haver Analytics.

China's **CPI** inflation rose 2.9% y-o-y in February of 2018, after a 1.5% rise in the prior month and above market consensus. It was the highest inflation rate since November 2013, as cost of food rebounded sharply and cost non-food rose faster. On a monthly basis, consumer prices increased by 1.2%, much faster than a 0.6% gain in the preceding month and above estimates of a 0.8% rise. It was the highest monthly figure since February 2016.

Graph 3 - 29: China's CPI and PPI

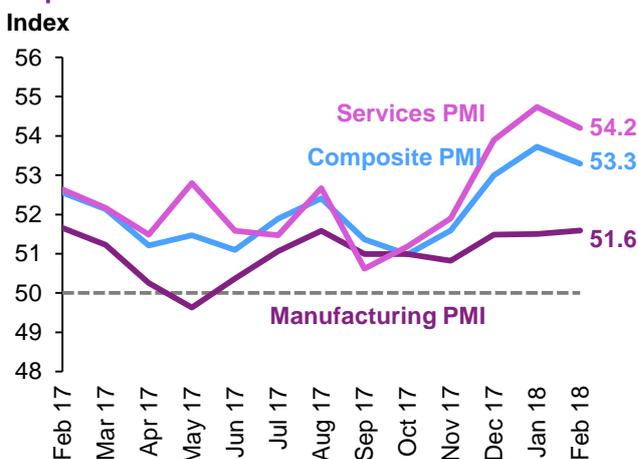


Sources: China Index Academy, China National Bureau of Statistics, Soufan and Haver Analytics.

China's **producer price index (PPI)** increased by 4.3 % y-o-y in January of 2018, compared to a 4.9 % in November. It was the 17th straight month of rise in producer prices but the smallest since November 2016. Cost rose less for means of production (5.7 % from 6.4 % in December), namely extraction (6.8 %), raw materials (7.3 %) and processing (4.9 %). Also, prices rose at a softer pace for consumer goods (0.3 % from 0.5 %) namely daily use goods (1.4%); clothing (0.8 %), while food production was flat. At the same time, prices of consumer durable goods declined at a faster 0.3 % (from -0.2 % in the prior month). On a monthly basis, producer prices rose 0.3 %, following a 0.8 % gain in December 2017.

The **Caixin Manufacturing PMI** in China edged up to 51.6 in February 2018 from 51.5 in the prior month and above market consensus of 51.3. It was the highest reading since August 2017, as new orders grew slightly faster, sentiment hit its highest in 11 months and output continued to rise. Also, buying activity increased modestly. At the same time, firms continued to shed staff. On the price front, the rate of input price inflation eased to the lowest in seven months, but remained much stronger than that of output charges. "For now, the durability of the Chinese economy will persist.

Graph 3 - 30: China's Caixin PMIs



Sources: Caixin, IHS Markit and Haver Analytics.

The official National Bureau of Statistics (NBS) Manufacturing PMI in China fell to 50.3 in February 2018, down 1 point from January and the largest fall in more than six years. The reading came below market estimates of 51.2 and was the lowest since

a contraction in July 2016 as Lunar New Year holiday, which this year fell entirely in February disrupted the production. Slower growth was reported for outputs (50.7 in February, from 53.5 in January) as the Lunar New Year holidays disrupted factory activities.

**Total new orders** also expanded much slower in February., new orders (51.0 from 52.6) and buying activity (50.8 from 52.9). New export orders declined for the second straight month (49.0 from 49.5) and employment contracted for the eleventh month in a row (48.1 from 48.3) also Raw material input prices fell for the second consecutive month to the lowest since July 2017, indicating cost pressure from price rises on manufacturing firms is easing.

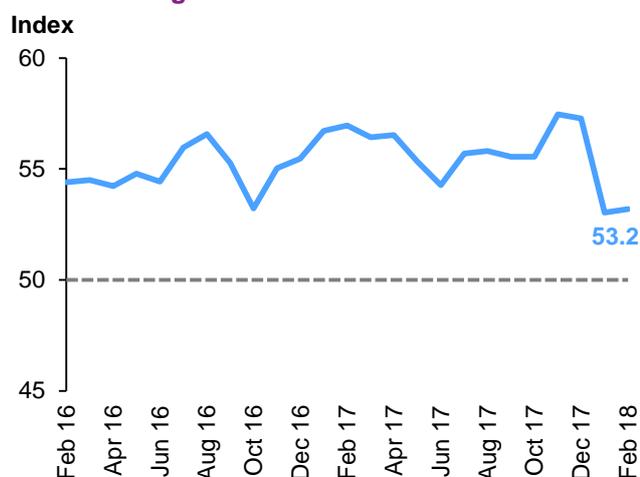
The **official non-manufacturing PMI** in China dropped to 50.3 in February of 2018 from 51.3 in the preceding month and below market consensus of 51.2. It was the weakest pace of expansion in services activity since October 2017, as new orders (50.5 from 51.9 in January) rose the least in ten months and business sentiment softened (61.2 from 61.7) while new export orders (45.9 from 50.1 from) declined for the first time since September 2017. Also, employment (49.6 from 49.4) and orders in hand (43.8 from 44.4 from 43.8) continued to fall. Meantime, suppliers' delivery time shortened markedly (50.7 from 51.3).

China's **GDP growth** expectation kept unchanged at 6.5% for 2018.

## OPEC Member Countries

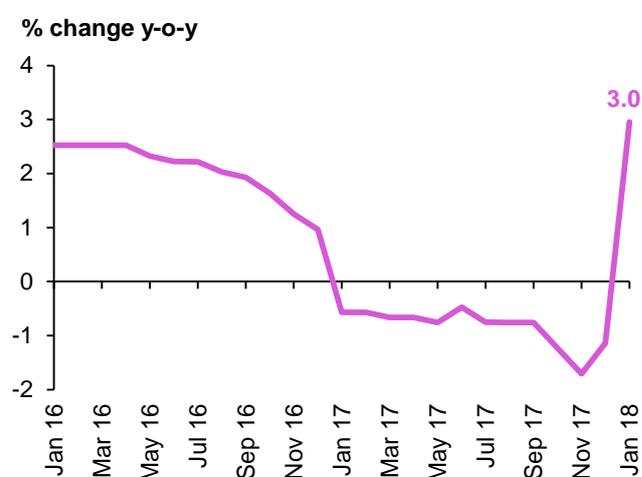
In **Saudi Arabia**, the Emirates NBD Saudi Arabia PMI rose to 53.2 in February, up from 53.0 in the previous month, signalling an overall improvement in business conditions. In the survey, firms in the non-oil private sector revealed more optimism about the coming year prospects due to winning new projects and better growth outlook. This overall level of optimism detected in February is the highest since April 2014. The somewhat softer domestic demand in the last quarter of 2017 have prompted firms to lower selling prices in February by unprecedented pace in the survey record since August 2009, aiming at encouraging client demand. The survey also showed that slowing foreign demand led new export orders to fall in February. On another price-related note, the survey demonstrated a drop in input-price inflation to three-month low during February's survey period. Input prices even fell below the long-term average. Employment in the country's non-oil private sector continued last month by a rate higher than the past two years average. This marks the 47th consecutive month of job creation in Saudi Arabia. The non-oil and gas sector in Saudi Arabia grew by 1.0% y-o-y in 2017, faster than 2016's 0.2%. Consumer price inflation increased in January by nearly 3.0% y-o-y, following 12 months of decline, which is largely connected to fuel subsidy cuts and VAT implementation in January. Prices of Tobacco and beverages notable increased in January, while those of housing, water, electricity, gas and other fuels slightly increased.

**Graph 3 - 31: Saudi Arabia's Emirates NBD manufacturing PMI**



Sources: Emirates NBD, IHS Markit and Haver Analytics.

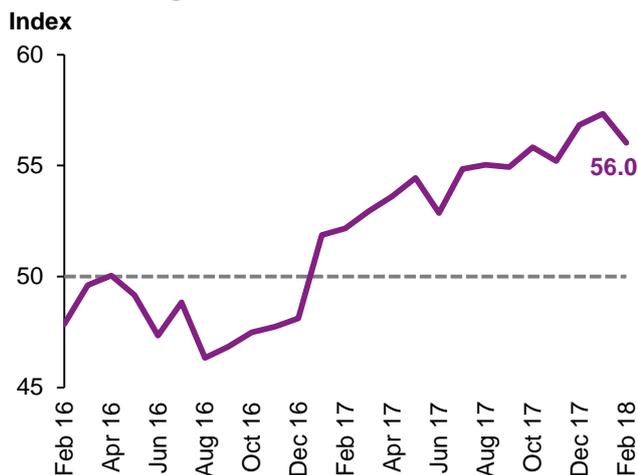
**Graph 3 - 32: Saudi Arabia's inflation**



Sources: General Authority for Statistics and Haver Analytics.

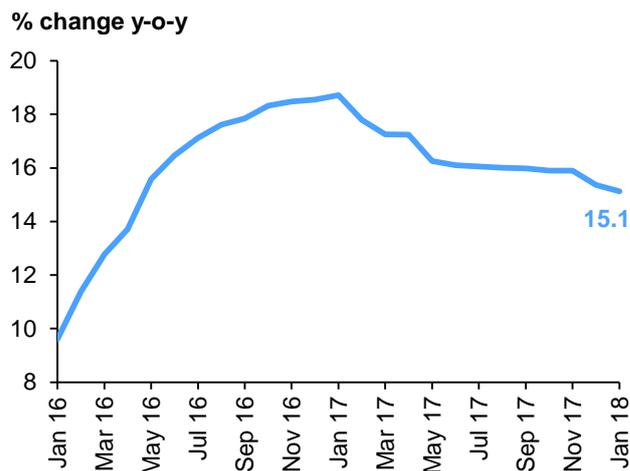
In **Nigeria**, GDP grew by 1.9% y-o-y in 4Q17, signalling highest rate of growth since 4Q15. This brings the full 2017 growth to 0.8% y-o-y. The increase in consumer price inflation continued to ease in January, albeit still larger than 15%. Inflation posted 15.1% y-o-y in January, down from 15.4% a month earlier. Price inflation of food and beverages eased from 19.4% y-o-y in December, to 18.9% in January. Clothing prices also showed relatively slower pace of inflation at 14.8% y-o-y in January, vis-à-vis 15.0% in the previous month. The Stanbic IBTC Bank Nigeria PMI registered 56.0 in February, from 57.3 in January, highlighting an ongoing improvement in the country's non-oil private sector. The surveyed firms reported sharp growth in both output and new business in the context of historical data. Some of the surveyed firms reported higher demand from the domestic market. The survey also showed a strong rise in the sector's job creation in February at fastest pace since November 2015, in order to meet rising output requirements. Employments in the sector were increasing since May 2016. Input-buying activities also increased as a result of rising output requirements. The pace of increase recorded in February's survey period was the highest since the beginning of the survey in January 2014.

**Graph 3 - 33: Nigeria's Stanbic IBTC Bank manufacturing PMI**



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

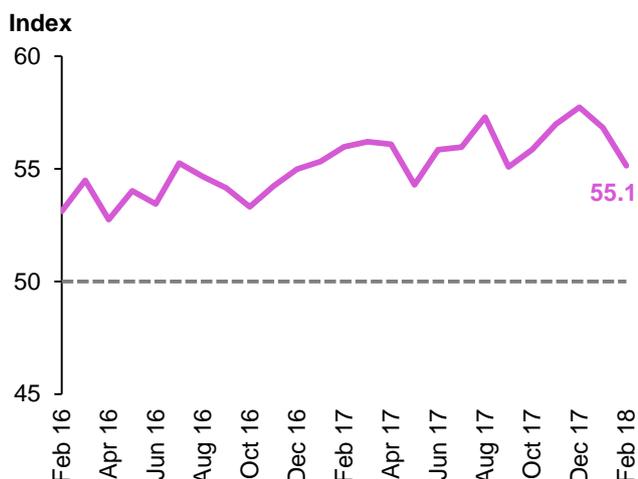
**Graph 3 - 34: Nigeria's inflation**



Sources: National Bureau of Statistics and Haver Analytics.

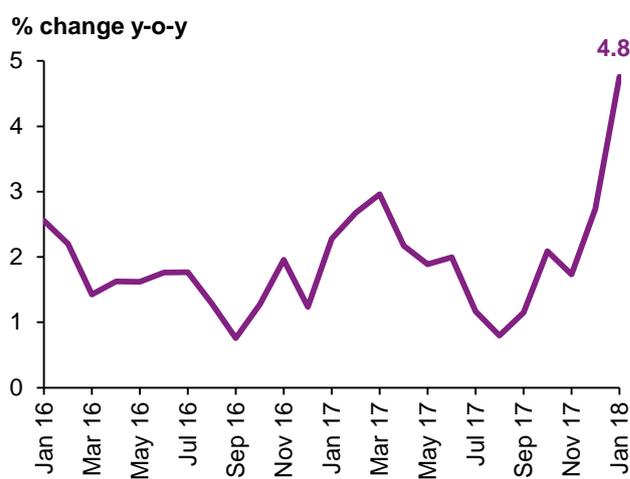
Inflation in the **United Arab Emirates** increased in January by fastest pace since August 2015, reaching 4.7% y-o-y, up from 2.7% in the previous month. For the whole 2017, the average of consumer price inflation stood at 2.0% over 2016. Prices of food and soft drink, textiles and clothing had the biggest rise in January. The former increased by 7.2% y-o-y in January, vis-à-vis 3.2% in December, whereas the latter went up by 8.8% y-o-y in January, from December's 1.0%. Expansion in the country's non-oil private sector continued in February 2018, albeit at softer pace in five months, according to the Emirates NBD UAE PMI. The index stood at 55.1 in February, from 56.8 a month earlier. The survey showed that new orders inflow remained robust in February, whereas output growth markedly slowed. Yet, it is still higher than the full series average of 54.6. Surveyed firms reported a softening output growth to a nine-month low last month. Also new orders from abroad continued to rise for the third consecutive month in February. The employment element of the survey suggested another month of rising employment, extending the streak of job creation to 22 consecutive months.

**Graph 3 - 35: UAE's Emirates NBD manufacturing PMIs**



Sources: Emirates NBD, IHS Markit and Haver Analytics.

**Graph 3 - 36: UAE's inflation**



Sources: General Authority for Statistics and Haver Analytics.

## Other Asia

In **Indonesia**, trade balance slipped into deficit in January 2018 at around \$0.7 billion, from \$1.4 billion trade surplus in January 2017. The reported increase in imports led to this trade deficit for the second month in a row. Imports notably rose by just more than 26%, while exports went up by 8.5% y-o-y. In the same time when the increase in oil and gas imports fell from 50.6% y-o-y in December to 17.4% in January, non-oil and gas imports went higher by 28.1% y-o-y in January vis-à-vis 13.1% in December. The country's manufacturing sector business conditions improved in February, reaching its best in 20 months. Nikkei Indonesia Manufacturing PMI registered 51.4 in February, up from 49.9 in January on the back of fastest pace of acceleration in production since mid-2016, a renewed upturn in new orders, and the first increase in employment in 17 months.

The main drivers of faster GDP growth in the final quarter of last year were GFCF, lower imports and the increase in government consumption. GDP grew by 5.1% y-o-y in 2017 which is the highest annual growth since 2013. In 4Q17, GDP grew by 5.2% y-o-y, up from 5.1% in 3Q17. In 4Q17, GFCF posted the highest growth since 1Q13, at 7.3% y-o-y, up from 7.1% y-o-y in 3Q17. Imports growth slowed from 3Q17's 15.5% y-o-y to 11.8% y-o-y in 4Q17. Government consumption went up from 3.5% y-o-y in 3Q17 to 3.8% y-o-y in 4Q17. Private consumption, on the other hand, was flat at 5.0% y-o-y growth in 3Q17 and 4Q17. Indonesia's exports rose by 8.5% y-o-y in 4Q17, notable slower than 3Q17's 17.0%.

On the production side, agriculture, mining, manufacturing, electricity, wholesale and retail trade, transportation, hotels, financial services and insurance, business services, and health services and social activities all have had slower growth in 4Q17 vis-à-vis 3Q17. Water supply, construction, information and communication, real estate, public administration, and education services had a faster y-o-y growth in 4Q17 over 3Q17.

## Africa

In **South Africa**, GDP grew by 2.0% y-o-y in 4Q17, signalling fastest growth since 1Q15. Higher expansion in private consumption expenditure was the main driver of better GDP growth in 4Q17. Private consumption accelerated by 2.9% y-o-y in 4Q17, up from 2.7% in 3Q17, whereas public consumption increased by 0.4% y-o-y in 4Q17, from 0.5% in the previous quarter. GFCF slipped into contraction in the last quarter of 2017 by 0.4% y-o-y, after expanding by 1.1% y-o-y in 3Q17. Imports grew faster than exports in 4Q17. Imports grew by 5.4% y-o-y in 4Q17 vs 4.0% rise in exports. This led to negative net exports of 7.96 billion rand in 4Q17. For the full 2017, GDP grew by 1.2% over 2016. In nominal terms, trade deficit hit a record high in January 2018 at around 28 billion rand.

In **Egypt**, the pound appreciated by 0.2% m-o-m in February 2018, following the 0.6% appreciation vs the dollar in January 2018. The pound lost nearly 95% of its value to the dollar during November 2016 through April 2017. Inflation slowed to 17.1% y-o-y in January 2018, down from 22.3% y-o-y in December and after falling to below 30% y-o-y increase for the first time in November posting 26.7% y-o-y. This is the lowest rate of inflation since October 2016. Inflation hit record high of 33% y-o-y increase in July 2017 on the back of cuts of fuel and energy subsidies. After falling back into recession in December, Egypt's non-oil private sector remained just below the 50-point line in for the second month in February, according to the Emirates NBD Egypt PMI. The index fractionally fell to 49.7 in February, from 49.9 in January despite the renewed acceleration in new orders inflow and positive business confidence. However, output from the country's non-oil private sector shrank last month after being stable in January. Early signals on improved domestic and export markets helped reduce the job shedding in February to lowest level since June 2015.

## Latin America

In **Colombia**, GDP posted growth of 1.6% y-o-y in 4Q17, from 2.2% in 3Q17. Growth for 2017 stands now at 1.8% y-o-y. The country's trade surplus reached \$0.3 billion in December 2017, from a deficit of \$0.6 billion in December 2016. This marks the first trade surplus since May 2014. Exports went up by around 13.5% y-o-y to nearly \$4.0 billion thanks to the increase in exports of mining products which rose by almost 50% y-o-y. Imports, on the other hand, dropped by 10% y-o-y to \$3.6 billion due to the fall in manufactured product imports by more than 8%, especially vehicles and other transport equipment with fell by 25.5% y-o-y and 78.8%, respectively. The US stood at Colombia's top export destination in December 2017, followed by Mexico. Main sources of imports were the US and China.

## Transition region

GDP growth in **Czech Republic** increased to 5.1% y-o-y in 4Q17, its fastest since 3Q15. For 2017, the economy grew by 4.3% y-o-y. While the expansion of government consumption notably slowed to 0.8% y-o-y in 4Q17, from 1.2% in 3Q17; household consumption growth accelerated to 4.5% y-o-y in 4Q17, up from 4.1% in 3Q17. GFCF also expanded by higher rate in 4Q17 of 7.3% y-o-y vis-à-vis 6.3% in the previous quarter. Both of exports and imports increased by close pace. Exports increased by 7.6% y-o-y and imports by 8.1% y-o-y in 4Q17. The country's manufacturing sector continued growing in February, according to IHS Markit Czech Republic Manufacturing PMI. The index posted 58.8 in February, from 59.8 a month earlier. Surveyed firms reported production increase by second fastest pace in nearly seven years.

## World Oil Demand

World oil demand grew by 1.62 mb/d in 2017, up by around 23 tb/d from the previous month's assessment, to average 97.04 mb/d.

Oil demand growth in the OECD region was revised higher by 5 tb/d in 2017, due to better-than-expected data in OECD Asia Pacific during 4Q17, primarily in Japan and Australia. Improvements in middle distillate requirements in 4Q17 in Japan and Australia have moderated the usual oil demand declines in Japan, while strong mining activities in Australia supported additional demand for diesel oil, leading to an upward adjustment of 20 tb/d in 4Q17.

In the non-OECD region, oil demand growth was also revised higher by 18 tb/d in 2017, mainly reflecting positive momentum in China and Other Asia. In China, an upward revision of 70 tb/d in 4Q17 resulted from better-than-expected demand in the petrochemical and transportation sectors in the country. In Other Asia, oil demand growth was adjusted higher by 30 tb/d in 4Q17, mainly reflecting better-than-expected oil demand developments in India, Indonesia and Thailand.

In 2018, world oil demand is anticipated to rise by 1.60 mb/d to average 98.63 mb/d, marginally higher than last month's assessment. Most of the oil demand growth is anticipated to originate from Other Asia, led by China, followed by India and then by OECD Americas. Similar to 2017, the OECD region saw an upward revision by 20 tb/d in 1Q18 amid solid initial data for OECD Americas. Additionally, in the non-OECD region, oil demand growth projections were adjusted higher by 20 tb/d in 1Q18 compared with last month's report, mainly reflecting the solid pace of growth for India in January 2018.

## World oil demand in 2017-2018

Table 4 - 1: World oil demand in 2017\*, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16 Growth	%
Americas	24.74	24.62	25.03	25.11	25.15	24.98	0.24	0.96
of which US	20.00	19.94	20.32	20.29	20.38	20.23	0.23	1.16
Europe	14.04	13.83	14.17	14.66	14.28	14.23	0.20	1.40
Asia Pacific	8.12	8.60	7.72	7.92	8.41	8.16	0.04	0.51
<b>Total OECD</b>	<b>46.90</b>	<b>47.04</b>	<b>46.92</b>	<b>47.69</b>	<b>47.84</b>	<b>47.37</b>	<b>0.48</b>	<b>1.01</b>
Other Asia	12.85	12.87	13.30	12.95	13.50	13.15	0.30	2.33
of which India	4.39	4.43	4.42	4.20	4.81	4.47	0.08	1.80
Latin America	6.47	6.27	6.51	6.82	6.47	6.52	0.05	0.76
Middle East	7.97	8.11	7.91	8.42	7.76	8.05	0.08	0.98
Africa	4.10	4.25	4.19	4.14	4.24	4.20	0.11	2.63
<b>Total DCs</b>	<b>31.39</b>	<b>31.49</b>	<b>31.90</b>	<b>32.33</b>	<b>31.97</b>	<b>31.93</b>	<b>0.54</b>	<b>1.71</b>
FSU	4.63	4.56	4.39	4.77	5.10	4.70	0.07	1.58
Other Europe	0.70	0.71	0.67	0.70	0.79	0.72	0.02	3.15
China	11.80	11.88	12.40	12.30	12.68	12.31	0.51	4.35
<b>Total "Other regions"</b>	<b>17.13</b>	<b>17.14</b>	<b>17.46</b>	<b>17.77</b>	<b>18.57</b>	<b>17.74</b>	<b>0.61</b>	<b>3.55</b>
<b>Total world</b>	<b>95.42</b>	<b>95.67</b>	<b>96.28</b>	<b>97.79</b>	<b>98.38</b>	<b>97.04</b>	<b>1.62</b>	<b>1.70</b>
Previous estimate	95.42	95.67	96.28	97.79	98.29	97.01	1.60	1.67
Revision	0.00	0.00	0.00	0.00	0.09	0.02	0.02	0.02

Note: \* 2017 = Estimate.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

**Table 4 - 2: World oil demand in 2018\*, mb/d**

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17	
							Growth	%
Americas	24.98	24.83	25.24	25.36	25.41	25.21	0.23	0.93
of which US	20.23	20.11	20.54	20.53	20.58	20.44	0.21	1.05
Europe	14.23	13.95	14.26	14.76	14.36	14.33	0.10	0.69
Asia Pacific	8.16	8.60	7.73	7.89	8.42	8.16	0.00	-0.02
<b>Total OECD</b>	<b>47.37</b>	<b>47.38</b>	<b>47.22</b>	<b>48.01</b>	<b>48.19</b>	<b>47.70</b>	<b>0.33</b>	<b>0.69</b>
Other Asia	13.15	13.26	13.69	13.33	13.87	13.54	0.38	2.92
of which India	4.47	4.67	4.66	4.32	4.97	4.65	0.19	4.22
Latin America	6.52	6.37	6.60	6.92	6.57	6.61	0.10	1.46
Middle East	8.05	8.20	7.99	8.53	7.86	8.14	0.10	1.18
Africa	4.20	4.39	4.33	4.27	4.38	4.34	0.14	3.28
<b>Total DCs</b>	<b>31.93</b>	<b>32.21</b>	<b>32.61</b>	<b>33.04</b>	<b>32.69</b>	<b>32.64</b>	<b>0.71</b>	<b>2.23</b>
FSU	4.70	4.66	4.50	4.89	5.21	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	12.31	12.28	12.82	12.71	13.10	12.73	0.42	3.37
<b>Total "Other regions"</b>	<b>17.74</b>	<b>17.68</b>	<b>18.01</b>	<b>18.33</b>	<b>19.13</b>	<b>18.29</b>	<b>0.56</b>	<b>3.13</b>
<b>Total world</b>	<b>97.04</b>	<b>97.27</b>	<b>97.85</b>	<b>99.38</b>	<b>100.01</b>	<b>98.63</b>	<b>1.60</b>	<b>1.64</b>
Previous estimate	97.01	97.23	97.85	99.38	99.92	98.60	1.59	1.64
Revision	0.02	0.04	0.00	0.00	0.09	0.03	0.01	0.01

Note: \*2018 = Forecast.

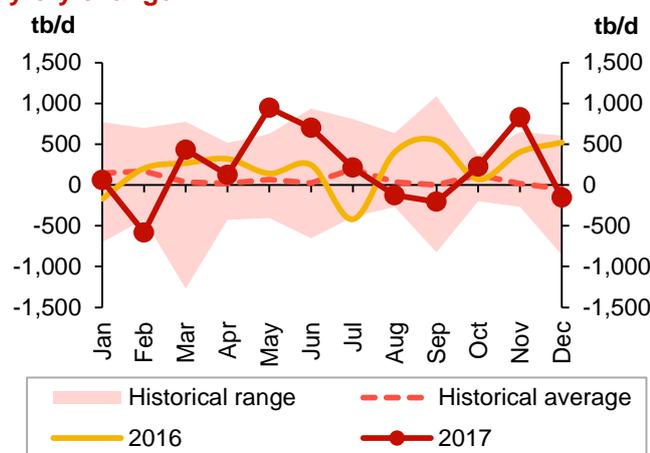
Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

## OECD

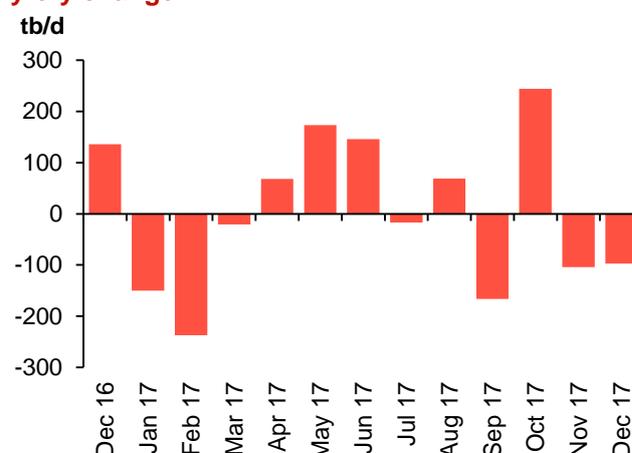
### OECD Americas

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



Sources: National, Joint Organisations Data Initiative and OPEC Secretariat.

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



Source: US Energy Information Administration.

## US

The most recently available monthly **US oil demand** data relates to December 2017 implying y-o-y gains in oil requirements of around 0.1 mb/d, or 0.6%, y-o-y, following stronger increases in October and November 2017 and an overall robust 4Q17. Monthly December 2017 data contradicted more positive expectations, which were based on preliminary weekly data and implied y-o-y growth of around 0.5 mb/d.

December 2017 oil demand growth was again largely attributed to transportation and petrochemical demand and to some extent to colder weather compared with the same month in 2016. Gasoline demand declined once more by 97 tb/d, or 1.0%, y-o-y, for the second month in a row, in line with an increasing retail price environment and in combination with improving efficiencies and despite slightly increasing mileage by 0.7% y-o-y. These developments in gasoline requirements occurred with some weakening in auto sales. Following the peak during 2014, total light vehicle sales seem to have been on the decline in 2015, 2016 and 2017. Total light vehicle retail sales shed 1.7% in December 2017 with total units sold pegged at 17.9 million. During December 2017, diesel oil demand declined by more than 0.1 mb/d or 2.7% y-o-y, mainly as a result of a high base line of comparison and despite colder-than-expected weather, as compared to the previous year and steady industrial activities in line with the expansion of the overall economy.

Jet fuel and residual fuel oil requirements also showed gains y-o-y in December 2017, while LPG demand remained robust for another month, adding as much as 0.27 mb/d, or 9.7%, y-o-y. The 2017 overall picture shows solidly growing US oil demand, which is dominated by rising LPG, jet fuel and residual fuel oil requirements in combination with slightly declining gasoline demand. Preliminary weekly data implies robustly growing January and February 2018 oil demand, with gains in all main petroleum categories, notably LPG, jet fuel, gasoline, and diesel oil requirements, also in line with the economy in the country. The development of 2018 US oil demand remains strongly dependent on the US economy and road transportation fuel retail prices, with risks remaining balanced to the upside and downside compared with last month.

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

	<b>Dec 17</b>	<b>Dec 16</b>	<b>Change 2017/16</b>	
			<b>tb/d</b>	<b>%</b>
LPG	3,045	2,775	270	9.7
Naphtha	224	226	-2	-0.9
Gasoline	9,196	9,293	-97	-1.0
Jet/kerosene	1,756	1,674	82	4.9
Diesel oil	3,934	4,043	-109	-2.7
Fuel oil	389	306	83	27.1
Other products	1,829	1,944	-114	-5.9
<b>Total</b>	<b>20,373</b>	<b>20,261</b>	<b>113</b>	<b>0.6</b>

Sources: US Energy Information Administration and OPEC Secretariat.

In 2017, **OECD Americas oil demand** grew by 0.24 mb/d compared with 2016. 2018 OECD Americas oil demand is projected to remain strong, growing by 0.23 mb/d compared with 2017.

## Mexico

In **Mexico**, January 2018 oil demand decreased for another month, down by 0.23 mb/d, or 11.0%, y-o-y, on the back of reduced demand in diesel oil and residual fuel oil, as a result of substitution with other energy commodities and a weaker economy. This, however, was partly offset by growing y-o-y gasoline requirements, for the first month since the end of 2016.

For the whole of 2017 oil demand in Mexico declined, with the majority of main product categories being in the negative – the only exception being gasoline.

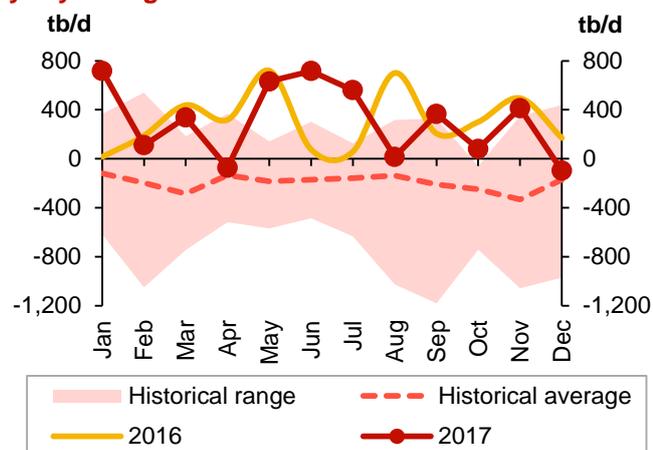
## Canada

Latest December 2017 **Canadian** data showed slightly falling oil requirements by 27 tb/d y-o-y, notably for gasoline and naphtha, while jet/kerosene and diesel oil demand remained in the positive y-o-y.

## OECD Europe

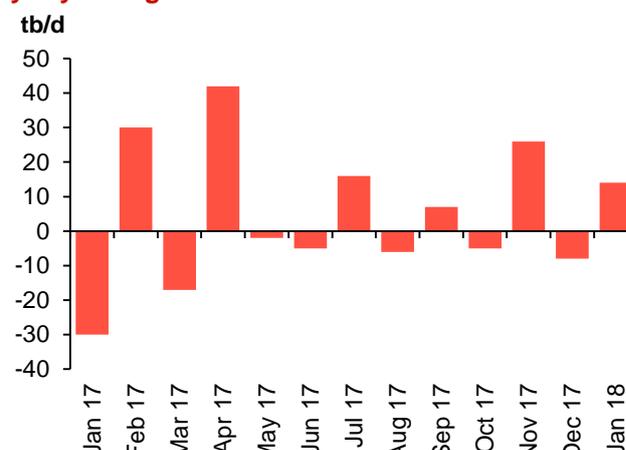
Latest and partly preliminary January 2018 data for the **European Big 4** oil consuming countries – Germany, France Italy and the UK – shows a drop in oil demand by 0.24 mb/d, or 3.4%, y-o-y. Substantially warmer weather, in combination with high historical baseline effects, led to losses in requirements for most petroleum product categories. Following solid gains in demand in the previous two years, 2017 closed with an increase for the whole region, by 0.20 mb/d, or 1.4%, y-o-y, with gains being largest during the first three quarters of the year and in line with improvements in the overall economy of the region, solid gains of 3.4% in auto sales, and the continuing low oil price environment. Diesel, jet fuel, naphtha and, to some extent, also gasoline usage in road transportation led the growth [for most of the year?], while demand for all other petroleum categories was healthy.

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



Sources: National, Joint Organisations Data Initiative and OPEC Secretariat.

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



Sources: Joint Organisations Data Initiative, UK Department of Energy Climate and Change and OPEC Secretariat.

Nevertheless, there is some uncertainty for 2018, as there are a number of factors pointing in opposite directions. The expected improvements in the economy and the current low oil price environment would be in support of 2018 oil demand, while unsolved budget deficits in some countries and fuel taxation pose downside risks. Nevertheless, the current oil demand picture is in line with leading indicators, such as increasing industrial production and rising car sales – the latter having increased for more than four years; in fact, passenger car sales grew again in January 2018 by around 7% y-o-y for the biggest parts of the region. The expectations for 2018 oil demand in Europe remained unchanged since last month, with lower growth as compared to 2015, 2016 and 2017, and risks balanced.

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

	Jan 18	Jan 17	Change 2018/17	
			tb/d	%
LPG	522	594	-72	-12.2
Naphtha	763	776	-13	-1.7
Gasoline	973	986	-13	-1.3
Jet/kerosene	748	772	-24	-3.1
Diesel oil	2,968	3,106	-138	-4.5
Fuel oil	242	278	-36	-13.0
Other products	610	550	60	10.9
<b>Total</b>	<b>6,825</b>	<b>7,062</b>	<b>-237</b>	<b>-3.4</b>

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

Sources: JODI, UK Department of Energy and Climate Change, Unione Petrolifera and OPEC Secretariat.

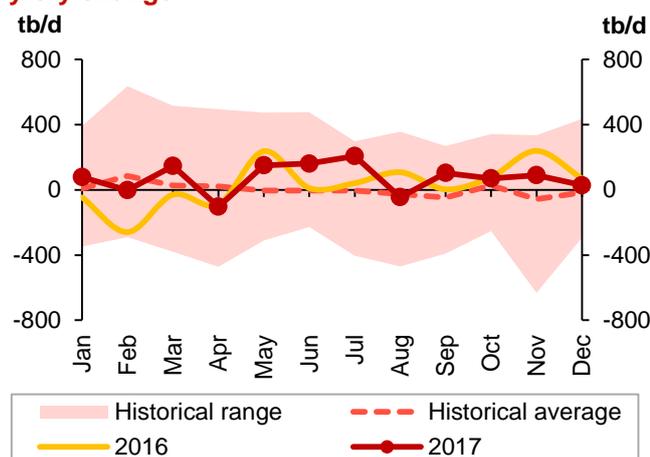
In 2017, **OECD Europe oil demand** grew by 0.20 mb/d y-o-y, while oil demand in 2018 is forecast to increase by 0.10 mb/d compared with 2017.

## OECD Asia Pacific

### Japan

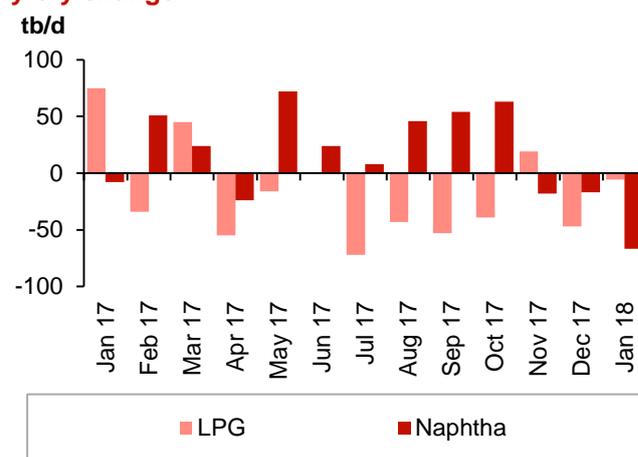
**Japanese oil demand** decreased in January 2018 by 73 tb/d, or 1.7%, y-o-y, with a mixed picture among the main petroleum categories. Y-o-y gains in oil demand were seen for jet/kerosene – as a result of increased aviation activities and a colder-than-expected winter – as well as for diesel oil in the transportation sector. Jet/kerosene and diesel oil increased by 2.5% and 1.2%, respectively. Demand for all other petroleum product categories shrank, particularly for naphtha and gasoline, while residual fuel oil requirements were flat y-o-y. Crude and fuel oil deliveries for electricity generation remained stagnant y-o-y, as a result of the colder weather during January 2018. For the whole of 2017, Japanese oil demand fell by 0.1 mb/d y-o-y – jet/kerosene being the only product with requirements on the positive.

**Graph 4 - 5: OECD Asia Pacific oil demand, y-o-y change**



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

**Graph 4 - 6: Japanese LPG and naphtha demand, y-o-y change**



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

The outlook risks for 2018 Japanese oil demand remain skewed to the downside and are determined by the development of the country's economy.

**Table 4 - 5: Japanese domestic sales, tb/d**

	Jan 18	Jan 17	Change 2018/17 tb/d	%
LPG	468	474	-6	-1.2
Naphtha	787	854	-67	-7.8
Gasoline	703	714	-11	-1.6
Jet/kerosene	785	766	19	2.5
Diesel oil	772	763	9	1.2
Fuel oil	339	336	3	1.0
Other products	362	383	-21	-5.4
<b>Total</b>	<b>4,217</b>	<b>4,290</b>	<b>-73</b>	<b>-1.7</b>

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

### South Korea

**South Korean oil demand** recorded a marginal decrease during the month of December, falling by approximately 0.02 mb/d, or 0.5% y-o-y. South Korean oil demand did, however, record a substantial increase in 2017, growing by 0.05 mb/d. In December 2017, naphtha demand led the growth, rising by around 0.10 mb/d, or 8%, y-o-y, mainly to feed into the petrochemical and transportation sectors, in line with a healthily growing economy.

For the whole of 2017, South Korean oil demand remained robust, with requirements for the majority of main petroleum product categories rising, particularly naphtha and diesel oil. South Korean oil demand is projected to remain positive in 2018, particularly as most assumptions, i.e. economic development as well as expansions in petrochemical and transportation sectors are hinting to the upside.

## Australia

With available data up to December 2017, which marked another month of exceptionally solid oil demand growth, **Australian** 2017 oil demand grew strongly by 0.07 mb/d, or 7.5%, with the bulk of additional oil requirements being for diesel used in industrial activities.

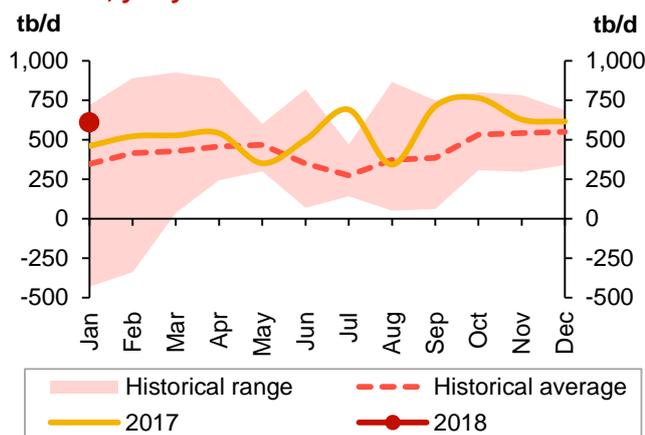
**OECD Asia Pacific oil demand** increased by a mere 0.04 mb/d y-o-y in 2017. In 2018, oil demand in the region is projected to remain flat compared with 2017.

## Non-OECD

### China

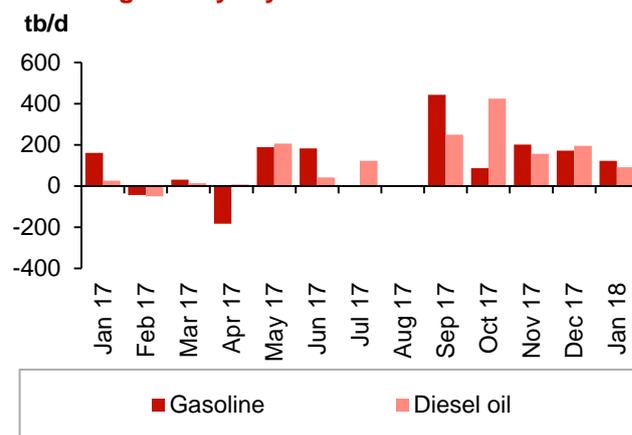
**China's oil demand** grew by around 0.61 mb/d in January 2018 y-o-y, after solid growth in 2017 of 0.51 mb/d y-o-y. In absolute figures, the total oil demand for the country stood at 11.76 mb/d in January 2018. Oil demand increased on the back of healthy gains across the barrel with persistently firm increases in LPG, gasoline and fuel oil requirements. LPG consumption reached a total of around 1.85 mb/d, around 0.1 mb/d higher than the level recorded in January 2017, mainly supported by colder-than-expected weather spurring heating demand. Projections for LPG remain solid in 2018 as potentially 1 mt/y of propane dehydrogenation capacity (PDH) and alkylation units are planned to start operations during the year.

**Graph 4 - 7: Changes in Chinese apparent oil demand, y-o-y**



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

**Graph 4 - 8: Chinese diesel oil and gasoline demand growth y-o-y**



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

**Gasoline demand** continued to grow strongly in January, rising by 0.12 mb/d and remaining above the historical high level of 3.0 mb/d. Demand was supported by motor vehicle sales in January, which reached 2.4 million units, despite being down by 3.2% y-o-y, according to China's Association of Automobile Manufacturers and Haver Analytics. It is worth mentioning that Lunar New Year holidays took place in January 2017 and these holidays have shifted to the month of February in 2018, thereby leading to skewed y-o-y comparison. As for passenger car sales, they also recorded declines of 3.4% y-o-y.

Total consumption of jet/kerosene during the month of January stands at 0.64 mb/d, up by 30 tb/d y-o-y, boosted by domestic air travel. Consumption of fuel oil was higher y-o-y, rising by 0.1 mb/d on improvements in bunker requirements and extra demand from the industrial sector. Similarly, diesel oil consumption decreased by around 91 tb/d mainly, in line with improving manufacturing activities as the official manufacturing PMI remained above the 50 point threshold at 51.3 in January.

China ended 2017 with firm oil demand growth, driven mainly by LPG for the flourishing petrochemical sector as well as gasoline requirements supported by robust car sales. For 2018, the outlook is currently balanced; the firm petrochemical sector and expansion projects in the refinery sectors contain upside potential for China's oil demand growth, while possible fluctuations in the economic development as well as policies encouraging reduction in transportation fuel consumption remain the negative downsides risks.

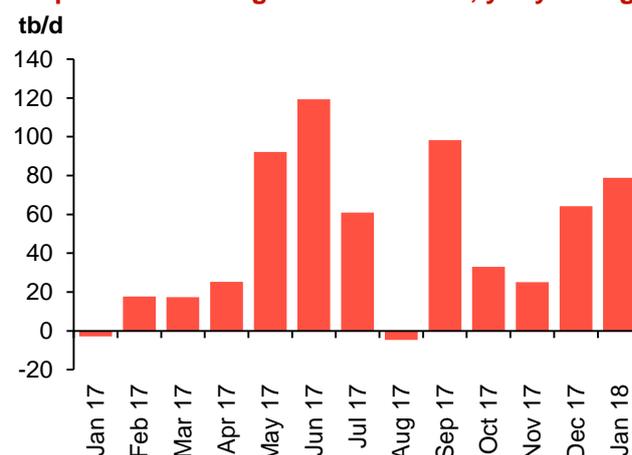
For 2017, **Chinese oil demand** grew by 0.51 mb/d, while oil demand in 2018 is projected to increase by 0.42 mb/d.

## India

**India's oil demand** soared at the start of the year, boosted by a low baseline of comparison and substantial gains in diesel oil requirements in support of government infrastructure projects. Oil demand in January increased by 0.45 mb/d, or 10.3%, y-o-y, with total consumption at 4.79 mb/d. This rise was led by strong gains in diesel oil requirements, followed by gasoline.

Diesel oil requirements increased at a fast pace, adding more than 0.23 mb/d, or 14.8%, y-o-y as demand was boosted by a number of factors, such as the increase in infrastructure project spending. These projects will focus on road construction as well as housing construction in rural areas. Sales of commercial vehicles were also a strong supporter of diesel oil requirements in January. Sales of medium and heavy commercial vehicles increased by 19% to more than 34 thousand units, whereas sales of light commercial vehicle surged by 58% to around 51.5 thousand units. Additionally sales of trucks and buses soared by around 40% to 85.7 thousand units. Finally, the low baseline of comparison has also played part in the high diesel oil demand in January as data during the same month a year earlier was negatively impacted by the demonetisation programme which reduced consumer spending. Demand for diesel oil declined by more than 0.13 mb/d in January 2017. Total diesel consumption in January remained at health levels at 1.81 mb/d, similar to December 2017 and slight lower than the historically high consumption in November 2017 of nearly 2 mb/d.

**Graph 4 - 9: Indian gasoline demand, y-o-y change**



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

Gasoline demand was sharply higher by 79 tb/d, or 15.6%, y-o-y, to average 0.58 mb/d, in line with increasing vehicle sales. Domestic car sales have risen sharply in January – passenger vehicle sales added 7.6% y-o-y amid a lower baseline, while sports utility vehicles (SUV) sales also increased by as much as 38% to reach 86 thousand units. In addition, motorcycle sales increased by around 29%. Total consumption of LPG remained above 0.70 mb/d in January, up by 32 tb/d or 4.6% y-o-y. The increase in LPG demand is attributed to the government's commitment to supply LPG to 80 million households by 2020, revised up from a previous target of 50 million households. In addition, weather conditions were colder than usual in most parts of the country, allowing for extra LPG consumption for heating purposes. It is also worth highlighting that jet/ kerosene demand has increased by 4 tb/d y-o-y for the first time since August 2016 on the back of a low baseline and improvements in the aviation sector. Fuel oil demand increased by 20 tb/d y-o-y in January with total consumption at 0.45 mb/d while the other products category increased by 75 tb/d, or 12.5%, propelled by additional bitumen sales for road construction.

Looking forward, risks for 2018 in **Other Asian oil demand** growth are currently expected to be skewed to the upside, as the outlook for India's economy suggests stable to improving economic activities and also accounts for additional government spending on infrastructure projects such as road construction and housing. LPG for residential use and gasoline for the transportation sector are expected to be the main growth factors.

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

	Jan 18	Jan 17	Change 2018/17	
			tb/d	%
LPG	735	703	32	4.6
Naphtha	284	278	6	2.0
Gasoline	584	505	79	15.6
Jet/kerosene	246	242	4	1.5
Diesel oil	1,808	1,576	232	14.8
Fuel oil	452	431	20	4.7
Other products	678	603	75	12.5
<b>Total</b>	<b>4,786</b>	<b>4,338</b>	<b>448</b>	<b>10.3</b>

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

## Other Asia

### Indonesia

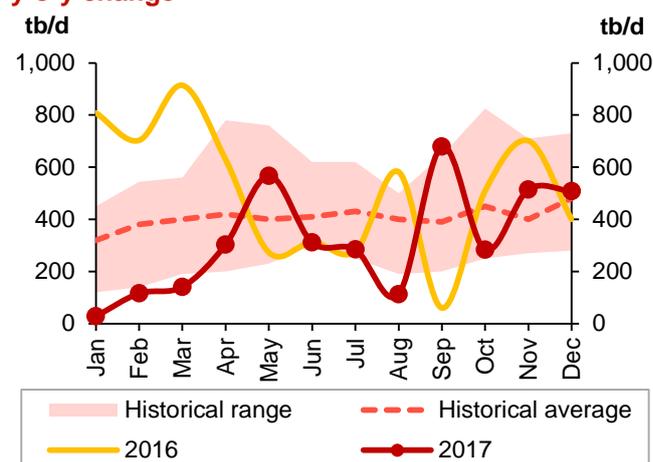
**Indonesian oil consumption** inched up during the month of December 2017 by 45 tb/d, or 2.8%, y-o-y, to average 1.66 mb/d. The growth in oil consumption can be mainly attributed to better-than-expected demand in the petrochemical sector, which saw LPG and naphtha increasing by more the 10% and 3%, respectively. Similarly, 2017 saw oil demand increase by 34 tb/d, around 2.0% y-o-y, encouraged by demand growth in petrochemical feedstock.

### Thailand

In **Thailand**, oil demand grew solidly in December 2017 - by 39 tb/d, or 2.8%, y-o-y- supported by high demand growth for transportation fuels (jet fuel and gasoline) as well as higher demand for petrochemical feedstocks (LPG and naphtha). Additionally, oil consumption in 2017 was up by 17 tb/d, or 1.3%, y-o-y, led by higher demand for jet/kerosene, LPG and gasoline.

Steady growth is projected across the region with Indonesia, Thailand and Singapore contributing largely to oil demand growth. Improvements in economic conditions should provide support to middle distillate demand, while positive expectations for plastics demand should, in turn, provide support to petrochemical feedstocks requirements.

**Graph 4 - 10: Other Asia's oil demand, y-o-y change**



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

**Other Asia's oil demand** grew by 0.30 mb/d in 2017. As for 2018, oil demand growth is forecast to increase further by 0.38 mb/d.

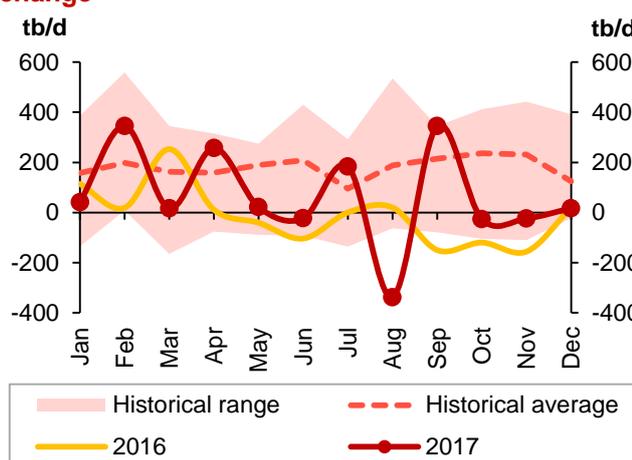
## Middle East

### Saudi Arabia

In January 2018, **Saudi Arabia's oil consumption** returned to growth on the back of better-than-anticipated requirements in the power generation. Overall oil demand added a surprising 0.10 mb/d compared with January 2017 levels as demand for heavy distillates rose.

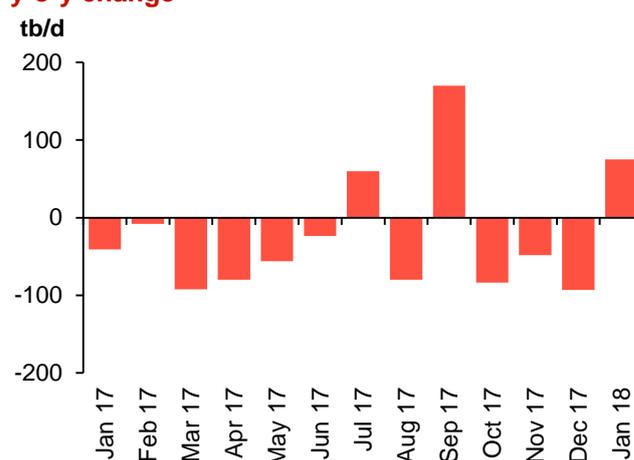
Within product categories, performance was mixed – while the top and middle of the barrel saw declines, fuel oil, crude oil for direct burning and the “other products” category all recorded solid gains. Demand for crude oil for power generation was unusually higher y-o-y by 75 tb/d, and fuel oil demand also increased by 46 tb/d y-o-y, despite seasonally lower requirements for air conditioning. In addition, the new policies of reducing subsidies for electricity in residential and industrial sectors have not yet shown an effect in the levels of consumption.

**Graph 4 - 11: Middle East oil demand, y-o-y change**



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

**Graph 4 - 12: Saudi Arabia's direct crude burning, y-o-y change**



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

Diesel oil requirements plunged by 77 tb/d, or 13.2%, y-o-y. This reduction comes primarily on the back of lower construction activities in the country. Transportation fuels, with exception of jet/kerosene, also saw declines. Gasoline dropped by around 7.7%, or 43 tb/d, y-o-y as a reduction in subsidies and the general slowdown in consumer spending influenced consumption. LPG consumption dropped by 5 tb/d on the back of less demand in the petrochemical sector.

### Iraq

Oil demand figures for the month of January 2018 in **Iraq** showed a declining trend, with a reduction in demand by 25 tb/d, or 3.5%, y-o-y despite a mixed performance of products. While fuel oil, gasoline, diesel oil and LPG showed increases, jet/kerosene and the other products categories declined sharply.

### Other countries in the Middle East

Oil demand performance was generally positive in the region, based on latest available data (mainly covering December 2017 with the exception of Qatar which covers January 2018 data). Growth in oil requirements recorded positive gains in Kuwait, IR Iran and UAE, while decreasing in Iraq and Qatar.

Going forward, Middle East oil demand is subject to the performance of various economies in the region with the impact of oil prices on their spending plans requiring close monitoring. The issues of subsidy reduction and impact of substitution are important factors going forward.

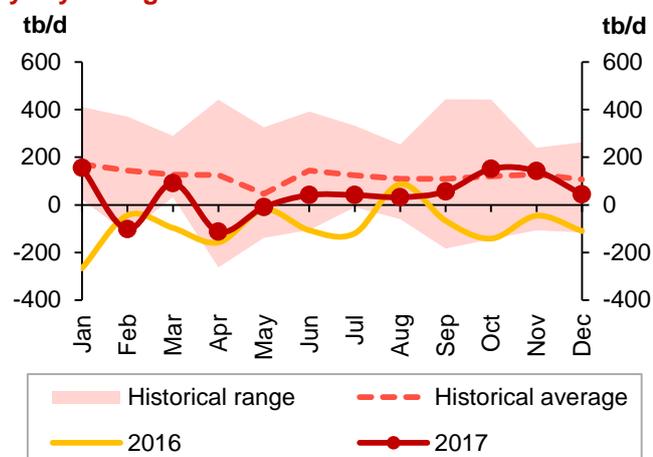
For 2017, **Middle East oil demand** recorded growth of 78 tb/d y-o-y, while oil demand in 2018 is projected to increase by 95 tb/d.

## Latin America

## Brazil

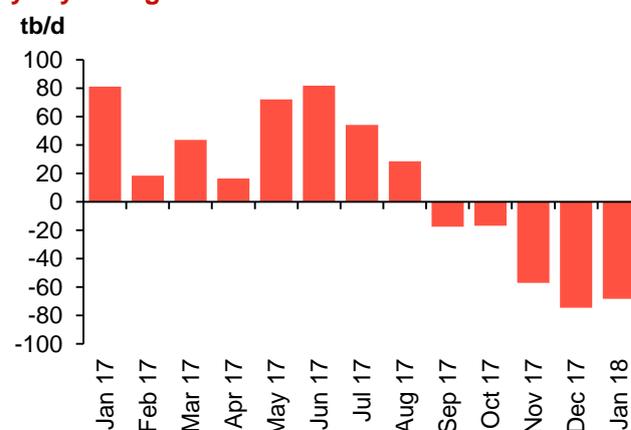
In **Brazil**, oil demand was strong going into January 2018, supported by steady macroeconomic data. Oil demand grew by 75 tb/d, or 3.0%, y-o-y, with total consumption at 2.59 mb/d. Within products, growth was led by ethanol, middle distillates and LPG.

**Graph 4 - 13: Latin American oil demand, y-o-y change**



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

**Graph 4 - 14: Brazilian gasoline demand, y-o-y change**



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

Potential for diesel demand appeared in line with steady industrial production in the country as the indicator had been gaining momentum since the beginning of 2017 and the index reached the highest point of 91.2 towards the end of 2017, according to the *Instituto Brasileiro de Geografia e Estatistica*. Additionally, the low base line of comparison is considered a positive factor for diesel demand growth in January, due to the slower economic conditions at the beginning of 2017. LPG demand rose by 5 tb/d, or 2.5%, y-o-y to reach total consumption of 0.21 mb/d in January. Similar to diesel, fuel oil consumption was on the rise as persisting drought conditions in parts of the country encouraged additional use of fuel oil to compensate for the reduction in hydro-electrical power.

Ethanol demand was higher by around 0.1 mb/d as retail prices for the product were lower than gasoline, pushing drivers to consume ethanol in lieu of gasoline. According to Agência Nacional do Petróleo (ANP), retail prices of ethanol averaged at 2.98 reais/litre while gasoline retail prices averaged 1.2 reais/litre higher during the month of January. In turn, gasoline demand declined by a massive 68 tb/d, or 9%, from the level recorded during January 2017. Diesel demand continued to be strong with total consumption of 0.84 mb/d in January, higher by 36 tb/d, or 4.4% y-o-y.

**Table 4 - 7: Brazilian oil demand\*, tb/d**

	Jan 18	Jan 17	Change 2018/17	
			tb/d	%
LPG	210	205	5	2.5
Naphtha	145	144	1	0.7
Gasoline	688	756	-68	-9.0
Jet/kerosene	131	123	8	6.3
Diesel oil	839	803	36	4.4
Fuel oil	72	78	-6	-7.2
Other products	507	408	99	24.4
<b>Total</b>	<b>2,593</b>	<b>2,518</b>	<b>75</b>	<b>3.0</b>

Note: \* = Inland deliveries.

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

## Argentina

**Oil consumption in Argentina** was slightly positive during the month of December 2017. A decline of around 13 tb/d, or 1.9%, y-o-y was recorded for 2017 as whole. Despite solid gains in most of the product mix – chiefly the transportation fuels – declines in the fuel oil and diesel oil have dragged total products lower y-o-y. Total consumption averaged 0.69 mb/d in 2017.

Looking forward, oil demand potential for 2018 is currently tilted to the upside, as economic conditions in Brazil and other countries in the region are anticipated to improve and government spending on projects is anticipated to be revived. In terms of products, diesel oil and gasoline have higher growth potential and are expected to fuel the industrial and transportation sectors.

**Latin American oil demand** is estimate to have risen by 49 tb/d in 2017. During 2018, oil demand growth is forecast to be higher y-o-y by 95 tb/d.

## World Oil Supply

World oil supply in February 2018 increased by 0.37 mb/d m-o-m, to average 98.20 mb/d, representing an increase of 1.66 mb/d y-o-y. Preliminary non-OPEC oil supply in February, including OPEC NGLs, was up by 0.45 mb/d m-o-m and rose by 1.71 mb/d y-o-y to average 66.01 mb/d.

For 2017, non-OPEC supply was revised slightly up by 0.01 mb/d from last month's assessment, mainly due to higher-than-expected output in 4Q17 by 63 tb/d, representing growth of 0.87 mb/d y-o-y.

For 2018, following higher-than-expected output in 1Q18 by 323 tb/d in OECD (Americas and Europe), FSU and China, as well as additional upward revisions in production forecasts in the US, Canada, Egypt and China and minor downward revisions in Australia and Argentina, total non-OPEC supply was revised up by 0.28 mb/d, to 59.53 mb/d, representing a y-o-y growth of 1.66 mb/d.

OPEC NGLs and non-conventional liquids' production averaged 6.48 mb/d in January, up by 0.04 mb/d m-o-m and rising by 0.31 mb/d y-o-y. OPEC NGLs are estimated to grow by 0.17 mb/d to average 6.31 mb/d in 2017, and for 2018, production is forecast to grow by 0.18 mb/d, to average 6.49 mb/d.

According to secondary sources, OPEC crude oil production decreased by 77 tb/d, to average 32.19 mb/d, in February 2018.

**Table 5 - 1: Non-OPEC supply forecast comparison in 2017\* and 2018\*, mb/d**

Region	2017	Change 2017/16	2018	Change 2018/17
OECD Americas	21.41	0.80	23.04	1.63
OECD Europe	3.78	-0.02	3.83	0.05
OECD Asia Pacific	0.39	-0.03	0.40	0.00
<b>Total OECD</b>	<b>25.58</b>	<b>0.74</b>	<b>27.26</b>	<b>1.68</b>
Other Asia	3.62	-0.09	3.57	-0.05
Latin America	5.20	0.10	5.33	0.14
Middle East	1.24	-0.04	1.24	0.00
Africa	1.86	0.07	1.92	0.06
<b>Total DCs</b>	<b>11.91</b>	<b>0.03</b>	<b>12.06</b>	<b>0.15</b>
FSU	14.06	0.20	13.93	-0.13
Other Europe	0.12	-0.01	0.12	0.00
China	3.99	-0.11	3.92	-0.07
<b>Non-OPEC production</b>	<b>55.67</b>	<b>0.86</b>	<b>57.30</b>	<b>1.63</b>
Processing gains	2.21	0.01	2.23	0.03
<b>Non-OPEC supply</b>	<b>57.87</b>	<b>0.87</b>	<b>59.53</b>	<b>1.66</b>

Note: \* 2017 = Estimate and 2018 = Forecast.

Source: OPEC Secretariat.

## Monthly revisions on non-OPEC supply growth forecast

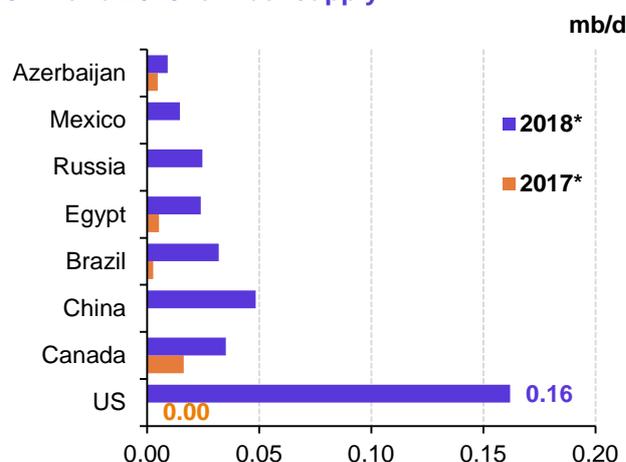
Preliminary non-OPEC oil supply in **February 2018** saw growth of 0.45 mb/d m-o-m to average 59.53 mb/d and was higher by 1.44 mb/d y-o-y. OECD Americas was the main region to show a monthly increase of 0.48 mb/d, to average 22.92 mb/d. The **non-OPEC oil supply estimate for 4Q17** was revised up by 63 tb/d on updated production data - mainly from Canada owing to remarkable production in November at 5.20 mb/d - to reach 58.69 mb/d on a quarterly basis, up by 1.20 mb/d q-o-q and an increase of 1.11 mb/d compared with 4Q16.

Moreover, **non-OPEC oil supply data** in 1Q17 and 2Q17 was revised down by 9 tb/d and 11 tb/d, respectively, due to downward revisions in production data of Norway while 3Q17 was revised up by 12 tb/d, due to upward revisions in production data of Egypt and Azerbaijan.

As a result, **non-OPEC oil supply in 2017** was revised up by 0.01 mb/d to average 57.87 mb/d, to now show growth of 0.87 mb/d y-o-y. The **non-OPEC oil supply forecast for 2018** was also revised up in absolute terms by 0.28 mb/d to average 59.53 mb/d, with oil supply growth for the year also revised up by 0.26 mb/d to 1.66 mb/d. The only revision that was seen on a country basis for 2017 according to this month's analysis, was Canada adding 0.02 mb/d.

For **2018**, the **US** liquids supply forecast was revised up by 0.16 mb/d, to show annual growth of 1.46 mb/d y-o-y, on the back of higher expected output of crude oil by 0.11 mb/d, mainly from the major shale plays, and increased NGLs production by 0.05 mb/d. This was followed by an upward revision for China by 0.05 mb/d. Canada was also revised up by 0.04 mb/d, to show annual growth of 0.27 mb/d y-o-y, on the back of production ramp ups from the new main oil sand projects. Production of Brazil was also revised up by 0.03 mb/d, to show annual growth of 0.23 mb/d y-o-y, due to expected new oil in 4Q18 from new fields' start-ups. Owing to the higher output of countries such as Norway, Brunei, Egypt, Russia and China in 1Q18, some of which started in 4Q17, the production forecasts for the current year were revised up while downward revisions were applied to the production forecasts of Australia, India, Indonesia, other Asia, Argentina, Colombia and Azerbaijan (**Graph 5 - 1**).

**Graph 5 - 1: MOMR Mar 18/Feb 18 revisions in 2017\* and 2018\* annual supply**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

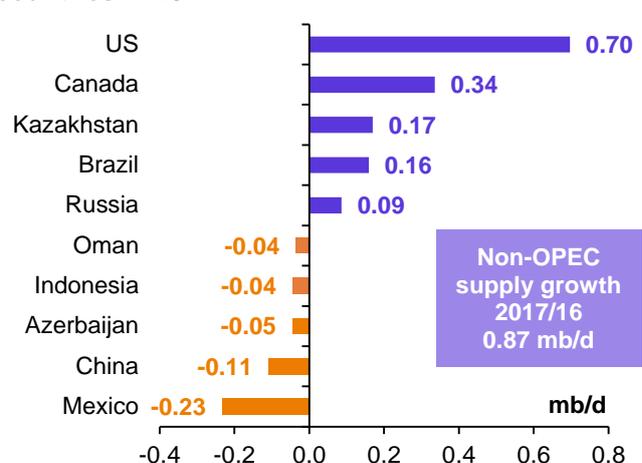
## Non-OPEC oil supply highlights in 2017

Estimated non-OPEC oil supply in 4Q17 showed an increase of 1.20 mb/d q-o-q, mainly from the US, (0.88 mb/d), Canada (0.10 mb/d), Russia (0.08 mb/d) and Kazakhstan (0.06 mb/d), while oil production in countries such as Mexico, Denmark, Australia and Bahrain, declined compared with 3Q17.

Estimated non-OPEC supply for **2017**, considering the revisions to all quarters, has been revised up by 14 tb/d since last month's assessment to average 57.87 mb/d, to show growth of 0.87 mb/d, y-o-y (**Table 5 - 2**).

In terms of y-o-y growth, the US with 0.70 mb/d, Canada (0.34 mb/d), Kazakhstan (0.17 mb/d), Brazil (0.16 mb/d), Russia (0.09 mb/d), Ghana (0.07 mb/d) and Congo (0.06 mb/d) have been the main drivers for non-OPEC yearly incremental production, while oil output declined in Mexico by 0.23 mb/d y-o-y, China (-0.11 mb/d), Azerbaijan (-0.05 mb/d), Indonesia (-0.04 mb/d), Oman (-0.04 mb/d) while in Norway, Australia, Argentina and Colombia oil production declined by 0.03 mb/d, each.

**Graph 5 - 2: Annual supply changes for selected countries in 2017\***



Note: \* 2017 = Estimate.  
Source: OPEC Secretariat.

Table 5 - 2: Non-OPEC oil supply in 2017\*, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16	
							Growth	%
Americas	20.61	21.08	20.91	21.34	22.29	21.41	0.80	3.88
of which US	13.63	13.79	14.08	14.28	15.16	14.33	0.70	5.11
Europe	3.81	3.93	3.78	3.68	3.73	3.78	-0.02	-0.64
Asia Pacific	0.42	0.39	0.39	0.41	0.38	0.39	-0.03	-7.42
<b>Total OECD</b>	<b>24.84</b>	<b>25.40</b>	<b>25.09</b>	<b>25.43</b>	<b>26.41</b>	<b>25.58</b>	<b>0.74</b>	<b>3.00</b>
Other Asia	3.71	3.67	3.61	3.58	3.60	3.62	-0.09	-2.54
Latin America	5.10	5.19	5.20	5.19	5.21	5.20	0.10	1.89
Middle East	1.28	1.24	1.24	1.24	1.22	1.24	-0.04	-3.34
Africa	1.79	1.84	1.84	1.87	1.90	1.86	0.07	3.90
<b>Total DCs</b>	<b>11.88</b>	<b>11.94</b>	<b>11.89</b>	<b>11.88</b>	<b>11.93</b>	<b>11.91</b>	<b>0.03</b>	<b>0.25</b>
FSU	13.86	14.13	14.14	13.91	14.07	14.06	0.20	1.44
of which Russia	11.08	11.25	11.24	11.06	11.14	11.17	0.09	0.78
Other Europe	0.13	0.12	0.12	0.13	0.12	0.12	-0.01	-4.94
China	4.10	4.02	4.03	3.95	3.96	3.99	-0.11	-2.64
<b>Total "Other regions"</b>	<b>18.09</b>	<b>18.27</b>	<b>18.29</b>	<b>17.98</b>	<b>18.15</b>	<b>18.17</b>	<b>0.09</b>	<b>0.47</b>
<b>Total non-OPEC production</b>	<b>54.81</b>	<b>55.61</b>	<b>55.27</b>	<b>55.29</b>	<b>56.49</b>	<b>55.67</b>	<b>0.86</b>	<b>1.57</b>
Processing gains	2.19	2.21	2.21	2.21	2.21	2.21	0.01	0.50
<b>Total non-OPEC supply</b>	<b>57.00</b>	<b>57.82</b>	<b>57.47</b>	<b>57.49</b>	<b>58.69</b>	<b>57.87</b>	<b>0.87</b>	<b>1.53</b>
Previous estimate	57.00	57.83	57.49	57.48	58.63	57.86	0.86	1.50
Revision	0.00	-0.01	-0.01	0.01	0.06	0.01	0.01	0.02

Note: \* 2017 = Estimate.

Source: OPEC Secretariat.

Final investment decisions on a global total of 18 delayed large upstream projects were approved during 2017, more than double the number in the previous two years combined, according to Rystad Energy. These projects include the sanctioning of a pair of Brazilian FPSO projects, a couple of subsea tiebacks in Angola and China, as well as an onshore oil development in the UAE. The 25 delayed projects launched since the 2014 oil price drop will develop around 16 Bboe of reserves at an estimated cost of \$87 billion to first production. Tengizchevroil's 2016 Tengiz FGP/WPMP expansion in Kazakhstan accounts for about 37% of this expenditure. 2017 began with 111 projects and ended with 104 projects. Seven projects were added during the first half, and four during the second half of 2017. However, over 100 projects remain outstanding.

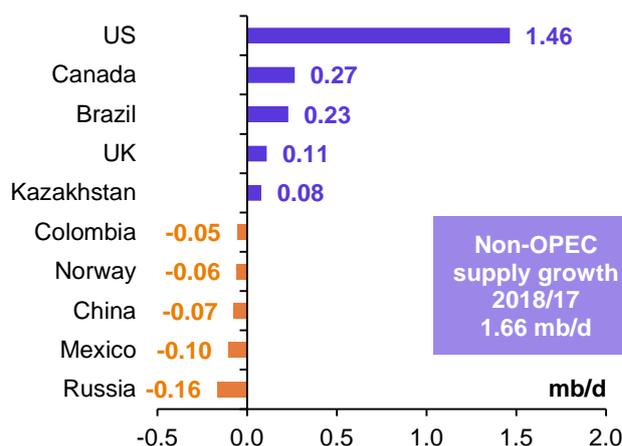
## Non-OPEC oil supply highlights in 2018

**Non-OPEC supply** in 2018 is forecast to increase by 1.66 mb/d compared with growth of 0.87 mb/d in 2017. Non-OPEC supply for the year was revised up by 0.28 mb/d in absolute terms, compared with last month's assessment, to average 59.53 mb/d, and is now expected to grow at a faster pace, leading also to an upward revision in y-o-y growth by 0.26 mb/d to average 1.66 mb/d, compared to the previous *MOMR*.

The key drivers for growth in 2018 are the US (1.46 mb/d), Canada (0.27 mb/d), Brazil (0.23 mb/d), UK (0.11 mb/d), Kazakhstan (0.08 mb/d) Ghana (0.05 mb/d) and Congo (0.03 mb/d), while production is forecast to decline in Russia (0.16 mb/d), Mexico (0.10 mb/d), China (0.07 mb/d), Norway (0.06 mb/d) and Colombia (0.05 mb/d).

The main upward revision was seen in the US, mainly due to an updated assessment for both components of the US production forecast – tight crude and NGLs. Preliminary oil output estimation in 1Q18 indicates m-o-m growth of 0.21 mb/d to average 15.37 mb/d, despite lower fracking activities during freezing season in some areas. In Canada, new projects' start-ups and ramp-ups supported the increase in oil output and is expected to continue doing so in coming months. Hence, the forecast has been revised up by 0.02 mb/d to average 0.27 mb/d for the current year. Oil production in Brazil is also forecast to show higher growth of 0.23 mb/d, revised up by 0.03 mb/d to average 3.53 mb/d, with additional volumes coming onstream in 4Q18 from the new FPSO instalment.

**Graph 5 - 3: Annual supply changes for selected countries in 2018\***



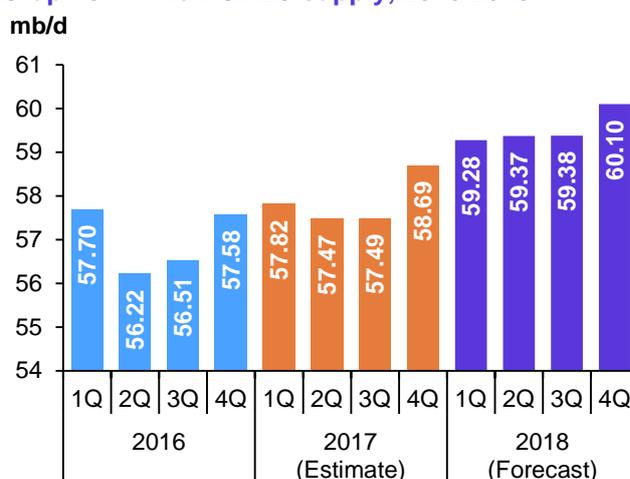
Note: \* 2018 = Forecast.  
Source: OPEC Secretariat.

Russian oil output was also revised up by 0.03 mb/d to average 11.0 mb/d, to show a contraction of 0.16 mb/d in 2018, following an upward revision in 1Q18 by 0.1 mb/d compared to last month's assessment. Improved oil output in Mexico, Norway and China in 1Q18 has led to a lesser forecast contraction for the year at -0.10 mb/d, -0.06 mb/d and -0.07 mb/d, respectively. On the other hand, the production forecasts for Australia, Argentina, Colombia and Kazakhstan were reduced.

**Graph 5 - 4** highlights actual non-OPEC quarterly oil supply in 2016, estimates for 2017 and forecasts for 2018. The quarterly distribution for non-OPEC supply in 2017 indicates a regular seasonal pattern, however 3Q17 shows a dip on the back of the hurricanes experienced in GoM and unexpected heavy maintenance in offshore platforms. Nevertheless, 3Q17 still shows a higher production level compared to the same quarter a year earlier.

For 2018, higher growth is expected on the back of the projected increase in US shale production following a better price environment not only for shale producers, but also for other countries such as Canada, UK, Brazil and China, leading to a higher quarterly distribution throughout the year with a record-high level projected for 4Q18.

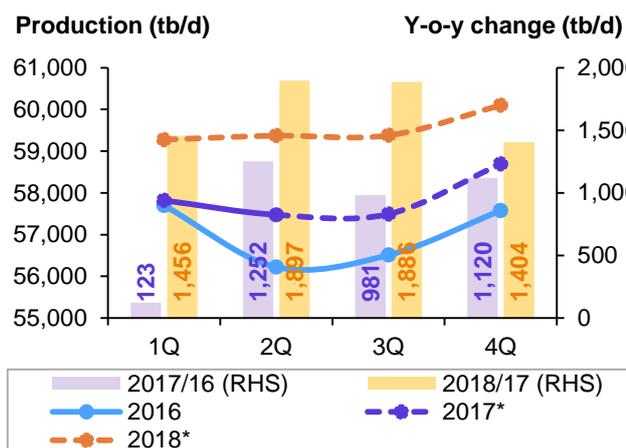
**Graph 5 - 4: Non-OPEC supply, 2016-2018**



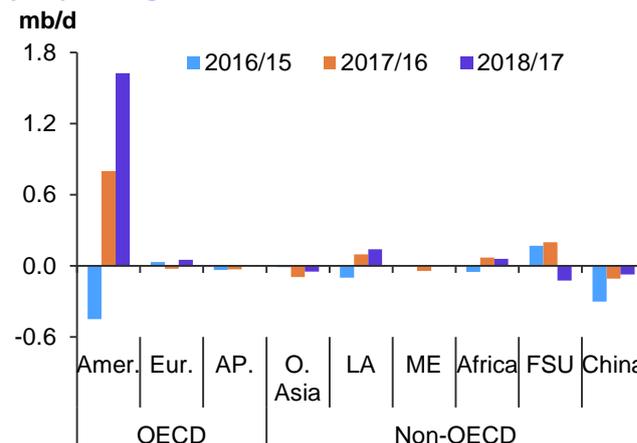
Source: OPEC Secretariat.

Non-OPEC supply in 1H18 is forecast to average 59.32 mb/d, up by 1.23 mb/d from 2H17 and higher by 1.67 mb/d over 1H17, while 2H18 is forecast higher by 0.42 mb/d than 1H18, averaging 59.74 mb/d, (**Graph 5 - 5**).

On a regional basis, non-OPEC supply in OECD Americas is estimated to have increased by 0.80 mb/d in 2017, y-o-y while in 2018 it is expected to grow by 1.63 mb/d y-o-y to average 23.04 mb/d. Oil production in OECD Europe and Asia Pacific in 2017 declined by 0.02 mb/d and 0.03 mb/d y-o-y, to average 3.78 mb/d and 0.39 mb/d, respectively. For 2018, oil output in OECD Europe is expected to increase by 0.05 mb/d y-o-y, to average 3.83 mb/d, while production will remain flat in OECD Asia Pacific. In Developing Countries (DCs), oil production decreased in Other Asia and Middle East in 2017, and increased in Latin America and Africa. For 2018, Latin America and Africa both are expected to grow by 0.14 mb/d and 0.06 mb/d, respectively, while Other Asia will decline and production in Middle East is forecast to remain steady at 1.24 mb/d.

**Graph 5 - 5: Non-OPEC liquids supply quarterly, 2016-2018**

Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 6: Regional non-OPEC supply growth, y-o-y change**

Note: 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

In the FSU, countries such as Kazakhstan, Azerbaijan and FSU other will see the same trend in 2018 as in 2017 when the region saw growth of 0.20 mb/d, while the expected contraction in Russia's production in 2018 is expected to lead to a decline in FSU output by 0.13 mb/d (**Graph 5 – 6**).

**Table 5 - 3: Non-OPEC oil supply in 2018\*, mb/d**

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17 Growth	%
Americas	21.41	22.70	22.95	23.10	23.38	23.04	1.63	7.59
of which US	14.33	15.37	15.76	15.96	16.09	15.80	1.46	10.22
Europe	3.78	3.90	3.81	3.66	3.96	3.83	0.05	1.31
Asia Pacific	0.39	0.39	0.40	0.41	0.38	0.40	0.00	0.62
<b>Total OECD</b>	<b>25.58</b>	<b>26.99</b>	<b>27.16</b>	<b>27.17</b>	<b>27.72</b>	<b>27.26</b>	<b>1.68</b>	<b>6.56</b>
Other Asia	3.62	3.55	3.59	3.57	3.55	3.57	-0.05	-1.33
Latin America	5.20	5.19	5.26	5.41	5.47	5.33	0.14	2.67
Middle East	1.24	1.23	1.25	1.24	1.24	1.24	0.00	0.40
Africa	1.86	1.92	1.92	1.92	1.93	1.92	0.06	3.09
<b>Total DCs</b>	<b>11.91</b>	<b>11.88</b>	<b>12.02</b>	<b>12.15</b>	<b>12.20</b>	<b>12.06</b>	<b>0.15</b>	<b>1.28</b>
FSU	14.06	14.04	13.94	13.81	13.94	13.93	-0.13	-0.89
of which Russia	11.17	11.08	10.98	10.98	10.98	11.00	-0.16	-1.48
Other Europe	0.12	0.12	0.13	0.13	0.12	0.12	0.00	-0.40
China	3.99	4.01	3.89	3.88	3.88	3.92	-0.07	-1.81
<b>Total "Other regions"</b>	<b>18.17</b>	<b>18.17</b>	<b>17.96</b>	<b>17.82</b>	<b>17.94</b>	<b>17.97</b>	<b>-0.20</b>	<b>-1.09</b>
<b>Total non-OPEC production</b>	<b>55.67</b>	<b>57.04</b>	<b>57.14</b>	<b>57.14</b>	<b>57.87</b>	<b>57.30</b>	<b>1.63</b>	<b>2.93</b>
Processing gains	2.21	2.23	2.23	2.23	2.23	2.23	0.03	1.32
<b>Total non-OPEC supply</b>	<b>57.87</b>	<b>59.28</b>	<b>59.37</b>	<b>59.38</b>	<b>60.10</b>	<b>59.53</b>	<b>1.66</b>	<b>2.87</b>
Previous estimate	57.86	59.12	59.26	59.17	59.48	59.26	1.40	2.42
Revision	0.01	0.16	0.11	0.21	0.62	0.28	0.26	0.45

Note: \* 2018 = Forecast.  
Source: OPEC Secretariat.

# Non-OPEC oil supply in 2017 and 2018

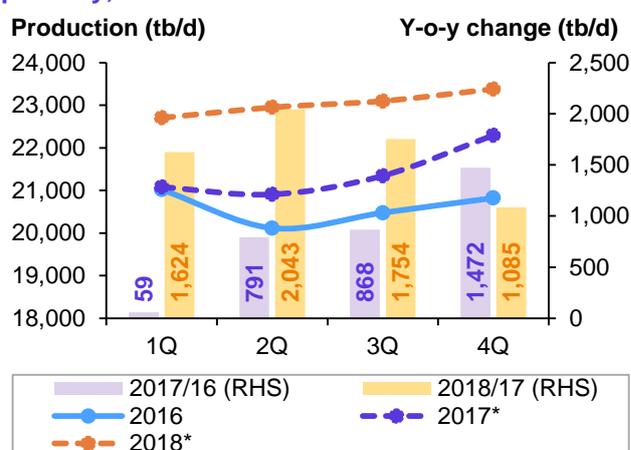
## OECD

### OECD Americas

**OECD Americas' oil supply in 2017** is estimated to average 21.41 mb/d, an increase of 0.80 mb/d y-o-y. The oil supply estimation was revised up by 16 tb/d this month, owing to an upward revision for Canada by the same amount.

The **2018** supply forecast for OECD Americas was also revised up by 212 tb/d to now show growth of 1.63 mb/d y-o-y, and average 23.04 mb/d. The oil supply growth forecast for the US and Canada has been revised up and is now projected to grow by 1.46 mb/d and 0.27 mb/d to average 15.80 mb/d and 5.11 mb/d, respectively, while the annual decline in Mexico is expected lower than in the previous assessment at -0.10 mb/d to average 2.13 mb/d. Oil supply on quarterly basis shows the same pattern as in 2017, but at higher level (**Graph 5 – 7**).

**Graph 5 - 7: OECD Americas liquids supply quarterly, 2016-2018**

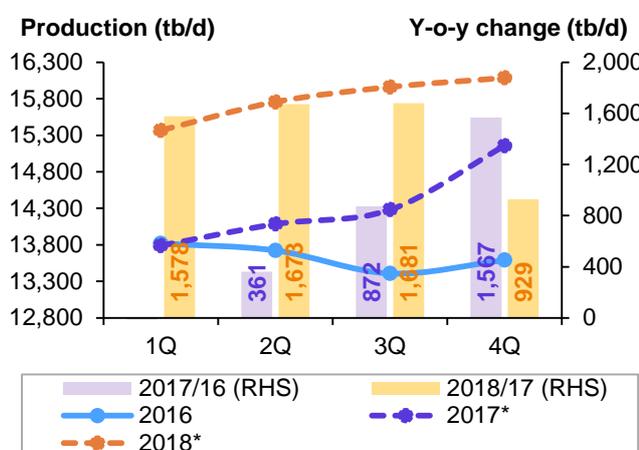


Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

## US

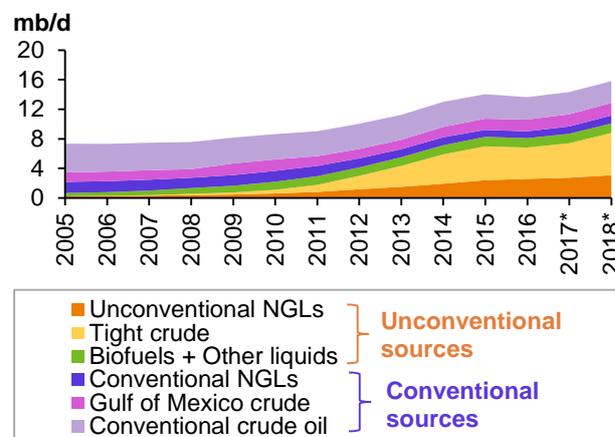
According to the Energy Information Administration's (EIA) *Petroleum Supply Monthly*, crude oil production in the US averaged 9.95 mb/d in December 2017, a decrease of 108 tb/d from a month earlier due to the output drops in PADD 2 by 26 tb/d, particularly in North Dakota (-15 tb/d), in PADD 3 by 74 tb/d, particularly in the Gulf of Mexico (-131 tb/d) and in PADD 5 by 11 tb/d, mainly in California (-13 tb/d). In December 2017, US crude oil output rose by 1.18 mb/d, y-o-y. Simultaneously, oil production in the states of Texas, New Mexico -both in the Permian Basin - and Colorado increased by 36 tb/d, 26 tb/d and 14 tb/d, respectively.

**Graph 5 - 8: US liquids supply quarterly, 2016-2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 9: US liquids production breakdown**



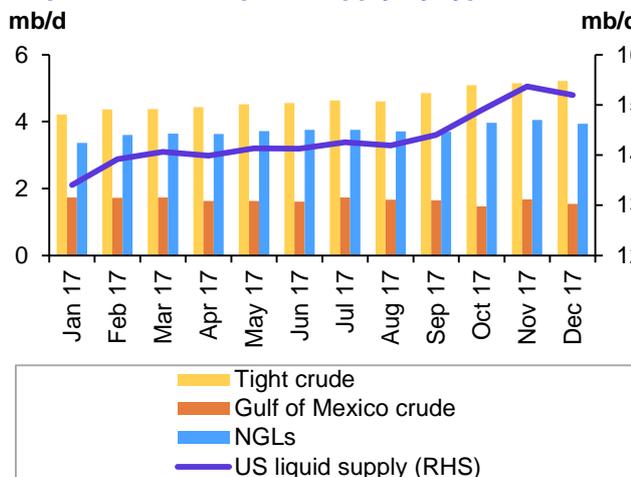
Note: \* 2017 = Estimate and 2018 = Forecast.  
Sources: Energy Information Administration, Rystad Energy and OPEC Secretariat.

Oil production in the US **GoM in December** decreased by 0.13 mb/d m-o-m, to average 1.54 mb/d, due to a continuation of the unplanned outages owing to a fire at the Enchilada platform, keeping even the Salsa and

Auger platforms offline until February. Oil production from the GoM is estimated to grow by 0.05 mb/d in 2017 and is forecast to increase by another 0.05 mb/d in 2018, supported by new projects such as the 80 tb/d Stampede and the 75 tb/d Big Foot, alongside the continued development of tieback opportunities.

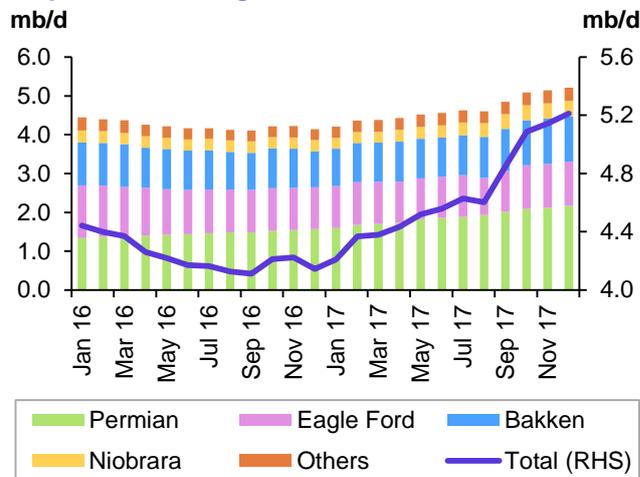
**Total US liquids supply**, excluding processing gains, dropped m-o-m by 0.17 mb/d to average 15.20 mb/d in **December**, but was higher by 1.68 mb/d y-o-y. US NGLs were down by 0.12 mb/d m-o-m to average 3.94 mb/d in December and are expected to decline further in January 2018. US NGLs production rose y-o-y US unconventional liquids – mainly ethanol – are estimated to have increased in December by 52 tb/d m-o-m to average 1.31 mb/d. For the year, they increased by 0.01 mb/d y-o-y to average 1.28 mb/d.

Graph 5 - 10: US liquids supply by type in 2017



Sources: EIA and OPEC Secretariat.

Graph 5 - 11: US tight crude breakdown

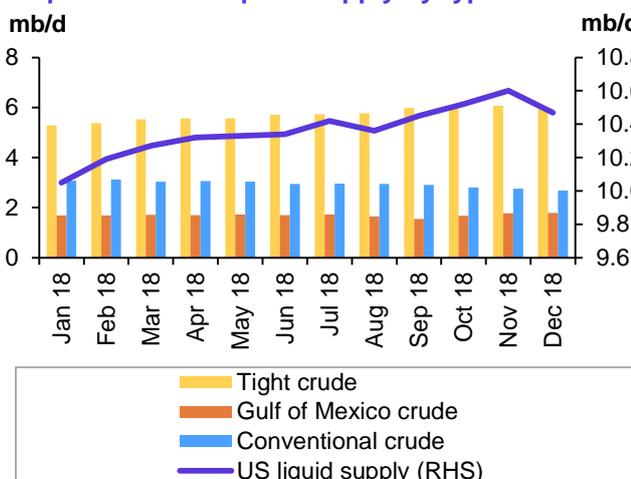


Sources: EIA and OPEC Secretariat.

**US liquids supply** in **2017** grew by 0.70 mb/d y-o-y to average 14.33 mb/d. US tight crude saw the main share of 61% at 0.43 mb/d, while NGLs had a share of 33%, up 0.23 mb/d y-o-y. Despite several hurricanes in 2017, oil production in the Gulf of Mexico rose by 0.05 mb/d, y-o-y.

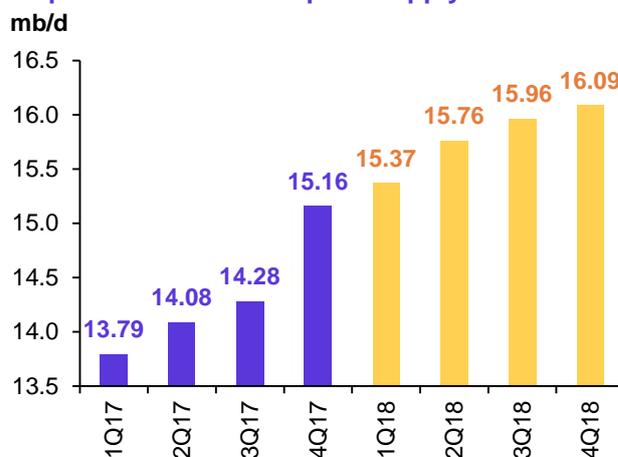
From December 2016 to December 2017, US tight crude rose by 1.07 mb/d, while y-o-y average growth was estimated at 0.43 mb/d. For 2018, y-o-y average growth of 1.05 mb/d is forecast, while December 2017 to December 2018 growth is projected at only 0.79 mb/d.

Graph 5 - 12: US liquids supply by type in 2018



Sources: EIA and OPEC Secretariat.

Graph 5 - 13: US total liquids supply forecast



Note: 2018 = Forecast.  
Source: OPEC Secretariat.

**US crude oil production** in **2018** is anticipated to grow by 0.52 mb/d from December 2017 to December 2018 due to the high baseline, while the average y-o-y growth is expected to reach 1.04 mb/d, mostly coming from shale. Annual production growth in the Gulf of Mexico is forecast to be offset by declines in mature conventional oil fields.

In 2017, 84% of US liquids supply growth is estimated to have come from tight and shale formations, (tight crude & unconventional NGLs) while for 2018, this share is expected to be 95% owing primarily to higher price levels. In 2014, amid higher prices, 89% of total growth came from tight oil. Technology has the main role for this robust progress in terms of efficiency.

**Table 5 - 4: US liquids production breakdown, mb/d**

	<u>2015</u>	<u>2016</u>	<u>Change</u> <u>2016/15</u>	<u>2017*</u>	<u>Change</u> <u>2017/16</u>	<u>2018*</u>	<u>Change</u> <u>2018/17</u>
<b>Tight crude</b>	4.58	4.24	-0.35	4.67	0.43	5.72	1.05
<b>Gulf of Mexico crude</b>	1.52	1.60	0.08	1.65	0.05	1.70	0.05
<b>Conventional crude oil</b>	3.31	3.02	-0.29	3.00	-0.02	2.94	-0.06
<b>Unconventional NGLs</b>	2.40	2.58	0.18	2.74	0.16	3.08	0.34
<b>Conventional NGLs</b>	0.94	0.93	-0.01	0.99	0.07	1.07	0.08
<b>Biofuels + Other liquids</b>	1.28	1.27	-0.02	1.27	0.01	1.29	0.01
<b>US total supply</b>	<b>14.03</b>	<b>13.63</b>	<b>-0.40</b>	<b>14.33</b>	<b>0.70</b>	<b>15.80</b>	<b>1.47</b>

Note: \* 2017 = Estimate and 2018 = Forecast.

Sources: Energy Information Administration, Rystad Energy and OPEC Secretariat.

The **US tight crude oil production** estimate for **2017**, following impressive output growth of 1.07 mb/d since December 2016, has already surpassed 5.2 mb/d in December 2017, mainly from the Permian Basin. In terms of y-o-y growth, US tight crude rose by 0.43 tb/d to average 4.67 mb/d.

Tight crude output from horizontal wells increased in the Permian by 0.05 mb/d in **December** to average 2.17 mb/d. Oil production also rose from the Niobrara shale by 0.01 mb/d to average 0.40 mb/d, while oil output in Bakken shale and Eagle Ford remain unchanged at 1.17 mb/d and 1.13 mb/d, respectively. Other regions saw minor growth, stagnated, or experienced minor declines. The Permian Basin in the US is expected to continue to produce viable drilling projects with drilling and production growing throughout 2018.

Shale is capable of further escalation in output in the second growth phase because:

- Horizontal completion activity has been increasing since 4Q16 by 51% reaching 3,100 wells in 4Q17
- Completed lateral footage in horizontal wells increased by 62% to 25 million feet in 4Q17
- Proppant consumption using for fracking increased by 82% to more than 21 million tons in 4Q17
- Together with growing well complexity, this caused more than 100% growth in EURs.

**US tight crude production** in **2018** is now forecast to show y-o-y growth of 1.05 mb/d to average 5.72 mb/d. Production from shale and tight plays in the Permian Basin (Texas and New Mexico) is projected to grow by 0.72 mb/d to average 2.57 mb/d, following a revision to output by 0.11 mb/d. The production forecast for Bakken was revised up by 0.02 mb/d, now to show y-o-y growth of 0.10 mb/d and average 1.16 mb/d. Production of tight crude from the Eagle Ford, Niobrara and other shale plays, particularly STACK/SCOOP, is forecast to grow by 0.09 mb/d, 0.06 mb/d and 0.08 mb/d to average 1.20 mb/d, 0.39 mb/d and 0.41 mb/d, respectively (**Table 5 - 5**).

**Table 5 - 5: US tight oil production growth in 2017 and 2018**

<b>Shale play</b> <i>tb/d</i>	<u>2017*</u>		<u>2018*</u>		<i>M-o-m revision</i>
	<i>Production</i>	<i>Y-o-y change</i>	<i>Production</i>	<i>Y-o-y change</i>	
<b>Permian tight</b>	1.85	0.38	2.57	0.72	0.11
<b>Bakken shale</b>	1.06	0.03	1.16	0.10	0.02
<b>Eagle Ford shale</b>	1.11	-0.06	1.20	0.09	0.00
<b>Niobrara shale</b>	0.33	0.03	0.39	0.06	0.00
<b>Other tight plays</b>	0.33	0.02	0.41	0.08	0.00
<b>Total</b>	<b>4.67</b>	<b>0.40</b>	<b>5.72</b>	<b>1.05</b>	<b>0.13</b>

Note: \* 2017 = Estimate and 2018 = Forecast.

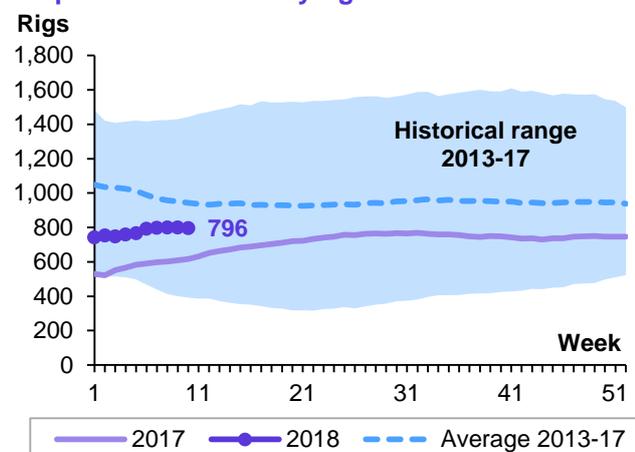
Source: OPEC Secretariat.

## US oil rig count

Since September 2017, US shale firms had focused more on well completions to raise production rather than drilling new wells until January 2018. The increase of the rig count by 35 units in February leads to an expectation of a likely hike in drilling activity going forward.

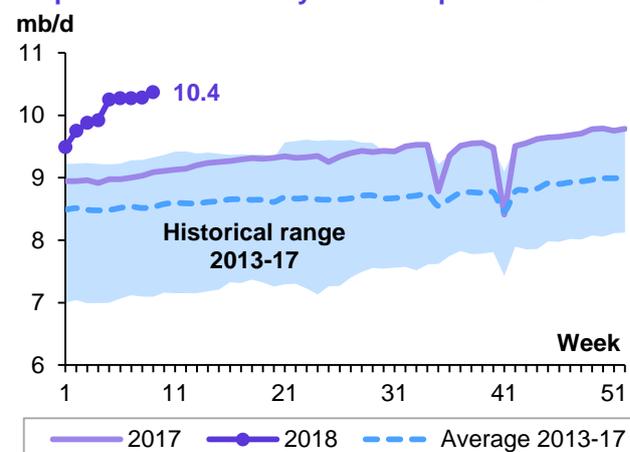
According to the *Baker Hughes* report on the North American rig count, the **US rotary rig count** in the week ended 9 March 2018, increased by 3 units to total 984 rigs, while 4 units were added in onshore fields to stand at 967 rigs. The number of active rigs offshore declined by 1 unit to 13 rigs.

**Graph 5 - 14: US weekly rig count**



Sources: Baker Hughes, US Energy Information Administration and OPEC Secretariat.

**Graph 5 - 15: US weekly crude oil production**



Sources: US Energy Information Administration and OPEC Secretariat.

**Table 5 - 6: US rotary rig count on 9 March 2018**

		9 Mar 18	Month ago	Year ago	Change		
					M-o-m	Y-o-y	Y-o-y, %
Oil and gas split	Oil	796	791	617	5	179	29%
	Gas	188	184	151	4	37	25%
Location	Onshore	971	959	748	12	223	30%
	Offshore	13	16	20	-3	-7	-35%
Basin	Williston	51	50	38	1	13	34%
	Eagle Ford	70	61	68	9	2	3%
	Permian	436	437	309	-1	127	41%
Drilling trajectory	Directional	75	73	61	2	14	23%
	Horizontal	848	832	639	16	209	33%
	Vertical	61	70	68	-9	-7	-10%
<b>US total rig count</b>		<b>984</b>	<b>975</b>	<b>768</b>	<b>9</b>	<b>216</b>	<b>28%</b>

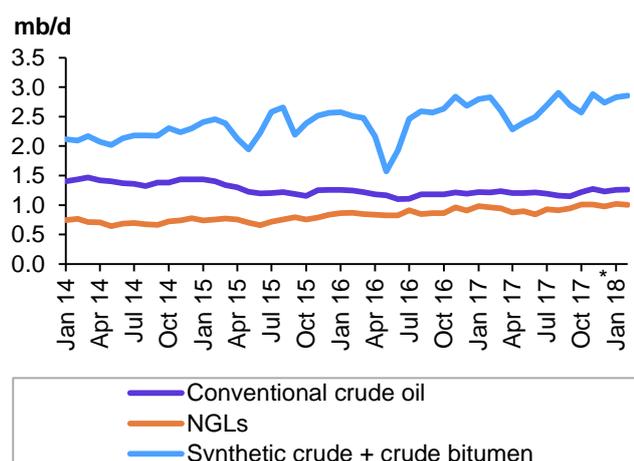
Sources: Baker Hughes and OPEC Secretariat.

However, the total **rig count in Canada** decreased by 29 units to 1,283 rigs over the same period. While the active rig count in oil fields declined by 4 units to 796 rigs, gas rigs added 7 units to 188 rigs.

## Canada

**Canadian liquids output** in November continued to increase for the second consecutive month by a robust jump of 0.36 mb/d m-o-m, to average 5.20 mb/d, mainly due to an increase in oil sands production by 0.31 mb/d m-o-m to average 2.92 mb/d on the back of a return of the Horizon upgrader where output soared to 0.14 mb/d after planned maintenance. Out of a total 0.31 mb/d of monthly growth, 0.18 mb/d came from synthetic oil and 0.11 mb/d was reported extracted from bitumen mines through the Kearl project combined with growth of 0.02 mb/d from in situ output. CNRL's Horizon phase 3 with 876 mb of recoverable resources is estimated to contribute the most to 2017 production and the asset is expected to reach a production plateau of 72 tb/d of liquids by 2020. Moreover, preliminary conventional oil production from onshore fields was down while offshore production is likely to increase in November from Terra Nova and the new field of Hebron by 53 tb/d, adding a total of 1.27 mb/d. NGLs output in November remain unchanged at 1.01 mb/d, following an increase in October by 64 tb/d.

Graph 5 - 16: Canada production by product type

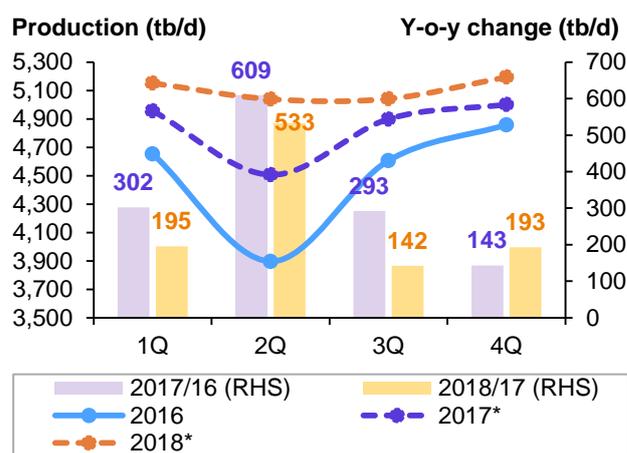


Note: \* January - February 2018 = Forecast.  
Source: OPEC Secretariat.

Based on actual production data and robust growth in November, **Canadian oil supply in 4Q17** was revised up by 65 tb/d to average 5.0 mb/d. The absolute supply in 2017 revised up by 16 tb/d, represented a y-o-y growth of 0.34 mb/d to average 4.84 mb/d. This was despite disruptions owing to wildfires. However, oil production was supported by new volumes coming from new projects or old project ramp-ups.

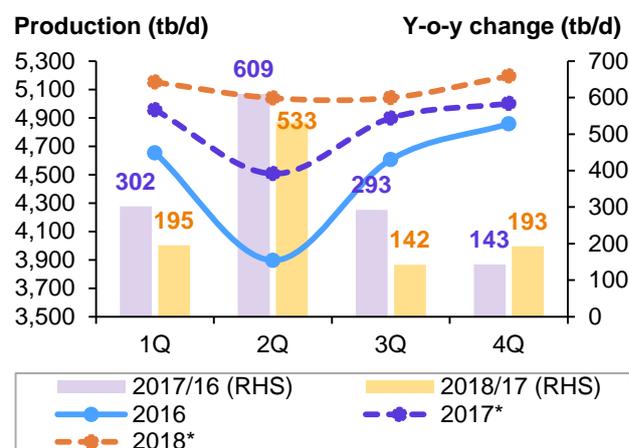
For **2018**, Canada's production forecast was revised up by 19 tb/d to average 5.11 mb/d, showing growth of 0.27 mb/d, y-o-y. Gains, mainly from the offshore Hebron oil field by approximately 60 tb/d, Horizon oil sands by 50 tb/d, Syncrude Mildred Lake by around 40 tb/d, Kearl Bitumen project by 20 tb/d, Surmont and the Fort Hills bitumen project by 90 tb/d, will support the flow.

Graph 5 - 17: Canada liquids supply quarterly, 2016-2018



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

Graph 5 - 18: Canada liquids supply quarterly, 2016-2018

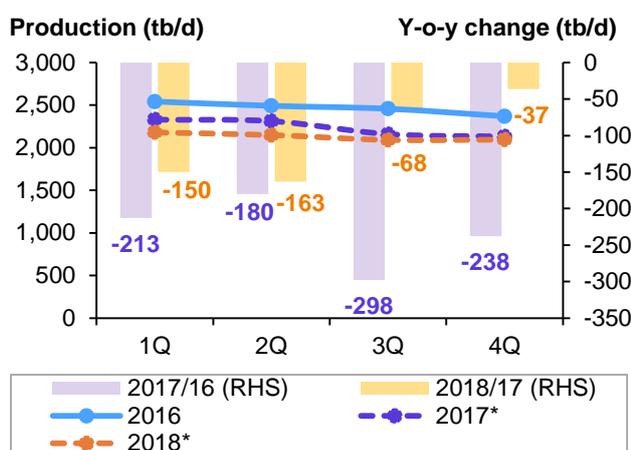


Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

## Mexico

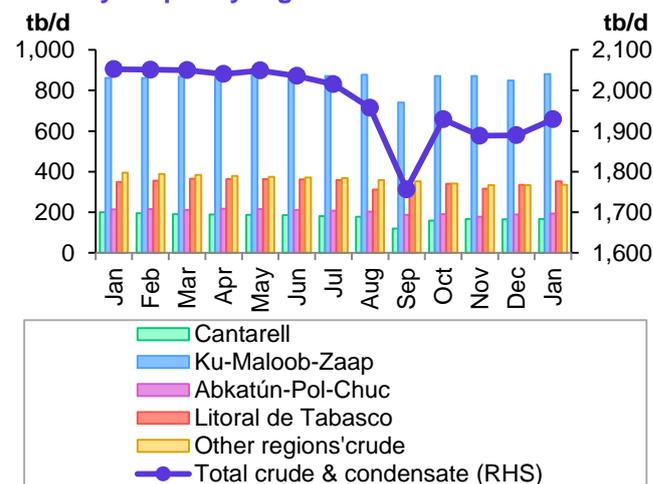
**Mexico's oil production** increased by 0.08 mb/d m-o-m in January to average 2.19 mb/d, lower y-o-y by 0.14 mb/d. Crude oil output in 2017 declined by 0.2 mb/d y-o-y to average 1.95 mb/d. Out of total decline, 27% dropped in heavy crude, while the rest was for light and super-light crude. Production of NGLs has also decreased by 0.02 mb/d to average 0.28 mb/d. During 2017, production of crude oil in Ku-Maloob-Zaap complex declined by 0.03 mb/d y-o-y mainly in the Ku field, while in Cantarell and Chuc offshore fields the y-o-y decline reached 0.03 mb/d and 0.05 mb/d, respectively. PEMEX has also reported annual declines in other smaller fields. The main reasons are heavy maintenance, hurricanes and an earth quake in 2017 harming oil production in Mexico. Under normal conditions, oil production in 2018 is forecast to contract further by 0.10 mb/d, y-o-y to average 2.13 mb/d, revised up by 15 tb/d on the back of better production performance in 1Q18.

**Graph 5 - 19: Mexico's liquids supply quarterly, 2016-2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 20: Mexico crude and condensate monthly output by region**



Sources: Pemex and OPEC Secretariat.

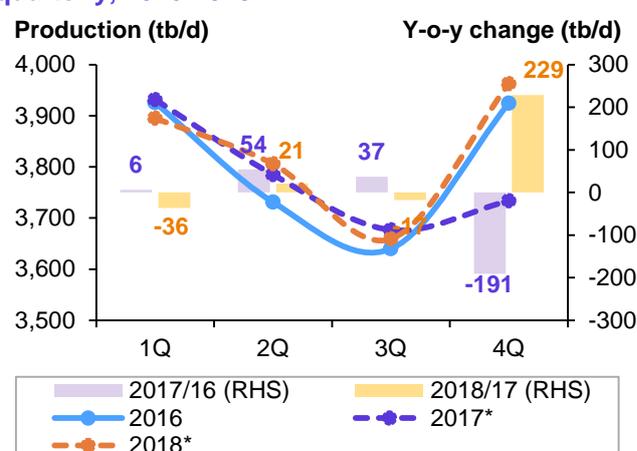
## OECD Europe

**OECD Europe's oil supply** in January was up by 0.33 mb/d m-o-m to average 3.92 mb/d, following the return of the Forties Pipeline System in the UK, higher by 0.05 mb/d y-o-y. Production in Norway and the UK increased, while production declined by a minor 10 tb/d in other OECD Europe. Moreover, oil output in Denmark remains unchanged at 0.13 mb/d. Preliminary oil production in the region in February is forecast to be down from a month earlier.

For **2017**, the region is estimated to see a slight contraction of 0.02 mb/d to average 3.78 mb/d.

For **2018**, following an upward revisions in the UK and other OECD Europe, growth of 0.05 mb/d is forecast to average 3.83 mb/d. Although production in Norway and Denmark is expected to decline in the current year, this will be offset by growth in the output of the UK.

**Graph 5 - 21: OECD Europe liquids supply quarterly, 2016-2018**



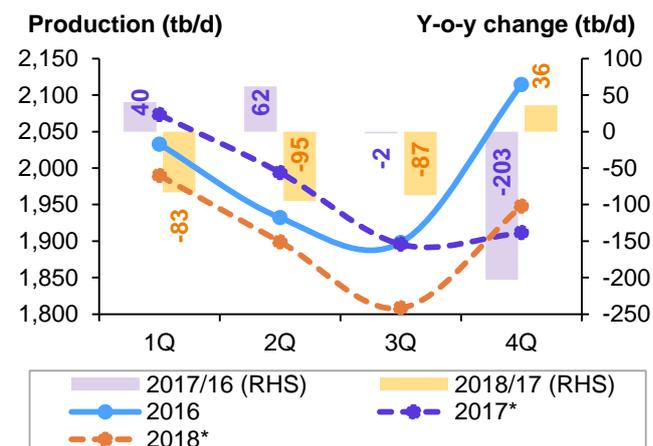
Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

## Norway

Preliminary production figures for January 2018 show an average production of 2.02 mb/d of oil, NGLs and condensate, indicating an increase of 89 tb/d compared to the previous month, according to NPD's monthly production report. Production of crude oil at 1.61 mb/d up by 77 tb/d m-o-m but it was lower by minor 7 tb/d, y-o-y. At the same time, NGLs output in January increased by 12 tb/d to average 0.41 mb/d. Norway's liquids supply in December was composed of 1.54 mb/d of crude oil, 0.36 mb/d of NGLs and 0.03 mb/d of condensate.

Norway's production in **2017** averaged 1.97 mb/d, lower y-o-y by 0.03 mb/d. At the same time, crude oil output also decreased by 0.03 mb/d y-o-y to average 1.59 mb/d for the year. Oil production in Norway has not reported an annual decline since 2014. The oil production forecast for **2018** was revised up by 0.01 mb/d on the back of higher-than-expected oil output performance in January, production is expected to drop less, by 0.06 mb/d y-o-y to average 1.91 mb/d.

**Graph 5 - 22: Norway's liquids supply quarterly, 2016-2018**



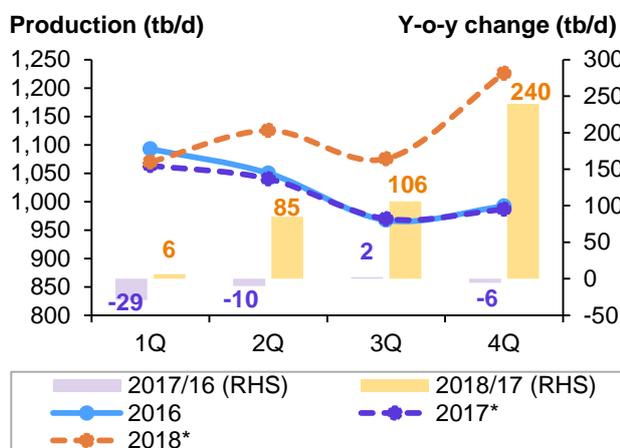
Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

## UK

Following the return of the Forties Pipeline System (FPS) from end of December to the stream – the largest pipeline system in Britain, transferring around 0.45 mb/d of Forties crude oil from some 80 fields to the Kinneil processing terminal in Scotland – **UK liquids production** in January recovered sharply by 0.25 mb/d m-o-m to average 1.07 mb/d, slightly higher than expected, to now stand at the same level of a year ago.

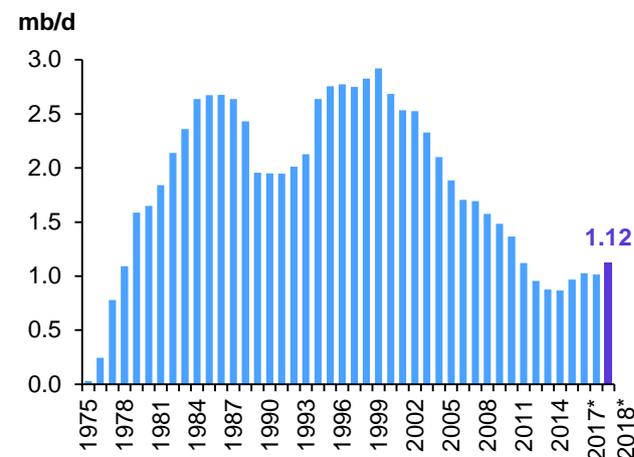
UK liquids production in **2017** was revised down by 0.01 mb/d to average 1.01 mb/d, representing a minor decline of 0.01 mb/d y-o-y.

**Graph 5 - 23: UK's liquids supply quarterly, 2016-2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 24: UK annual output and oil supply forecast in 2018, mb/d**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

For **2018**, the UK offshore oil and gas industry is fuelled by a robust uptick in the number of field development projects such as the redevelopment of the Monarb field in which the production is expected to ramp up by around 14 tb/d to 26 tb/d by the end of the year, and from the Clair Ridge project – with 110 tb/d production capacity – which is expected to start up in 2Q18. Production ramp-up in Kraken field, Elgin/Franklin, Quad 204 WoS, Western Isles, Greater Catcher is expected to add around 0.18 mb/d, part of which will be offset by natural declines from brown fields.

**UK oil supply** in 2018 is nevertheless expected to grow by 0.11 mb/d y-o-y to average 1.12 mb/d.

## Developing Countries

**Total oil supply of developing countries** (DCs) in 2017 is estimated to grow by only 0.03 mb/d y-o-y, showing an upward revision in growth by 0.01 mb/d, to reach an average of 11.91 mb/d, due to higher-than-expected-production in Latin America and Africa.

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

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
<b>2016</b>	11.79	11.77	11.95	12.01	11.88	-0.16
<b>2017*</b>	11.94	11.89	11.88	11.93	11.91	0.03
<b>2018*</b>	11.88	12.02	12.15	12.20	12.06	0.15

Note: \* 2017 = Estimate and 2018 = Forecast.

Source: OPEC Secretariat.

Preliminary data for developing countries shows oil supply at 11.87 mb/d for January, lower by 0.01 mb/d m-o-m and also down by 0.20 mb/d, y-o-y, on the back of y-o-y declines in Other Asia, Latin America and the Middle East. For 2018, DCs' supply is forecast to grow by 0.15 mb/d y-o-y to average 12.06 mb/d, with absolute supply revised up by 0.01 mb/d from the previous assessment due to a higher baseline.

Preliminary data for **Other Asia** shows that supply decreased by 0.09 mb/d in 2017 to average 3.62 mb/d, but the contraction will slow to around 0.05 mb/d in 2018 to average 3.57 mb/d after the downward revision by 0.01 mb/d due to a downward adjustment in the forecast for India and Asia others in this month's assessment.

Fifty oil and gas fields in South East Asia (SEA), with a collective 4 billion barrels of oil equivalent resources, will likely be approved for development during the three-year period from 2018 through 2020. These fields will require \$28 billion of capex from final investment decision (FID) to first production. According to Rystad Energy, the \$28 billion is for Greenfield opportunities available to 2020. Brownfield, maintenance and infill drilling activities at existing projects will consume more funds. With 19 fields, Indonesia has the largest count in the SEA FID forecast. However, Malaysia dominates the tallies for both the resources developed (37%) and required capex (42%).

## Latin America

Oil production in **Latin America** was revised up by 0.01 mb/d from the previous assessment and is expected to grow by 0.10 mb/d to average 5.20 mb/d in 2017. The main driver was Brazil, showing growth of 0.16 mb/d. Other countries in the region have been declining, except for Trinidad and Tobago, which shows steady production levels compared to a year earlier. For the current year, the region will grow by 0.14 mb/d, by supporting output from Brazil once again.

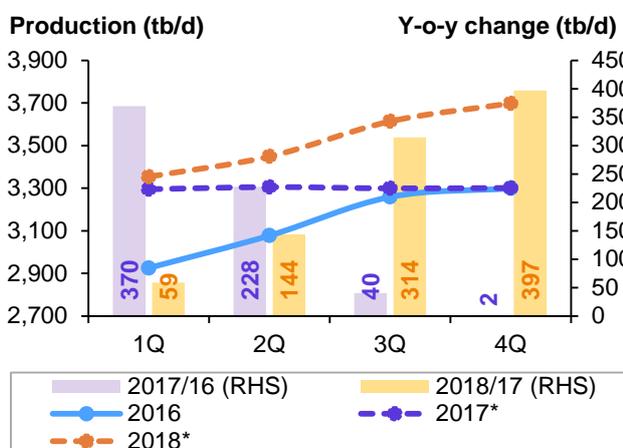
**Colombia's** oil production stood at 0.88 mb/d in 2017, down by 0.03 mb/d from the previous month. Oil production in January showed a minor decline of 0.01 mb/d m-o-m to average 0.88 mb/d, although preliminary data for February indicates a drop of 0.08 mb/d due to attacks on pipelines causing disruptions. Colombia is expected to show another yearly decline of 0.05 mb/d for 2018, to average 0.82 mb/d.

In **Argentina**, oil output is expected to decline by 0.03 mb/d to average 0.65 mb/d in 2017. For 2018, oil production is anticipated to show a minor decline of 0.01 mb/d to average 0.63 mb/d. Argentina's state-owned oil company YPF SA expects shale oil and gas production to grow 35% in 2018, as costs in the Vaca Muerta shale play continue to fall. Still, declining production in mature fields means overall hydrocarbon output will fall 2 to 3% in 2018 after a 5.3% reduction in 2017, the Chairman said. The company plans to drill 100 wells in 12 different areas of Vaca Muerta this year, after drilling costs for horizontal wells fell to \$1,390 per lateral foot in the 4Q compared with \$2,270 in 2016 and \$3,050 in 2015. The company reportedly recently finished drilling its first 3,200-meter long lateral well.

## Brazil

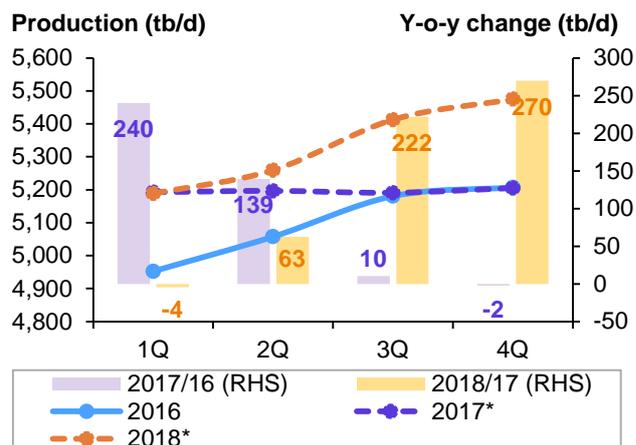
According to Petrobras, **Brazil's liquids output** excluding biofuels, was down in January by 22 tb/d m-o-m to average 2.71 mb/d, also down by 0.09 mb/d, y-o-y.

**Graph 5 - 26: Brazil's liquids supply quarterly, 2016-2018**



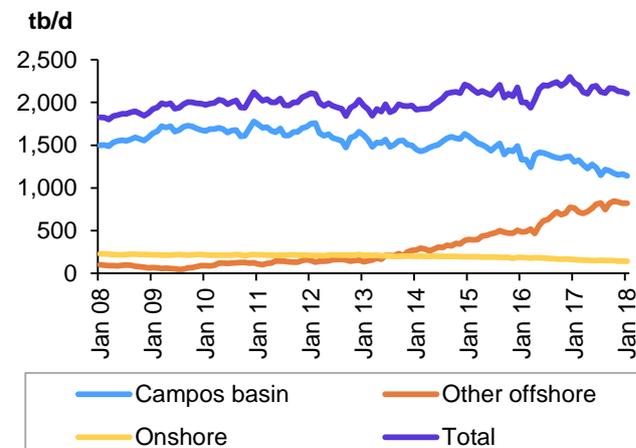
Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 25: Latin America liquids supply quarterly, 2016-2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Graph 5 - 27: Brazil's crude oil production by source, 2008-2017**



Sources: Petrobras and OPEC Secretariat.

Crude output dropped by 22 tb/d m-o-m in January to average 2.59 mb/d, while NGLs output was stagnant at 0.12 mb/d, according to Petrobras. The main reason for the decline is due to the fields' declines from those located in the post-salt layers in Campos basin which is around 13% per year, compare to the average

output in 2017. Production from pre-salt layers in Santos basin was 30% higher y-o-y in 2017 at 1.09 mb/d, mainly coming from the Lula, Lapa and Sapinhoa fields. following the interconnection of new wells to the FPSOs Cidade de Saquarema, Cidade de Maricá and Cidade de Itaguaí; the start-up of operations at the P-66 platform and at the Lapa field, as well as new wells connected to the FPSO Cidade de Caraguatatuba. Moreover, the start of production at the FPSO Pioneiro de Libra on the Mero field, again in the Pre-salt Santos basin supported the increase. Brazil's 4Q17 average liquids output was revised up by 11 tb/d to average 3.30 mb/d.

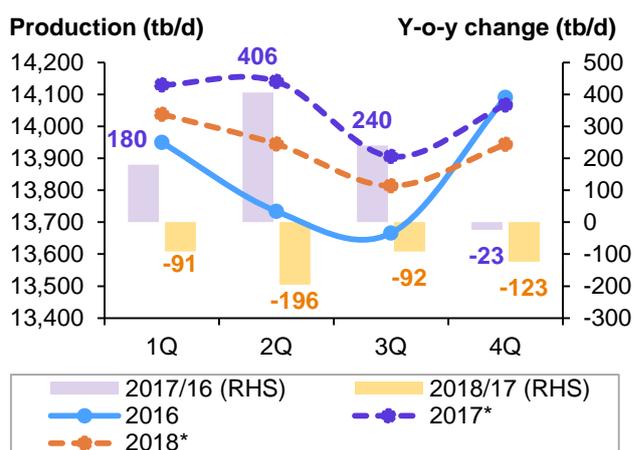
The supply forecast for 2018 was revised up by 0.03 mb/d owing to higher expected production coming in 4Q18, with projected new volumes of 154 tb/d, representing growth of 0.23 mb/d, y-o-y to show average supply of 3.53 mb/d. Petrobras is planning to add oil production from fields such as Lula, Lapa, Buzios and Libra by 0.14 mb/d, 0.03 mb/d, 0.07 mb/d and 0.03 mb/d, respectively.

## FSU

FSU's oil supply rose by 0.20 mb/d in 2017 to average 14.06 mb/d, unchanged from the previous assessment. Total FSU liquids production in January decreased by 0.01 mb/d to average 14.11 mb/d, mainly due to Russia and Kazakhstan showing lower crude oil output, while production in Azeri fields increased. Preliminary data for February 2018 indicates steady output at 14.11 mb/d.

Oil production in Russia and Kazakhstan is estimated to have increased in 2017, while it is estimated to have declined in Azerbaijan and FSU others. For 2018, following an upward revision by 25 tb/d in Russia's oil production forecast, FSU's output is forecast to decline by 0.13 mb/d, mainly from Russia, to average 13.93 mb/d.

Graph 5 - 28: FSU liquids supply quarterly, 2016-2018

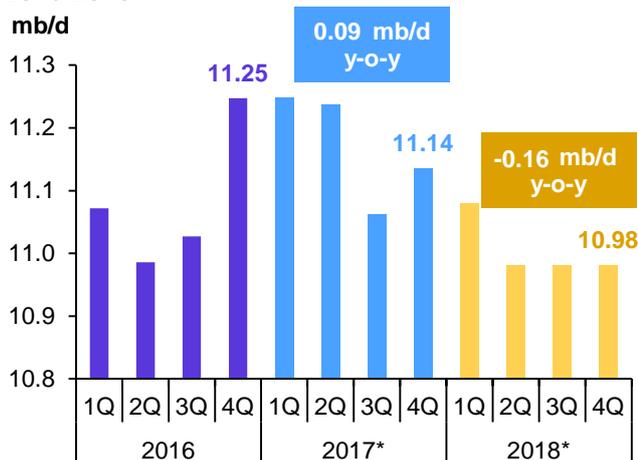


Note: \* 2017 and 2018 = Forecast.  
Source: OPEC Secretariat.

## Russia

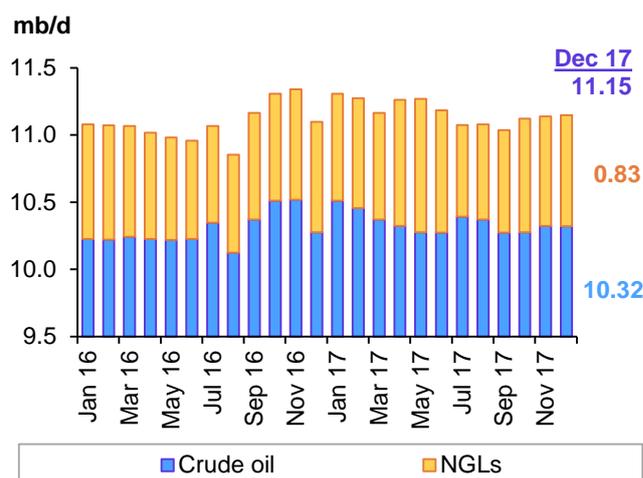
Preliminary Russian liquids output in February averaged 11.16 mb/d, up by 0.02 mb/d m-o-m, according to the Ministry of Energy. Russian liquids output in January declined by a minor 0.01 mb/d compared to December 2017, based on secondary sources.

Graph 5 - 29: Russia liquids supply quarterly, 2016-2018



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

Graph 5 - 30: Russia's liquids supply monthly



Sources: Ministry of Energy and OPEC Secretariat.

According to secondary sources; historical crude oil output in **2017** stood at an average of 10.35 mb/d, up by 0.06 mb/d, y-o-y. Meanwhile, NGLs added 0.03 mb/d y-o-y to average 0.82 mb/d in 2017. For the year, Russian average liquids output rose by 0.09 mb/d y-o-y to average 11.17 mb/d.

For **2018**, and assuming the voluntary production level of 10.98 mb/d in line with the as per the Declaration of Cooperation between OPEC and other participating non-OPEC countries, Russian liquids production is forecast to decline by 0.16 mb/d to average 11.00 mb/d, following an upward revision on the back of higher-than-expected output in 1Q18 by 100 tb/d.

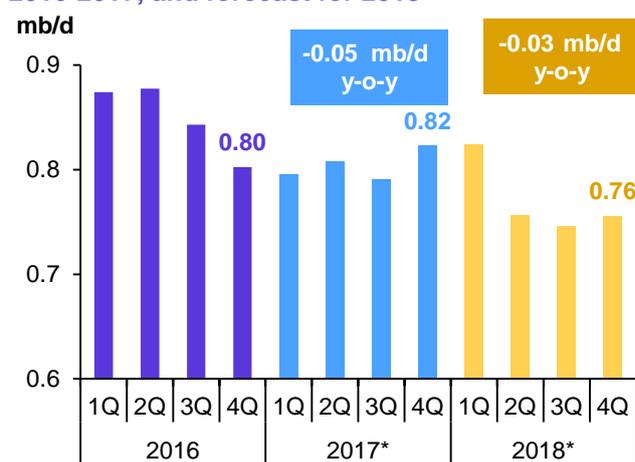
## Caspian

### Azerbaijan

In **Azerbaijan**, crude oil production in January increased by 0.01 mb/d m-o-m, most probably from the Azeri-Chirag-Guneshli (ACG) complex, to average 0.75 mb/d, broadly unchanged from January 2017. 75% of Azeri production comes from the ACG complex.

Azeri liquids supply in 2017 contracted by 0.05 mb/d to average 0.80 mb/d. Azerbaijan is estimated to produce an average of 0.73 mb/d of crude oil and 0.07 mb/d of NGLs in 2017. Preliminary liquids output in 1Q18 was shown stronger than expected in the forecast, therefore it was revised up by 37 tb/d, leading to an upward revision by 0.01 mb/d in absolute annual supply to average 0.77 mb/d, representing a contraction of 0.03 mb/d, y-o-y. Preliminary data on liquids supply in February shows more or less the same level of output.

**Graph 5 - 31: Azerbaijan liquids supply quarterly 2016-2017, and forecast for 2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

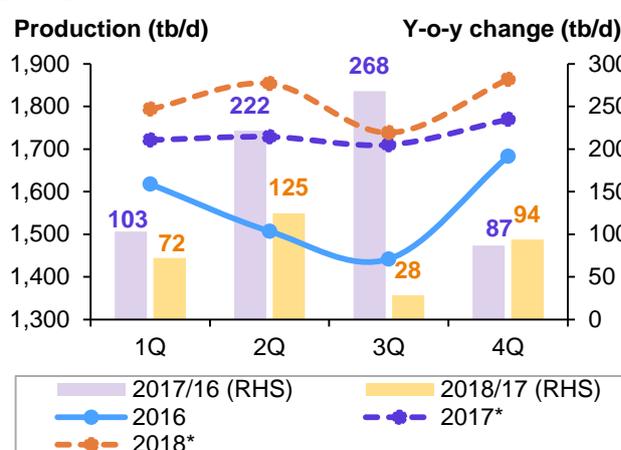
### Kazakhstan

**Kazakhstan's liquids production** was down by 0.01 mb/d in January compared to December, leading to average production of 1.80 mb/d. Preliminary 1Q18 liquids supply indicates an increase of 0.02 mb/d q-o-q, averaging 1.79 mb/d.

**2017** liquids supply in Kazakhstan following the startup of the Kashagan project in the Caspian in 4Q16, rose q-o-q, adding 0.17 mb/d y-o-y, leading to annual supply of 1.73 mb/d. In 2017, 89% of total supply was crude oil, while average NGLs output was pegged at 0.27 mb/d.

For **2018**, following gas re-injection operations in the Kashagan field, production is expected to reach 0.27 mb/d. As a result, Kazakhstan's liquids supply is forecast to grow by 0.08 mb/d, revised down by 0.01 mb/d, compared to last month's assessment due to lower-than-expected production by 50 tb/d in 1Q18, to average 1.81 mb/d.

**Graph 5 - 32: Kazakhstan liquids supply quarterly, 2016-2018**



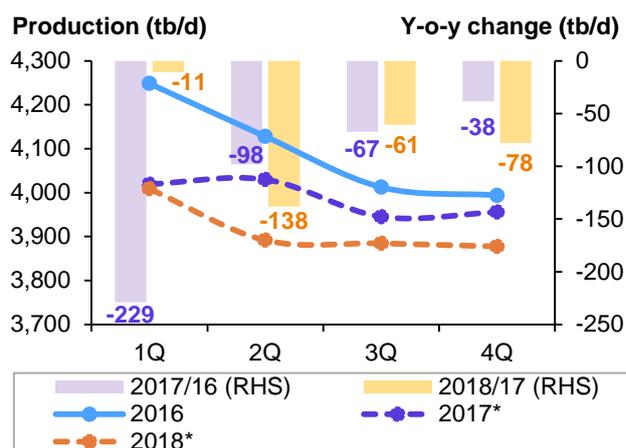
Note: \* 2017 and 2018 = Forecast.  
Source: OPEC Secretariat.

## China

**China's oil supply** in January was up by 0.07 mb/d to average 4.01 mb/d. Output surpassed 4 mb/d for the first time since June 2017. Output in 1Q18 is expected to increase to above 4 mb/d after two quarters of lower levels. Crude oil production in January increased by 66 tb/d to average 3.83 mb/d, according to data released by the Chinese National Bureau of Statistics.

Average crude oil production in **2017** declined by 0.14 mb/d y-o-y to average 3.84 mb/d, much less than the contraction seen in 2016. The decline was largely attributed to the production cut in the Daqing and Shengli oilfields, as well as the Bohai and eastern South China seas. China's liquids supply estimation for 2017 remains unchanged from last month's assessment, indicating a decline by 0.11 mb/d to average 3.99 mb/d.

**Graph 5 - 33: China liquids supply quarterly, 2016-2018**



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

For **2018**, following the higher level of oil production in 1Q18, Chinese production is forecast to decline to a lesser degree compared to 2017 – at about 0.07 mb/d y-o-y – to average 3.92 mb/d, an upward revision in absolute supply by 50 tb/d m-o-m.

## OPEC NGLs and non-conventional oils

**OPEC NGLs and non-conventional liquids** output in February 2018 rose by 0.04 mb/d to average 6.48 mb/d. Production in 2017 is estimated to grow by 0.17 mb/d, to average 6.31 mb/d, while for 2018, growth of 0.18 mb/d is forecast, to average 6.49 mb/d.

In **2017**, NGLs production increased mainly in the UAE (56 tb/d), Saudi Arabia (26 tb/d), IR Iran (25 tb/d), Qatar (21 tb/d) and Nigeria (21 tb/d), while production growth in **2018** is forecast mainly in IR Iran and Saudi Arabia.

**Table 5 - 8: OPEC NGLs + non-conventional oils, 2015-2018\*, mb/d**

	2015	2016	Change 16/15	1Q17	2Q17	3Q17	4Q17	2017	Change 17/16	2018	Change 18/17
<b>Total OPEC</b>	<b>6.04</b>	<b>6.14</b>	0.10	6.20	6.26	6.35	6.42	<b>6.31</b>	0.17	<b>6.49</b>	0.18

Note: \* 2017 = Estimate and 2018 = Forecast.

Source: OPEC Secretariat.

## OPEC crude oil production

According to secondary sources, **total OPEC-14 crude oil production** averaged 32.19 mb/d in February, a decrease of 77 tb/d over the previous month. While production mainly decreased in Venezuela, the UAE and Iraq, this was partially offset by higher production in Nigeria and Angola.

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

	2016	2017	2Q17	3Q17	4Q17	Dec 17	Jan 18	Feb 18	Feb/Jan
<b>Algeria</b>	1,090	1,043	1,054	1,055	1,014	1,037	1,026	1,031	4.8
<b>Angola</b>	1,725	1,638	1,648	1,641	1,633	1,622	1,596	1,613	17.1
<b>Ecuador</b>	545	530	530	536	526	523	519	520	0.9
<b>Equatorial Guinea</b>	160	135	137	130	131	129	137	130	-6.8
<b>Gabon</b>	221	200	203	199	199	197	200	191	-9.1
<b>Iran, I.R.</b>	3,515	3,812	3,793	3,833	3,823	3,822	3,818	3,813	-4.4
<b>Iraq</b>	4,392	4,447	4,455	4,482	4,401	4,416	4,450	4,425	-25.5
<b>Kuwait</b>	2,853	2,708	2,709	2,707	2,704	2,700	2,706	2,702	-4.0
<b>Libya</b>	390	817	709	932	967	962	987	996	9.9
<b>Nigeria</b>	1,556	1,658	1,594	1,763	1,762	1,818	1,781	1,806	24.9
<b>Qatar</b>	656	607	613	603	604	602	605	602	-3.7
<b>Saudi Arabia</b>	10,406	9,953	9,960	9,994	9,971	9,953	9,976	9,982	5.6
<b>UAE</b>	2,979	2,915	2,911	2,922	2,892	2,870	2,862	2,827	-34.3
<b>Venezuela</b>	2,154	1,916	1,964	1,929	1,770	1,647	1,601	1,548	-52.4
<b>Total OPEC</b>	<b>32,643</b>	<b>32,380</b>	<b>32,278</b>	<b>32,725</b>	<b>32,398</b>	<b>32,299</b>	<b>32,263</b>	<b>32,186</b>	<b>-77.1</b>

Note: 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**

	2016	2017	2Q17	3Q17	4Q17	Dec 17	Jan 18	Feb 18	Feb/Jan
<b>Algeria</b>	1,146	1,059	1,072	1,065	1,012	1,037	1,013	1,036	23.0
<b>Angola</b>	1,722	1,632	1,635	1,668	1,585	1,548	1,562	1,498	-64.0
<b>Ecuador</b>	549	531	534	535	522	520	513	513	-0.2
<b>Equatorial Guinea</b>	..	129	126	124	126	131	129	127	-2.5
<b>Gabon</b>	..	..	..	..	..	..	..	..	..
<b>Iran, I.R.</b>	3,651	3,867	3,878	3,865	3,833	3,811	3,817	3,810	-7.0
<b>Iraq</b>	4,648	4,469	4,549	4,380	4,361	4,362	4,360	4,360	0.0
<b>Kuwait</b>	2,954	2,704	2,710	2,700	2,702	2,701	2,705	2,700	-5.0
<b>Libya</b>	..	..	..	..	..	..	..	..	..
<b>Nigeria</b>	1,427	1,510	1,485	1,592	1,572	1,569	1,641	1,732	91.5
<b>Qatar</b>	652	600	608	589	608	612	621	539	-81.7
<b>Saudi Arabia</b>	10,460	9,951	9,965	9,978	9,977	9,980	9,983	9,935	-47.9
<b>UAE</b>	3,088	2,967	2,984	2,969	2,904	2,862	2,850	2,797	-53.0
<b>Venezuela</b>	2,373	2,072	2,127	2,102	1,804	1,621	1,769	1,586	-183.0
<b>Total OPEC</b>	..	..	..	..	..	..	..	..	..

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

.. Not available.

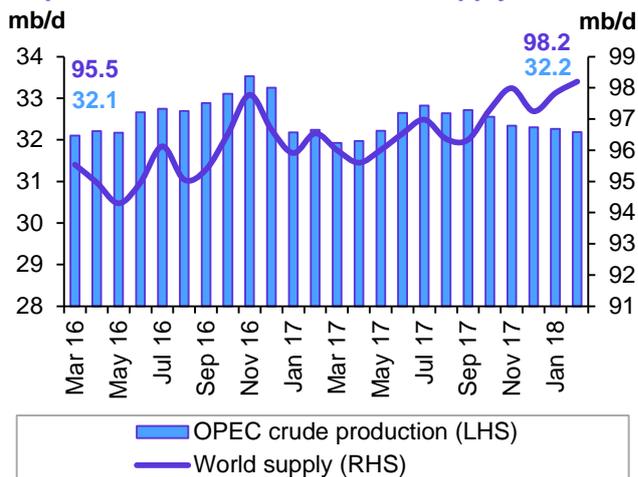
Source: OPEC Secretariat.

## World oil supply

Preliminary data indicates that **global oil supply** increased by 0.37 mb/d to average 98.20 mb/d in February 2018, compared with the previous month. Preliminary February supply data shows an increase in non-OPEC supply (including OPEC NGLs) by 0.45 mb/d to average 66.01 mb/d, higher by 1.71 mb/d, y-o-y. This was mainly driven by the US, Mexico, Norway, UK, Bahrain, Brazil and Kazakhstan which partially offset m-o-m declines in the US, Brazil, Bahrain, Russia and Canada. OPEC crude oil production was decreased by 77 tb/d in February.

**The share of OPEC crude oil in total global production** was down by 0.2 pp at 32.8% in February, 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 - 34: OPEC and world oil supply**



Source: OPEC Secretariat.

## Product Markets and Refinery Operations

Product markets in all main trading hubs showed positive results in February, mainly driven by improved fundamentals. In the **US**, refinery margins showed outstanding seasonal y-o-y growth, mainly supported by gasoline and diesel stocks drawdowns in the last week of the month, due to refinery maintenance.

In **Europe**, product markets strengthened, supported by higher gasoline demand and improved fuel oil export opportunities.

Meanwhile, product markets in **Asia** recorded gains all across the barrel, except in the diesel complex. Support came from higher product demand (in line with seasonal trends) and higher heating requirements due to colder weather in northeast Asia, amid firm jet fuel demand.

### Refinery margins

In February, refinery margins in the **USGC** further extended the slow upward, trend seen a month earlier, supported by a drop in the gasoline stocks level of 788 tb/d recorded in the last few days of the month. The drawdown in gasoline inventories was caused by planned refinery maintenance shutdowns ahead of transition to summer grades. This development drove bullish sentiment in the gasoline market and offset losses seen in other main products on the back of low seasonal demand.

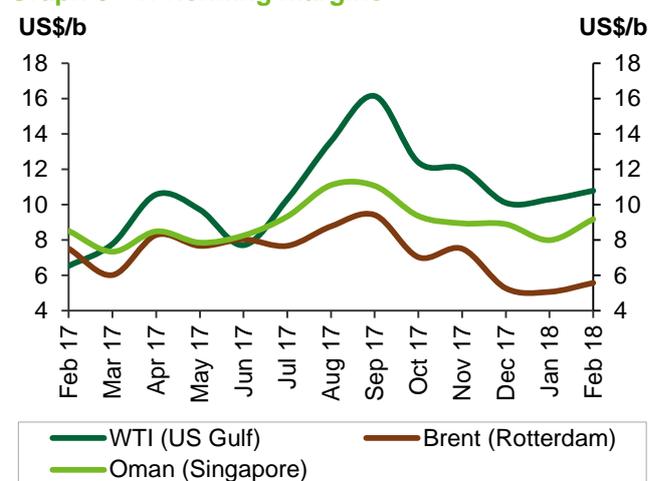
Another particularity recorded in February was the substantial y-o-y growth in refinery margins compared with previous years. Historical data has shown that US refinery margins drop to their lowest values in around February. In 2016, the lowest value for refinery margins reached was \$4.7/b in January and in 2017 it was \$6.5/b in February.

However this typical trend failed to materialise in 2018, and refinery margins did not bottom out as expected. This development is attributed to a stronger US products market, reflected by favourable product demand growth, and a relatively wider Brent-WTI spread, which has been placing US-WTI derived products at a commercial advantage over its European counterparts. Refinery margins for WTI in the US averaged \$10.8/b in February, up by 42¢ m-o-m and by \$4.26 y-o-y.

In **Europe**, refinery margins saw a recovery from the severe downturn seen in the previous few months. Despite the disappointing refining margins seen this winter attributed to overall warmer temperatures, in February, margins benefitted from gains seen all across the barrel with the exception of diesel, on the back of higher diesel stocks. This positive outcome was underpinned by healthy product demand and further boosted by a reduction in product supplies due to scheduled refinery maintenance. Refinery margins for Brent in Europe averaged \$5.6/b in February, up by 51¢ m-o-m and down by \$1.9 y-o-y.

Governments' taxation policies to discourage driving diesel-fuelled cars are expected to pressure diesel demand in Europe in the long term. Recently, a German court took a decision to allow local authorities to restrict free movement of diesel vehicles, while in France diesel-powered cars can be banned from specific zones, if pollution levels surpass certain limits. This effect is more likely to be further exacerbated if more European nations commit to reducing nitrogen oxide-related (NO<sub>x</sub>) air pollution and similar measures are adopted in other countries. Moreover, the EU has issued 'final warnings' to Germany, France, Spain, Italy and the UK for repeatedly exceeding NO<sub>x</sub> limits.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

## Product Markets and Refinery Operations

In **Asia**, product markets showed the strongest performance compared to other main product markets in February, mainly supported by robust jet/kerosene and fuel oil demand. The uptick in the kerosene product market was attributed to higher heating requirements related to colder winter temperatures in Northeast Asia. Meanwhile, the jet market strengthened on significant regional jet demand growth, amid tightening as supplies out of the Middle East declined due to refinery maintenance. Higher straight run fuel oil requirements from major refiners were attributed to interest in blending with lighter crudes to gradually lessen the habitual heavier crude intake. Refinery margins for Oman in Asia averaged \$9.2/b in February, up by \$1.2 m-o-m and by 66¢ y-o-y.

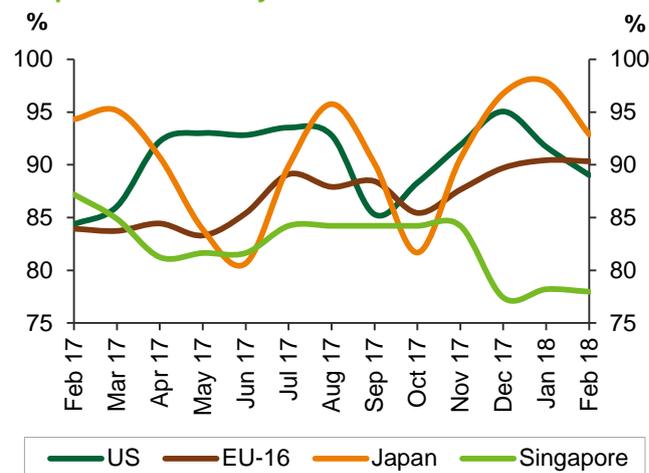
## Refinery operations

In the **US**, refinery utilization rates declined in February to average 89.0% corresponding to a throughput of 16.5 mb/d. This represented a drop of 2.3 pp and 489 tb/d, respectively, from the previous month. Compared to a year earlier, February refinery utilization rate was up by 4.0 pp and throughputs increased by 663 tb/d.

In February, **European** refinery utilization averaged 90.3%, corresponding to a throughput of 11.0 mb/d, a marginal drop of 0.1 pp and 10 tb/d, respectively, m-o-m, and down by 6.4 pp and 649 tb/d, y-o-y.

Refinery throughputs are expected to decline to lower levels in the upcoming months as refinery maintenance is expected to peak in May.

Graph 6 - 2: Refinery utilization rates



Sources: EIA, Euroilstock, PAJ and Argus Media.

In **Asia**, refinery utilization in Japan averaged 92.9% in February, corresponding to a throughput of 3.3 mb/d. Compared to the previous month, runs dropped by 175 tb/d, and compared to a year earlier, runs were down by 306 tb/d. In China, refinery utilization rates averaged 90.7% corresponding to a throughput of 11.8 mb/d, down by 0.8 pp and 110 tb/d, respectively, m-o-m and while refinery utilization was by 0.9 pp y-o-y, throughputs dropped by 308 tb/d from the same month a year earlier. Meanwhile, in Singapore refinery runs averaged 78.0% with a throughput of 1.2 mb/d, unchanged m-o-m and down by 9.0 pp and 140 tb/d, respectively, y-o-y. Looking ahead, refinery utilization rates in Asia are expected to remain relatively lower as an average of 1.5 mb/d of capacity is expected to go offline in the next four months.

## Product markets

### US market

US **gasoline** crack spreads experienced a recovery in the last few days of the month, supported by reduced supplies, and stock drawdowns as a result of refinery maintenance shutdowns. In the near term, the ongoing transition to higher Reid vapour pressure (RVP) summer grade could pressure the gasoline market, as traders are encouraged to clear winter-grade inventories. However, in the mid-term, as domestic gasoline demand remains seasonally low, stronger support is expected considering that an estimated 1 mb/d of CDU intake is expected to go offline in April, while, simultaneously, demand begins to pick up ahead of the driving season. In February, the US gasoline crack spread against WTI averaged \$18.7/b, down by \$1.4 m-o-m, and up by \$1.4 y-o-y.

The **jet/kerosene** market in February dropped, pressured by higher inventories, which may have been strategically accumulated ahead of the aviation's summer-time high season. The US jet/kerosene crack spread against WTI averaged \$16.3/b, down by \$2.7 m-o-m, and up by \$3.6 y-o-y.

US **gasoil** crack spreads plummeted in February, pressured by strong ARA and Singapore stock builds caused by lower gasoil demand and lower exports, compared to a year earlier. So far, the overall warmer-than-expected winter has failed to lift diesel cracks, and a 45% decrease in diesel exports from the US to Europe in February most likely contributed to the poor performance. The US gasoil crack spread against WTI averaged \$10.3/b, down by \$4.9 m-o-m, and up by 50¢ y-o-y.

The **fuel oil** crack spreads in the US weakened as demand continue slow. The oversupplied environment in the European fuel oil market caused a redirection of fuel oil volumes to Asia, which could have further exerted pressure on the US fuel oil market. Looking forward, as USGC refineries upgrade their secondary units to absorb lighter crudes blended with fuel oil, some support is expected as higher fuel oil requirements emerge from the USGC.

In February, the US fuel oil crack spread against WTI averaged minus \$8.7/b, down by 92¢ m-o-m, and by \$1.4 y-o-y.

## European market

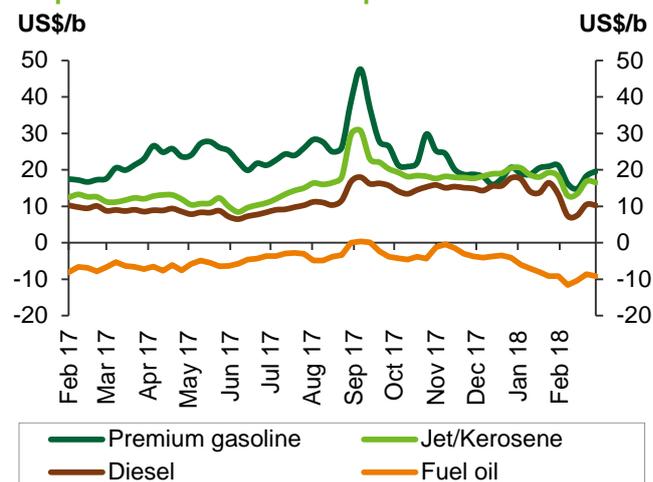
In February, the **gasoline** market in Europe continued the recovery trend seen in the last month. Firm exports to West Africa and the Americas provided support. The gasoline crack spread against Brent averaged \$17.6/b, gaining \$1.2 m-o-m, however losing \$3.0 y-o-y.

European **jet/kerosene** crack spreads strengthened in February. Healthy import requirements from Asia and refinery season in the Middle East contributed to this positive performance. The jet/kerosene crack spread against Brent averaged \$16.5/b, up by \$2.5 m-o-m, and by \$5.2 y-o-y.

At the middle of the barrel, **gasoil** cracks weakened, pressured by ample supplies from Russia. Gasoil stocks were reported to have increased, and thus far, winter heating demand was unable to support margins as expected before winter. The gasoil crack spread against Brent averaged \$12.3/b, which was 73¢ lower compared to a month earlier, however \$1.2 higher than in the same month a year earlier.

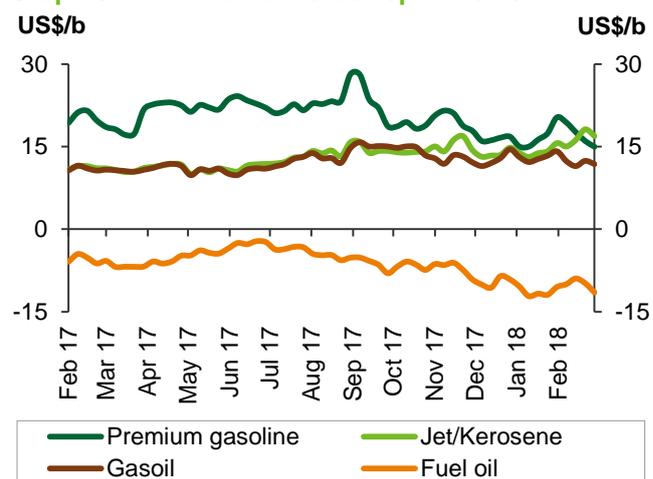
The **fuel oil 3.5%** crack spread against Brent strengthened, supported by higher arbitrage opportunities from the East and Middle East refinery maintenance, offsetting the negative impact from declining demand from the power generation sector. European fuel oil cracks averaged minus \$13.1/b, gaining \$1.6 m-o-m, however losing \$1.2 y-o-y.

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



Sources: Argus Media and OPEC Secretariat.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

## Asian market

The Asian **gasoline** market recovered from the weakening seen in the previous month and received support from higher gasoline demand in Japan. The start of the maintenance season, as well as the implementation of the new Chinese tax invoicing system (the implementation date was postponed to 1 March) in the acquisition of aromatics blending components are expected to exert some pressure on Asian gasoline cracks in the near and medium term. The Singapore gasoline 92 crack spread against Oman averaged \$11.2/b, up by 92¢ m-o-m and down by \$1.3 y-o-y.

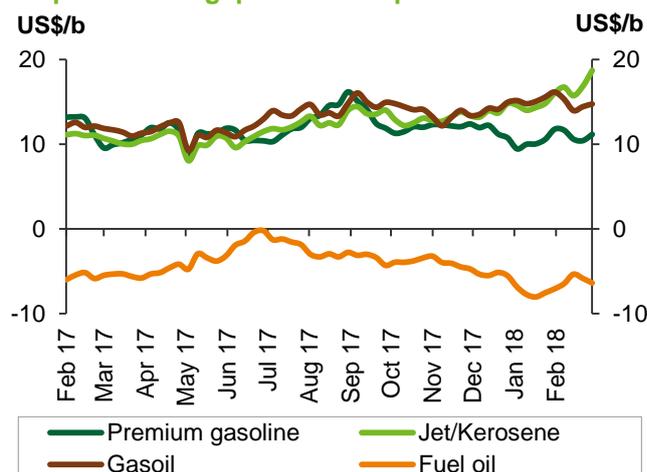
Singapore **light distillate naphtha** continued to lose ground in February, diving deeper into negative territory, pressured by a growing preference for LPG over naphtha as petrochemical feedstock. The Singapore naphtha crack spread against Oman averaged minus \$1.6/b, down by \$1.4/b m-o-m and lower by \$3.1/b y-o-y. Naphtha cracks will likely continue to weaken as LPG production is expected to grow this year.

The **jet/kerosene** crack spread in Asia saw the strongest performance compared to all other products in the main markets. Jet/kerosene showed remarkable gains on a monthly and yearly basis. Strong jet fuel demand growth and higher kerosene heating requirements due to colder winter temperatures supported this positive trend. Furthermore, an increase in jet demand from the aviation industry around the Chinese Lunar New Year holidays provided additional support. Strong jet/kerosene demand growth was outpaced by supply, and caused the price of the product to soar to \$80.0/b in February, the highest-priced product of all. Although jet/kerosene was priced \$1.0/b higher in the previous month, it had a lower differential and was priced lower than gasoil 50 ppm. The Singapore jet/kerosene crack spread against Oman averaged \$17.0/b, up by \$2.4 m-o-m and by \$5.9 y-o-y.

Asian **gasoil** crack spreads weakened due to supply-side pressure, as considerable supplies from India and China entered the market contributing to rising gasoil stocks. The Singapore gasoil crack spread against Oman averaged \$15.0/b, down by 33¢ m-o-m, but up by \$2.7 y-o-y.

The Asian **fuel oil** market improved on increased fuel oil demand from Chinese independent refiners to be used as cracking feedstock. Moreover, newly developed interest in blending fuel oil with lighter crudes by some major refiners to feed CDUs helped provide an additional boost to the much needed support in the fuel oil market. The Singapore fuel oil crack spread against Oman averaged minus \$6.0/b, up by 1.5 m-o-m but down by 54¢ y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Oman



Sources: Argus Media and OPEC Secretariat.

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

<u>Event</u>	<u>Time frame</u>	<u>US</u>	<u>Europe</u>	<u>Asia</u>	<u>Observation</u>
<b>Maintenance season</b> (Europe, Asia, Middle East, US and FSU)	2Q18	↑ High impact on refining margins	↑ High impact on refining margins	↑ High impact on refining margins	Strengthen product markets due to tightening supplies, lower crude consumption
<b>Refinery upgrades</b>	1H18	-	About 2 mb/d of total throughput expected to go offline temporarily.	-	Lower product supplies (short term). Lower fuel oil supplies, and higher gasoline/diesel supplies (long term)
<b>Higher US oil production</b>	2018	↓ High impact on refining margins (risk of pressure on WTI crude prices vs slower CDU capacity additions)	-	↓ Some impact on naphtha crack spread	About 60% of total LPG production is derived from natural gas.  Higher LPG supplies (lower LPG prices could further pressure naphtha cracks)
<b>New Chinese aromatic tax invoicing system</b>	1 March 2018	-	-	↓ Low impact on gasoline cracks	Reduced gasoline exports in the medium to long term, as currently stocks are high. New CDU additions may diminish this impact
<b>Chinese 5-month environmental campaign</b>	March 2018	-	-	↑ High impact on diesel market	Restricted heavy-duty trucking and industrial production in Northern China
<b>Higher transport fuel demand</b>	April 2018	↑ High impact on refining margins	↑ High impact on refining margins	↑ High impact on refining margins	Based on 2016 and 2017 trends
<b>IMO 2020</b>	2020	↑ High impact on LSFO cracks	↑ High impact on refining margins of upgraded refineries and forced closures of simple refineries	↑ High impact on LSFO market	Lower HSFO demand, higher refinery complexity, higher GO cracks (MGO), pressure simple refineries and forced closures

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Dec 17	Jan 18	Feb 18	Change Feb/Jan	Dec 17	Jan 18	Feb 18	Change Feb/Jan
<b>US</b>	<b>17.59</b>	<b>16.97</b>	<b>16.48</b>	<b>-0.49</b>	<b>95.05</b>	<b>91.33</b>	<b>89.02</b>	<b>-2.3 pp</b>
<b>Euro-16</b>	<b>10.93</b>	<b>11.02</b>	<b>11.01</b>	<b>-0.01</b>	<b>89.70</b>	<b>90.43</b>	<b>90.33</b>	<b>-0.1 pp</b>
France	1.18	1.14	1.16	0.02	94.02	91.22	92.66	1.4 pp
Germany	1.94	1.92	1.90	-0.02	88.80	87.71	86.97	-0.7 pp
Italy	1.43	1.50	1.49	-0.01	69.65	73.07	72.63	-0.4 pp
UK	1.10	1.01	0.95	-0.06	84.10	77.80	73.12	-4.7 pp
<b>Japan</b>	<b>3.41</b>	<b>3.44</b>	<b>3.27</b>	<b>-0.18</b>	<b>96.76</b>	<b>97.86</b>	<b>92.88</b>	<b>-4.98 pp</b>

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

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

	2015	2016	2017	1Q17	2Q17	3Q17	4Q17	1Q18*
<b>Total OECD</b>	<b>37.61</b>	<b>37.41</b>	<b>37.99</b>	<b>37.53</b>	<b>38.04</b>	<b>38.25</b>	<b>38.14</b>	<b>37.91</b>
<b>OECD Americas</b>	<b>19.01</b>	<b>18.78</b>	<b>19.09</b>	<b>18.56</b>	<b>19.80</b>	<b>19.03</b>	<b>19.02</b>	<b>18.95</b>
of which US	16.43	16.51	16.89	16.22	17.42	16.89	17.02	16.73
<b>OECD Europe</b>	<b>12.00</b>	<b>11.85</b>	<b>12.08</b>	<b>11.88</b>	<b>11.82</b>	<b>12.42</b>	<b>12.20</b>	<b>12.01</b>
of which:								
France	1.15	1.12	1.14	1.05	1.11	1.18	1.20	1.15
Germany	1.87	1.88	1.85	1.82	1.74	1.93	1.92	1.93
Italy	1.34	1.30	1.36	1.34	1.28	1.40	1.44	1.49
UK	1.10	1.08	1.06	1.04	1.06	1.06	1.08	0.98
<b>OECD Asia Pacific</b>	<b>6.60</b>	<b>6.78</b>	<b>6.81</b>	<b>7.10</b>	<b>6.43</b>	<b>6.80</b>	<b>6.92</b>	<b>6.95</b>
of which Japan	3.26	3.28	3.23	3.49	2.99	3.24	3.19	3.36
<b>Total Non-OECD</b>	<b>40.14</b>	<b>41.00</b>	<b>42.16</b>	<b>41.36</b>	<b>41.11</b>	<b>41.66</b>	<b>42.11</b>	<b>41.91</b>
of which:								
China	10.44	10.77	11.35	11.22	11.00	11.27	11.92	11.87
Middle East	6.41	6.75	6.90	6.61	6.92	6.96	6.62	6.42
Russia	5.64	5.58	5.59	5.64	5.46	5.62	5.64	5.81
Latin America	6.14	5.70	5.46	5.67	5.52	5.35	5.26	5.22
India	4.56	4.93	4.98	5.01	4.89	4.82	5.21	5.38
Africa	1.70	1.73	1.76	1.77	1.68	1.73	1.66	1.69
<b>Total world</b>	<b>77.75</b>	<b>78.41</b>	<b>80.16</b>	<b>78.90</b>	<b>79.16</b>	<b>79.92</b>	<b>80.25</b>	<b>79.82</b>

Note: \* Includes OPEC Secretariat's estimates.

Totals may not add up due to independent rounding.

Source: 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

	Jan 18	Feb 18	Change Feb/Jan	2017	2018 (y-t-d)
<b>US Gulf (Cargoes FOB):</b>					
Naphtha*	68.15	62.99	-5.16	55.09	65.57
Premium gasoline (unleaded 93)	83.83	80.83	-3.00	74.42	82.33
Regular gasoline (unleaded 87)	78.46	75.18	-3.28	68.57	76.82
Jet/Kerosene	82.70	78.48	-4.22	66.07	80.59
Gasoil (0.2% S)	78.94	72.45	-6.49	62.31	75.70
Fuel oil (3.0% S)	56.92	54.15	-2.77	47.05	55.54
<b>Rotterdam (Barges FoB):</b>					
Naphtha	65.48	61.52	-3.96	53.66	63.50
Premium gasoline (unleaded 98)	85.60	82.80	-2.80	75.13	84.20
Jet/Kerosene	83.10	81.65	-1.45	66.84	82.38
Gasoil/Diesel (10 ppm)	82.15	77.45	-4.70	66.35	79.80
Fuel oil (1.0% S)	57.65	55.15	-2.50	48.71	56.40
Fuel oil (3.5% S)	54.41	52.04	-2.37	44.31	53.23
<b>Mediterranean (Cargoes FOB):</b>					
Naphtha	64.29	60.54	-3.75	52.81	62.42
Premium gasoline**	77.12	73.27	-3.85	66.56	75.20
Jet/Kerosene	81.03	79.37	-1.66	65.12	80.20
Diesel	81.51	77.55	-3.96	66.92	79.53
Fuel oil (1.0% S)	59.24	56.29	-2.95	49.55	57.77
Fuel oil (3.5% S)	55.94	53.44	-2.50	46.18	54.69
<b>Singapore (Cargoes FOB):</b>					
Naphtha	66.26	61.41	-4.85	54.04	63.84
Premium gasoline (unleaded 95)	78.61	77.02	-1.59	68.01	77.82
Regular gasoline (unleaded 92)	76.65	74.15	-2.50	65.43	75.40
Jet/Kerosene	81.00	80.01	-0.99	65.32	80.51
Gasoil/Diesel (50 ppm)	81.70	77.95	-3.75	66.33	79.83
Fuel oil (180 cst)	58.89	56.96	-1.93	49.67	57.93
Fuel oil (380 cst 3.5% S)	58.85	56.56	-2.29	49.24	57.71

Note: \* Barges.

\*\* Cost, insurance and freight (CIF).

\*\*\* Based on the first three weeks of September.

Sources: Argus Media and OPEC Secretariat.

## Tanker Market

Tanker market spot freight rates continued the drop encountered in the previous months, as average dirty tanker spot freight rates declined further in February by 6% to stand at WS62 points. Lower rates were seen in all reported dirty classes on the back of limited tonnage demand and reduced inquiries at times, partially due to holidays in the East. Moreover, the well-populated tonnage list – as vessels supply outpaced demand – mostly prevented rates from rising in several regions, despite some weather and ports delays.

In general, demand for dirty tankers was suppressed in February affecting freight rates negatively in all classes. On average, the VLCC, Suezmax and Aframax spot rates declined by 9%, 9% and 4%, respectively. The weak tanker market returns were barely covering operational cost, depressing market profitability.

The clean tanker market was mostly quiet in February, with spot freight rates generally weak as most reported routes showed a decline in rates from a month earlier. Similar to dirty tankers, the clean tanker market was affected by holidays and insufficient activity, despite cold weather and occasional delays.

Looking ahead, it is unlikely that tanker market spot freight rates will gain any support to rise from their current levels, as short-term improvements in both dirty and clean sectors of the market are unlikely for the time being, mainly on the back of the prevailing imbalance in market fundamentals.

## Spot fixtures

According to preliminary data, global **fixtures** increased by 8.4% in February compared with the previous month. OPEC spot fixtures were up by 4.3%, or 0.57 mb/d, to average 13.81 mb/d. Fixtures on the Middle East-to-East route averaged 7.14 mb/d in February, increasing by 0.43 mb/d from one month ago, while those on the Middle East-to-West route averaged 2.56 mb/d. Outside of the Middle East, fixtures averaged 4.11 mb/d, down by 0.34 mb/d compared with the previous month.

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

	<b>Dec 17</b>	<b>Jan 18</b>	<b>Feb 18</b>	<b>Change Feb 18/Jan 18</b>
<b>All areas</b>	<b>18.14</b>	<b>18.03</b>	<b>19.55</b>	<b>1.52</b>
OPEC	13.01	13.23	13.81	0.57
Middle East/East	6.33	6.71	7.14	0.43
Middle East/West	2.25	2.07	2.56	0.49
Outside Middle East	4.44	4.45	4.11	-0.34

Sources: Oil Movements and OPEC Secretariat.

## Sailings and arrivals

Preliminary data shows **OPEC sailings** increasing in February by 0.7%, averaging 24.48 mb/d, higher by 0.52 mb/d from the same month a year ago. **Middle East sailings** dropped from the previous month by 1.2%, though remained above a year before.

February **arrivals** were mixed, registering declines in North America and Far Eastern ports of 7.9% and 2.8%, respectively, from a month ago, while arrivals to Europe and West Asia increased by 1.6% and 2.3%, respectively, to average 12.18 mb/d and 4.72 mb/d.

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

	<u>Dec 17</u>	<u>Jan 18</u>	<u>Feb 18</u>	<u>Change Feb 18/Jan 18</u>
<b>Sailings</b>				
OPEC	24.11	24.31	24.48	0.16
Middle East	17.33	17.73	17.51	-0.22
<b>Arrivals</b>				
North America	9.80	10.36	9.54	-0.82
Europe	12.51	11.99	12.18	0.19
Far East	8.65	8.74	8.50	-0.25
West Asia	4.54	4.61	4.72	0.11

Sources: Oil Movements and OPEC Secretariat.

## Dirty tanker freight rates

### VLCC

The **VLCC** market remained suppressed in February as loading requirements remained limited, with even a relative increase in the amount of activity on several major routes not sufficient to support freight rates as this uptick was only temporary. The clear imbalance in the VLCC market continued to weigh heavily on market profitability, as it depressed earnings to very low levels. A huge tonnage buildup was seen on all major trading routes.

In general, the VLCC market was lacking activities in the month due to holidays in different regions. Freight rates registered for tankers operating on the Middle East-to-East route dropped by 12% from the previous month to stand at WS39 points. Middle East-to-West routes declined by 7% from the previous month to stand at WS19 points, influenced by the downward pressure in the region. Similarly, West Africa-to-East routes dropped by 8% from a month ago to average WS42 points. On all routes, the VLCC freight rates were below those of the same month a year earlier.

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

	<u>Size 1,000 DWT</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Feb 18</u>	<u>Change Feb 18/Jan 18</u>
Middle East/East	230-280	52	44	39	-6
Middle East/West	270-285	25	21	19	-2
West Africa/East	260	57	46	42	-4

Sources: Argus Media and OPEC Secretariat.

### Suezmax

**Suezmax average spot freight rates** saw a similar drop compared to VLCCs in February. Rates for tankers operating on the West Africa-to-US route decreased by 3% to average WS51 points. Rates on the Northwest Europe (NWE)-to-US route fell by 15% in February from the previous month, to average WS43 points.

The decline in freight rates came on the back of limited loading requirements, despite some improvements in Suezmax rates at the beginning of the month for early March loadings, however the upward movement was shortlived, as it received no support from general tonnage demand versus continuous vessel availability. However, Suezmax rates did benefit from light VLCC requirements, providing more opportunity for Suezmax chartering. Nevertheless, the Suezmax market remained oversupplied in February, preventing any possible rise in rates.

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

	Size 1,000 DWT	Dec 17	Jan 18	Feb 18	Change Feb 18/Jan 18
West Africa/US Gulf Coast	130-135	87	53	51	-2
Northwest Europe/US Gulf Coast	130-135	66	50	43	-8

Sources: Argus Media and OPEC Secretariat.

## Aframax

The **Aframax** sector saw negative developments in February, similar to the other larger vessel classes in the dirty tanker market. Average Aframax freight rates declined on almost all routes from the previous month, showing an average drop of 4%.

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

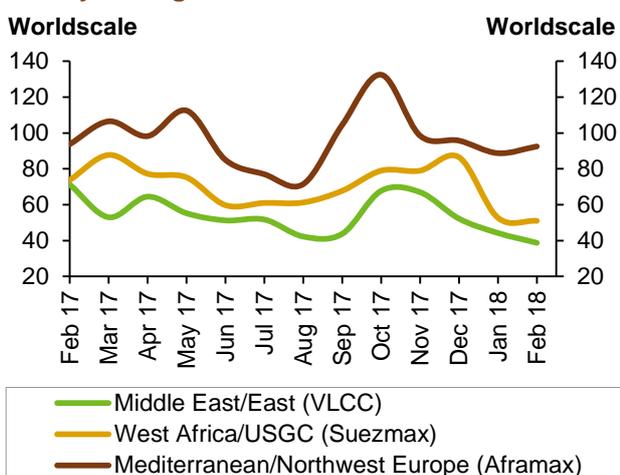
	Size 1,000 DWT	Dec 17	Jan 18	Feb 18	Change Feb 18/Jan 18
Indonesia/East	80-85	101	88	82	-6
Caribbean/US East Coast	80-85	160	111	98	-13
Mediterranean/Mediterranean	80-85	100	98	96	-2
Mediterranean/Northwest Europe	80-85	96	89	93	4

Sources: Argus Media and OPEC Secretariat.

In the North Sea and the Baltics, rates weakened or remained mostly at low levels. In the Mediterranean, rates remained steady, with freight rates for Aframax operating on the Mediterranean-to-Mediterranean routes showing a slight decline of 2% to stand at WS96 points, while rates registered on tankers trading on the Mediterranean-to-NWE routes inched up by WS4 points to stand at WS93 points, the only increase in monthly freight rates seen on all reported dirty tanker routes.

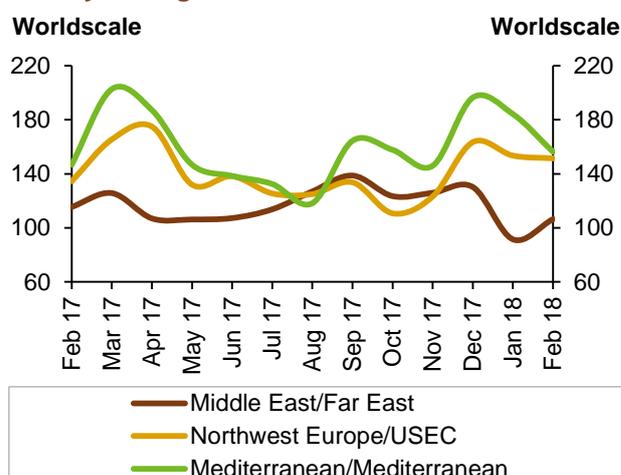
In the Caribbean, Aframax freight rates had dropped considerably in February from the previous month, on the back of well populated tonnage lists, and ships not being affected for long by weather delays and fog, as operations were resumed swiftly following weather improvements. Therefore, the Aframax spot rates on the Caribbean-to-US East Coast (USEC) routes reported a drop of 12% to stand at WS98 points, showing no major effect even on replacement requirements. Rates in the East took no exception, as Aframax rates on the Indonesia-to-East route went down by 7% to average WS82 points in February.

**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.

## Clean tanker freight rates

As seen in the dirty segment of the market, **clean tanker spot freight rates** were mostly under pressure in February owing to a general downward momentum in the market. Clean spot freight rates on most reported routes dropped in February from the previous month.

To the **East of Suez**, clean tanker spot freight rates increased by 8% compared with the previous month, supported by spot freight rates for tankers trading between the Middle East-to-East which showed a gain of WS15 points to stand at WS107 points, while rates on the Singapore-to-East route declined by WS2 points to stand at WS133 points.

In the **West of Suez**, spot freight rates for tankers operating on the NWE-to-USEC route dipped by 1% to average WS152 points. Rates in NWE dropped despite severe weather conditions, which were not enough to prevent rates from dropping, albeit slightly. In the Mediterranean, clean spot freight rates dropped in February compared with the previous month, attributed to low market activity, although offset by enquiries in the Black Sea and replacements for delayed vessel arrivals. Clean spot freight rates for tankers trading on the Mediterranean-to-Mediterranean and the Mediterranean-to-NWE routes dropped by WS28 points, each, in February, compared with the previous month to average WS156 points and WS166 points, respectively.

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

	Size 1,000 DWT	<u>Dec 17</u>	<u>Jan 18</u>	<u>Feb 18</u>	<b>Change</b> <u>Feb 18/Jan 18</u>
<b>East of Suez</b>					
Middle East/East	30-35	130	92	107	15
Singapore/East	30-35	177	134	133	-2
<b>West of Suez</b>					
Northwest Europe/US East Coast	33-37	164	154	152	-2
Mediterranean/Mediterranean	30-35	197	184	156	-28
Mediterranean/Northwest Europe	30-35	207	194	166	-28

Sources: Argus Media and OPEC Secretariat.

# Oil Trade

In February, preliminary data shows that US crude oil imports declined by 482 tb/d, or 6%, from the previous month to average 7.5 mb/d. On an annual basis, this reflects a loss of 349 tb/d, or 4%, from a year earlier. US product imports dropped by 135 tb/d, or 6.2%, m-o-m to average 2.0 mb/d, while y-o-y they dropped by 104 tb/d, or 5%.

Japan's crude oil imports dropped in January by 104 tb/d, or 3%, to average 3.4 mb/d. Y-o-y, crude imports declined by 39 tb/d, or 1%. On the other hand, product imports increased in January by 56 tb/d to average 722 tb/d, reflecting a gain of 8% m-o-m and 10% y-o-y.

China's crude oil imports rose to new peak in January, up by 1.6 mb/d, or 21%, from the previous month to average 9.6 mb/d. Y-o-y, China's crude imports increased by 1.6 mb/d, 19% higher than levels seen last year. The increase in imports was in line with China's refinery throughput increasing by 357 tb/d. On the other hand, product imports increased in January as the country prepared for the Chinese New Year, up by 174 tb/d to average 1.6 mb/d, reflecting a gain of 12% m-o-m and 29% y-o-y.

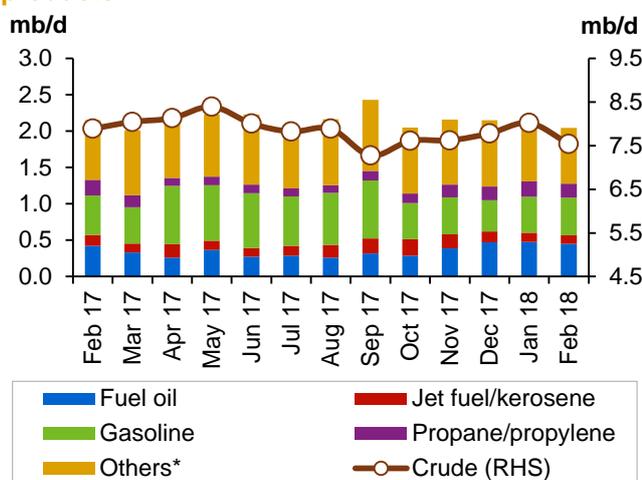
In January, India's crude imports rose to a record high, increasing by 119 tb/d, or 3%, from the previous month to average 4.7 mb/d, and up by 630 tb/d, or 15%, y-o-y. On the products side, India's imports in January saw a decrease of 51 tb/d, or 6%, m-o-m to average 804 tb/d, while y-o-y product imports rose by 76 tb/d, or 10%.

Total crude oil exports from the Former Soviet Union (FSU) in January increased by a slight 39 tb/d, or 1%, to average 6.7 mb/d, while crude exports through Russian pipeline saw higher gains, up by 186 tb/d, or 5%, to average 4 mb/d.

## US

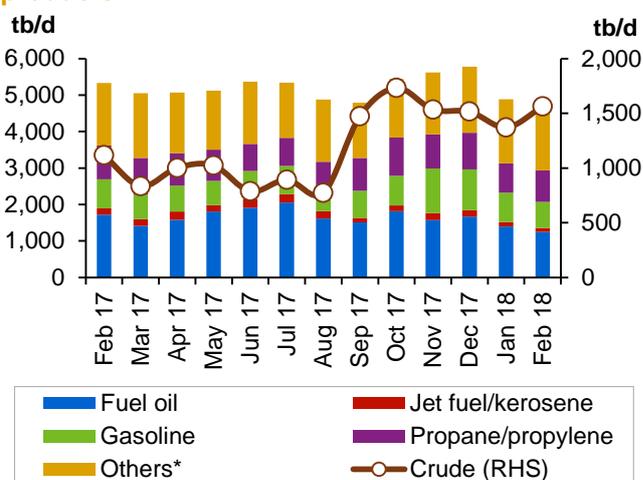
In February, preliminary data shows that **US crude oil imports** declined by 482 tb/d, or 6%, from the previous month to average 7.5 mb/d. Y-o-y, this reflects a drop of 349 tb/d, or 4%. The decline in crude imports coincided with refinery maintenance.

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



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

**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.

**US product imports** dropped by 135 tb/d, or 6%, m-o-m to average 2.0 mb/d, while y-o-y they dropped by 105 tb/d, or 5%. Year-to-date (y-t-d) both crude and product imports declined by 5% and 4%, respectively.

In February, **US product exports** registered a drop of 219 tb/d, or 4%, from the previous month to average 4.7 mb/d. On an annual comparison, exports saw a larger decrease of 663 tb/d, or 12%.

As a result, **US total net imports declined in February by 15% from the previous month to average 3.4 mb/d**, and were 7% lower than last year's level.

In December, Canada remained the **top crude supplier to the US** accounting for 47% of total US crude imports, with the country's monthly exports to the US 339 tb/d, or 10%, higher than a month ago. Mexico came as second-largest supplier holding a share of 9% of total US crude imports. Saudi Arabia was the third largest supplier to US, however with 90 tb/d, or 11%, less than seen in the previous month.

**Crude imports from OPEC Member Countries** in December dropped by 153 tb/d, or 5%, from a month earlier mainly due to fewer imports from Nigeria, Saudi Arabia and Iraq. Crude imports from OPEC Member Countries accounted for 33% of total US crude imports.

On the other hand, **product imports from OPEC Member Countries** rose by 53 tb/d from the previous month. As to the product supplier share, Canada, Russia and Algeria maintained their position as first, second and third suppliers to the US in December. Canada and Russia raised their exported volumes to the US by 7% and 5%, respectively, while imports from Algeria remained stable from a month earlier.

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

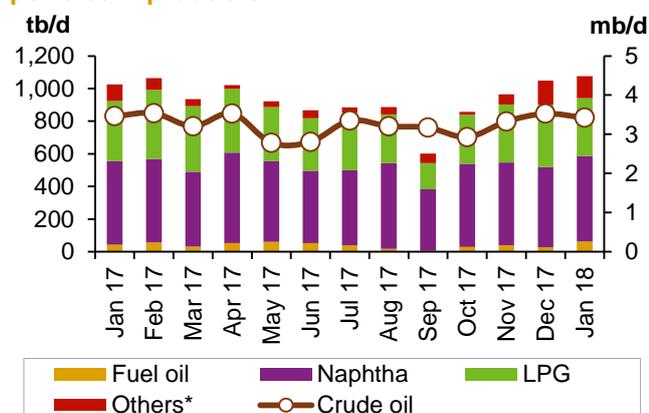
	Dec 17	Jan 18	Feb 18	Change Feb 18/Jan 18
Crude oil	6,267	6,652	5,978	-674
Total products	-3,629	-2,703	-2,619	85
<b>Total crude and products</b>	<b>2,638</b>	<b>3,949</b>	<b>3,360</b>	<b>-589</b>

Sources: US Energy Information Administration and OPEC Secretariat.

## Japan

**Japan's crude oil imports** in January dropped by 104 tb/d, or 3%, to average 3.4 mb/d. Y-o-y, crude imports declined by 39 tb/d, or 1%. Japan's refinery throughput was up by only 37 tb/d from the previous month.

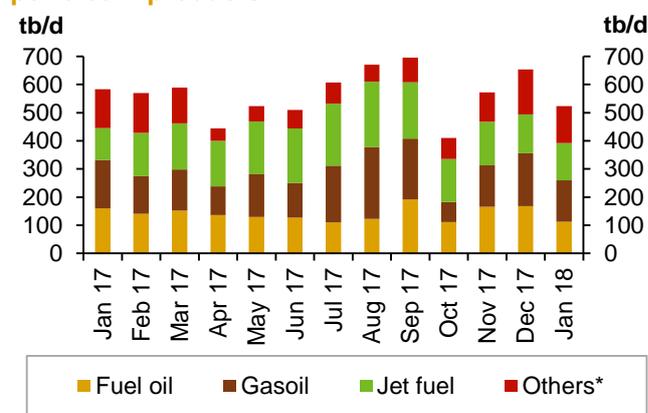
**Graph 8 - 3: Japan's imports of crude and petroleum products**



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 crude and 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.

## Oil Trade

As to the **suppliers' share**, Saudi Arabia, the UAE and Kuwait were the top suppliers in January, Saudi Arabia remained the top crude supplier, holding a share 36% of Japan's total crude imports. The UAE was the second largest supplier with a share of 24% of total crude imports. Kuwait, meanwhile, held third position with a share of 9%. Both Saudi Arabia and the UAE saw a decline in volumes imported by Japan from the previous month by 13% and 10%, respectively, while Kuwait raised its exports to Japan by 79 tb/d, or 34%, from the previous month.

On the other hand, **product imports** increased in January by 56 tb/d to average 722 tb/d, reflecting a gain of 8% m-o-m and 10% y-o-y. January's product imports are the highest since November 2013. This came despite domestic sales dropping by 1.7% y-o-y.

As to **product exports**, they declined in January by 130 tb/d, or 20%, to average 523 tb/d. Y-o-y, product exports dropped by 60 tb/d, or 10%.

Accordingly, **Japan's net imports increased in January by 83 tb/d to average 3.6 mb/d**, reflecting both a monthly and annual gain of 2%.

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

	Nov 17	Dec 17	Jan 18	Change Jan 18/Dec 17
Crude oil	3,325	3,525	3,421	-104
Total products	39	12	199	187
<b>Total crude and products</b>	<b>3,364</b>	<b>3,537</b>	<b>3,620</b>	<b>83</b>

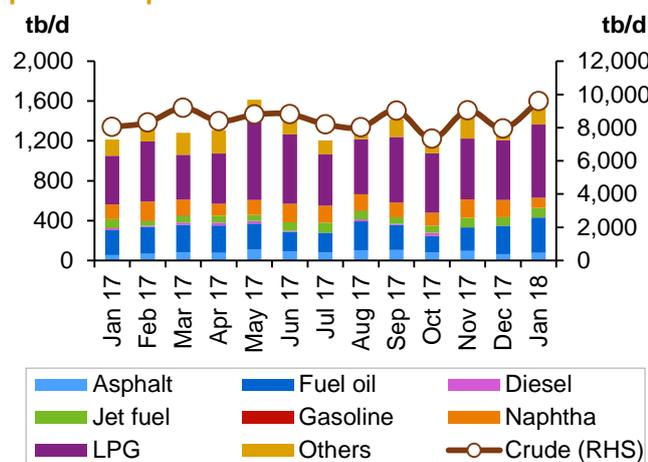
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

## China

**China's crude oil imports** rose to new peak in January, up by 1.6 mb/d, or 21%, from the previous month to average 9.6 mb/d. Y-o-y, China's crude imports increased by 1.6 mb/d, 19% higher than levels seen last year. The increase in imports came in line with China's refinery throughput, which increased by 357 tb/d in January. The country also reported a rise in crude oil inventories over the month.

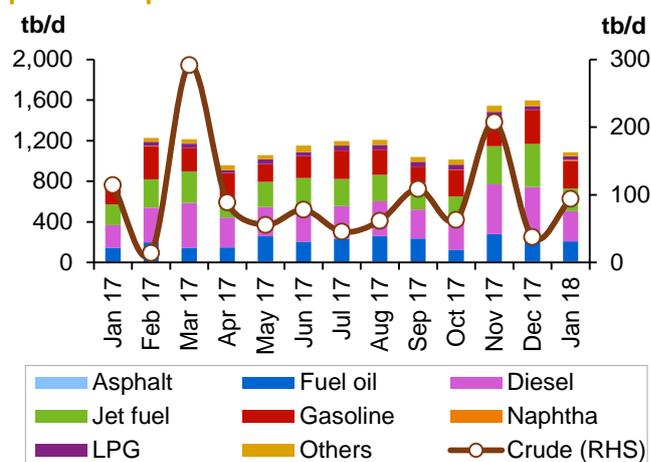
On the other hand, **product imports** increased in January on the back of healthy demand and as the country prepares for the Chinese New Year holidays. Product imports rose by 174 tb/d to average 1.6 mb/d, reflecting a gain of 12% m-o-m and 29% y-o-y.

**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 crude and petroleum products**



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

China's **crude oil exports** rose in January by 57 tb/d to average 94 tb/d. Y-o-y this is a decrease in crude exports by 18%.

In contrast, China's **product exports** dropped by 511 tb/d, or 32%, m-o-m, though they remain higher by 277 tb/d, or 34%, from the previous year.

As a result, **China's net oil imports rose by 2.3 mb/d, or 29%, from the previous month to average 10 mb/d** and were up 1.7 mb/d or 20% from a year earlier.

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

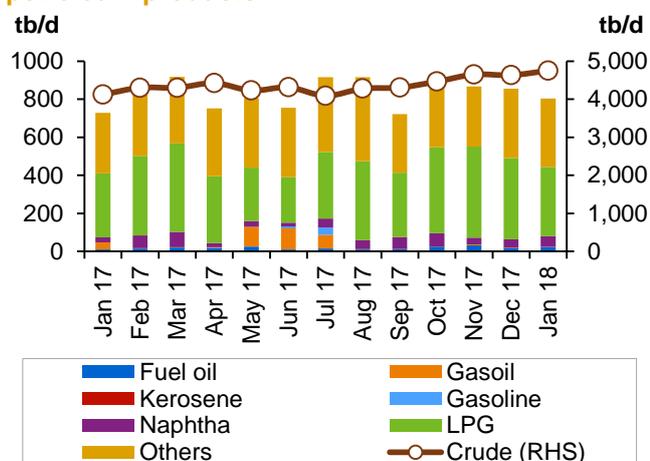
	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Change</u> <u>Jan 18/Dec 17</u>
Crude oil	8,831	7,919	9,502	1,583
Total products	-37	-208	476	684
<b>Total crude and products</b>	<b>8,794</b>	<b>7,711</b>	<b>9,978</b>	<b>2,267</b>

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

## India

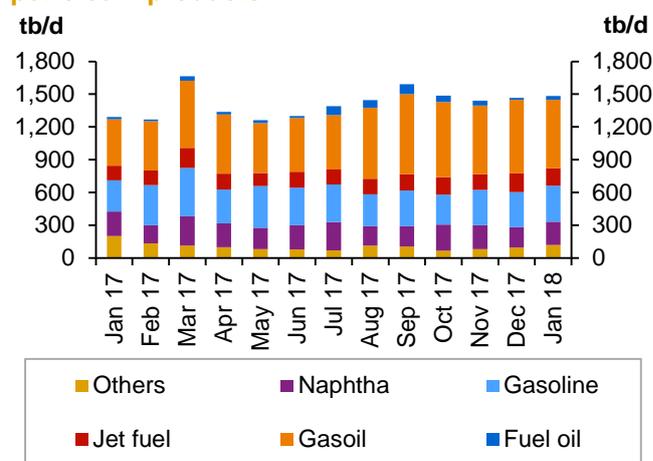
In January, **India's crude oil imports** rose to a record high, increasing by 119 tb/d, or 3%, from the previous month to average 4.7 mb/d, and also showed an annual increase of 630 tb/d, or 15%. At the same time, India's refinery throughput showed an increase from one month before by 150 tb/d in January.

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



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

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



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

India's **product imports** in January saw a decrease of 51 tb/d, or 6%, m-o-m to average 804 tb/d, while y-o-y, product imports rose by 76 tb/d, or 10%. The drop seen in monthly product imports came mainly as a result of reduced imports of LPG, which declined by 15%. As seen in previous months, there were no imports of gasoline or kerosene in January.

India's **product exports** rose slightly in January by 16 tb/d, or 1%, to average 1.5 mb/d. Y-o-y, product exports increased by 193 tb/d, or 15%. The gains in y-o-y product exports were mostly driven by higher exports of diesel, which increased by 203 tb/d.

Consequently, **India's net imports increased by 52 tb/d in January to average 4.1 mb/d**, reflecting a gain of 1% m-o-m and 14% y-o-y.

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

	<b>Nov 17</b>	<b>Dec 17</b>	<b>Jan 18</b>	<b>Change Jan 18/Dec 17</b>
Crude oil	4,648	4,631	4,750	119
Total products	-573	-612	-679	-67
<b>Total crude and products</b>	<b>4,075</b>	<b>4,019</b>	<b>4,070</b>	<b>52</b>

*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.*

## FSU

In January, **total crude oil exports** from the FSU increased by a slight 39 tb/d, or 1%, to average 6.7 mb/d, while crude oil exports through Russian pipelines saw higher gains of 186 tb/d, or 5%, to average 4 mb/d.

In the **Transneft system**, total shipments from the Black Sea dropped by 20 tb/d, or 4%, to average 488 tb/d. Total Baltic Sea exports dipped by only 3 tb/d in January, as lower shipments from the Ust Luga port terminal were offset by an increase in exports from Primorsk. Druzhba pipeline total shipments declined by 44 tb/d to average 943 tb/d. Kozmino shipments increased by 24 tb/d, or 4%, to average 647 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 18 tb/d, while shipments from the Baltic Sea were unchanged from a month before and averaged 13 tb/d.

In Asia, **Russian Far East total** exports in January were up by 25 tb/d, or 7%, from the previous month as volumes from the De Kastro port terminal rose by 47 tb/d, though the gains were offset by lower exports in the Aniva Bay port terminal which reported a drop of 22 tb/d m-o-m.

**Central Asian total** exports stood at 247 tb/d, a slight decrease of 5 tb/d through the Kenkiyak-Alashankou pipeline.

**Black Sea total** exports dropped by 100 tb/d, as all ports showed declines from the previous month.

In the **Mediterranean**, BTC supplies showed a decline of 86 tb/d, or 12%, from the previous month to average 644 tb/d.

**FSU total product exports** dropped by 129 tb/d, or 4%, from last month to average 3.3 mb/d. This drop in product exports was seen in all products with the exception of gasoil and gasoline, which reported higher volumes than the previous month by 67 tb/d and 44 tb/d. Exports of naphtha, jet fuel, fuel oil and VGO all dropped in January from one month earlier, by volumes between 2 tb/d and 183 tb/d.

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

		2017	3Q17	4Q17	Dec 17	Jan 18
<b>Transneft system</b>						
<b>Europe</b>	<b>Black sea total</b>	<b>605</b>	<b>573</b>	<b>617</b>	<b>508</b>	<b>488</b>
	Novorossiysk port terminal - total	605	573	617	508	488
	of which: Russian oil	424	403	409	329	329
	Others	181	170	208	179	159
	<b>Baltic sea total</b>	<b>1,516</b>	<b>1,403</b>	<b>1,434</b>	<b>1,305</b>	<b>1,302</b>
	Primorsk port terminal - total	871	801	777	748	791
	of which: Russian oil	871	801	777	748	791
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	645	603	657	557	510
	of which: Russian oil	470	423	478	371	325
	Others	175	180	180	185	186
	<b>Druzhba pipeline total</b>	<b>1,009</b>	<b>1,044</b>	<b>1,018</b>	<b>987</b>	<b>943</b>
	of which: Russian oil	977	1,012	986	955	911
	Others	32	32	32	32	32
<b>Asia</b>	<b>Pacific ocean total</b>	<b>645</b>	<b>638</b>	<b>662</b>	<b>623</b>	<b>647</b>
	Kozmino port terminal - total	645	638	662	623	647
	<b>China (via ESPO pipeline) total</b>	<b>336</b>	<b>339</b>	<b>345</b>	<b>348</b>	<b>578</b>
	China Amur	336	339	345	348	578
<b>Total Russian crude exports</b>		<b>4,111</b>	<b>3,997</b>	<b>4,076</b>	<b>3,771</b>	<b>3,957</b>
<b>Lukoil system</b>						
<b>Europe &amp; North America</b>	<b>Barents sea total</b>	<b>170</b>	<b>159</b>	<b>146</b>	<b>145</b>	<b>163</b>
	Varandey offshore platform	170	159	146	145	163
<b>Europe</b>	<b>Baltic sea total</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>13</b>
	Kalinigrad port terminal	13	14	13	13	13
<b>Other routes</b>						
<b>Asia</b>	<b>Russian Far East total</b>	<b>343</b>	<b>305</b>	<b>317</b>	<b>344</b>	<b>369</b>
	Aniva bay port terminal	127	122	135	141	119
	De Kastri port terminal	216	184	182	203	250
	<b>Central Asia total</b>	<b>262</b>	<b>250</b>	<b>285</b>	<b>242</b>	<b>247</b>
	Kenkiyak-Alashankou	262	250	285	242	247
<b>Europe</b>	<b>Black sea total</b>	<b>1,277</b>	<b>1,163</b>	<b>1,374</b>	<b>1,414</b>	<b>1,314</b>
	Novorossiysk port terminal (CPC)	1,194	1,115	1,276	1,324	1,237
	Supsa port terminal	72	42	90	82	77
	Batumi port terminal	11	6	8	8	0
	Kulevi port terminal	0	0	0	0	0
	<b>Mediterranean sea total</b>	<b>707</b>	<b>731</b>	<b>719</b>	<b>729</b>	<b>644</b>
	BTC	707	731	719	729	644
<b>Russian rail</b>						
	<b>Russian rail</b>	<b>40</b>	<b>36</b>	<b>45</b>	<b>41</b>	<b>33</b>
	of which: Russian oil	40	36	45	41	33
	Others	0	0	0	0	0
<b>Total FSU crude exports</b>		<b>6,923</b>	<b>6,655</b>	<b>6,976</b>	<b>6,701</b>	<b>6,740</b>
<b>Products</b>						
	Gasoline	193	184	171	184	228
	Naphtha	549	509	559	547	524
	Jet	35	34	32	37	35
	Gasoil	980	833	881	1,058	1,125
	Fuel oil	1,025	870	1,012	1,234	1,051
	VGO	308	286	313	353	321
<b>Total FSU product exports</b>		<b>3,089</b>	<b>2,715</b>	<b>2,967</b>	<b>3,413</b>	<b>3,284</b>
<b>Total FSU oil exports</b>		<b>10,012</b>	<b>9,370</b>	<b>9,943</b>	<b>10,114</b>	<b>10,024</b>

Sources: Argus Nefte Transport and Argus Global Markets.

## Stock Movements

Preliminary data for January showed that total OECD commercial oil stocks rose by 13.7 mb to stand at 2,865 mb, which was 206 mb lower than the same time one year ago, but 50 mb above the latest five-year average. Crude stocks indicated a surplus of 74 mb, while products stocks witnessed a deficit of 24 mb to the seasonal norm. In terms of days of forward cover, OECD commercial stocks fell slightly in January to stand at 60.0 days, which was 0.6 days lower than the latest five-year average.

Preliminary data for February showed that US total commercial oil stocks fell by 6.9 mb m-o-m, to stand at 1,203 mb. At this level, they were 149 mb lower than the same period a year ago, but 20 mb higher than the latest five-year average. Within the components, crude stocks rose by 5.7 mb, while products stocks fell by 12.5 mb, m-o-m.

The latest information for China showed that total commercial oil inventories rose by 10.5 mb m-o-m to stand at 368.3 mb in January. At this level, total commercial stocks were 9.7 mb lower than at the same time in the previous year. Within the components, crude and products stocks rose by 2.7 mb and 7.9 mb m-o-m, respectively.

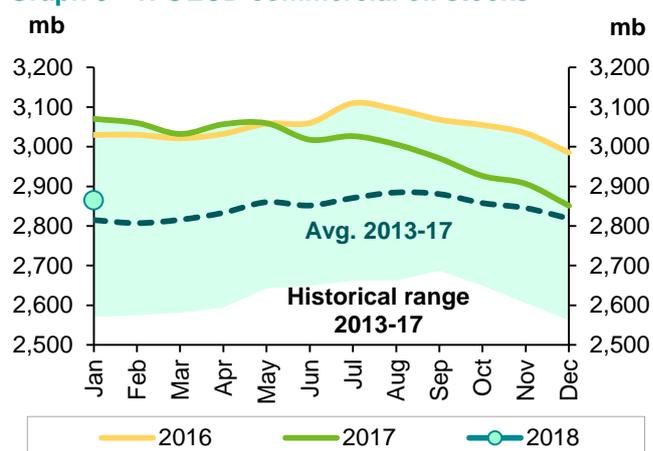
## OECD

Preliminary data for January showed that **total OECD commercial oil stocks** rose by 13.7 mb m-o-m, reversing the drop of the last five months. At 2,865 mb, they stood 206 mb lower than the same time one year ago, but 50 mb above the latest five-year average. It should be noted that the overhang has been reduced by 289 mb from January 2017. Within the components, crude and products stocks rose by 12.8 mb and 1.0 mb m-o-m, respectively. Within the regions, OECD Americas fell by 8.3 mb, while OECD Europe and OECD Asia Pacific inventories rose by 21.6 mb and 0.5 mb, respectively, m-o-m.

OECD commercial **crude stocks** rose by 12.8 mb m-o-m in January, reversing the fall of the last three months to stand at 1,437 mb. At this level, they were 84.9 mb lower than the same time a year ago, but 74.4 mb higher than the latest five-year average. OECD Asia Pacific and OECD Europe experienced stock builds, while OECD America witnessed a stock draw.

OECD commercial **product inventories** also rose slightly by 1.0 mb m-o-m in January to stand at 1,428 mb, which was 120.6 mb below the same time a year ago, and 24.5 mb below the seasonal norm. Within OECD regions, OECD Asia Pacific and OECD Europe experienced stock builds, while OECD America witnessed a stock draw.

Graph 9 - 1: OECD commercial oil stocks



Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

In terms of **days of forward cover**, OECD commercial stocks fell slightly in January to stand at 60.0 days, which was 5.3 days below the same period in 2017, and 0.6 days lower than the latest five-year average. Within the regions, OECD Americas had 0.1 less days of forward cover than the historical average to stand at 59.7 days in January. OECD Europe indicated a deficit of 2.4 days below the seasonal norm, to stand at 67.2 days in January, while OECD Asia Pacific stood 0.7 days higher than the seasonal average to finish the month at 48.9 days.

## OECD Americas

**OECD Americas total commercial stocks** fell by 8.3 m-o-m in January for the eight consecutive months to stand at 1,491 mb, which was 132 mb below a year ago, but 41 mb higher than the seasonal norm. Within the components, crude and product stocks fell by 0.9 mb and 7.4 mb m-o-m, respectively.

**Commercial crude oil stocks** in OECD Americas dropped slightly by 0.9 mb m-o-m in January to stand at 768 mb, which was 74 mb lower than the same period a year ago, but 44 mb higher than the latest five-year average. The fall came despite lower refinery crude runs in the US averaging 17.0 mb/d in January, some 600 tb/d lower than in the previous month. This corresponds to a utilization rate of 91.3%, 3.7 pp lower than the December rate.

**Product stocks** in OECD Americas also fell by 7.4 mb m-o-m in January, reversing the stock build of a month earlier. At 723 mb, they were 58 mb less than the same time one year ago and 3.5 mb below the seasonal norm. Higher demand in OECD Americas, especially in the US, was behind the stock draw in crude oil stocks. Lower refinery output also supported the drop in product inventories.

## OECD Europe

**OECD Europe's total commercial stocks** rose by 21.6 mb m-o-m in January, ending the month at 961 mb, which is 64 mb lower than the same time a year ago, but 6.1 mb above the latest five-year average. Crude and product stocks rose by 13.6 mb and 8.0 mb m-o-m, respectively.

OECD Europe's **commercial crude stocks** rose in January to end the month at 420 mb, which was 5.6 mb lower than a year earlier and 21.3 mb higher than the latest five-year average. This build in stocks comes despite higher refinery throughput in Euro-16, which rose by 90 tb/d from the previous month to average 11.0 mb/d.

OECD Europe's **commercial product stocks** also rose by 8.0 mb m-o-m to end January at 541 mb, which is 59 mb below the same time a year ago, and 15 mb lower than the seasonal norm. The build in product stocks could be attributed lower demand in OECD region.

## OECD Asia Pacific

**OECD Asia Pacific's total commercial oil stocks** rose slightly by 0.5 mb m-o-m in January to stand at 413 mb, which was 9.0 mb lower than a year ago, but 3.1 mb higher than the latest five-year average. Within the components, crude and product stocks rose by 0.1 mb and 0.4 mb m-o-m, respectively.

**Crude inventories** ended the month of January at 249 mb, which was 5.3 mb below a year ago but 8.9 mb above the seasonal norm.

OECD Asia Pacific's **total product inventories** ended January at 163 mb, standing 3.7 mb lower than the same time a year ago and 5.7 mb less than the seasonal norm.

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

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Change Jan 18/Dec 17</u>	<u>Jan 17</u>
<b>Crude oil</b>	1,473	1,424	1,437	12.8	1,522
<b>Products</b>	1,433	1,427	1,428	1.0	1,548
<b>Total</b>	<b>2,906</b>	<b>2,851</b>	<b>2,865</b>	<b>13.7</b>	<b>3,070</b>
<b>Days of forward cover</b>	<b>61.1</b>	<b>60.1</b>	<b>60.0</b>	<b>-0.1</b>	<b>65.4</b>

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

*Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.*

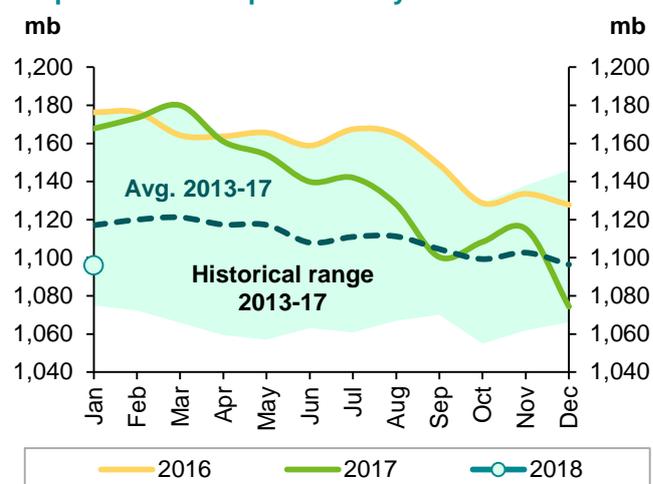
## EU plus Norway

Preliminary data for January shows that **total European stocks** rose by 21.6 mb m-o-m, reversing the sharp stock draw of the last month to stand at 1,096 mb. At this level, European stocks were 71.8 mb, or 6.2%, lower than the same time a year ago, but 21.1 mb, or 1.9%, lower than the latest five-year average. Within components, crude and products stocks rose by 13.6 mb and 8.0 mb m-o-m, respectively.

European **crude inventories** rose in January to stand at 479 mb, which was 6.2 mb, or 1.3%, lower than the same period a year ago. Compared with the seasonal average, they were 8.4 mb, or 1.8%, higher. The rise in crude oil stocks came despite an increase in refinery throughput, which rose by around 90 tb/d in January. This corresponds to a utilization rate of 90.4%, around 0.7 pp higher than in previous month.

European **product stocks** also rose by 8.0 mb m-o-m, ending January at 617 mb, which was 66 mb, or 9.6%, lower than the same time a year ago, and 29.5 mb, or 4.6%, below the seasonal norm. Within products, all products witnessed stock builds in January.

**Graph 9 - 2: EU-15 plus Norway's total oil stocks**



Source: Euroilstock.

**Gasoline stocks** rose by 1.2 mb m-o-m in January for the fourth consecutive month to stand at 115 mb. At this level, stocks were 11.2 mb, or 8.9%, lower than the same time one year ago, and 4.9 mb, or 4.1%, lower than the seasonal norm.

**Distillate stocks** increased by 5.2 mb m-o-m to end the month at 408 mb in January, indicating a deficit of 49.4 mb, or 10.8%, with the same time a year ago, and 10.5 mb, or 2.5%, above the latest five-year average. This build in both products was driven mainly by lower consumption in the region.

**Residual fuel oil stocks** also rose by 1.2 mb m-o-m in January to stand at 65.8 mb, which is 6.6 mb, or 9.1%, less than the same month a year ago, and 12.8 mb, or 16%, lower than the latest five-year average.

**Table 9 - 2: EU-15 plus Norway's total oil stocks, mb**

	Nov 17	Dec 17	Jan 18	Change Jan 18/Dec 17	Jan 17
<b>Crude oil</b>	<b>481.4</b>	<b>465.6</b>	<b>479.2</b>	<b>13.6</b>	<b>485.4</b>
<b>Gasoline</b>	114.2	114.2	115.4	1.2	126.7
<b>Naphtha</b>	25.1	27.3	27.7	0.4	26.1
<b>Middle distillates</b>	427.2	402.6	407.8	5.2	457.2
<b>Fuel oils</b>	67.3	64.6	65.8	1.2	72.4
<b>Total products</b>	<b>633.8</b>	<b>608.8</b>	<b>616.7</b>	<b>8.0</b>	<b>682.4</b>
<b>Total</b>	<b>1,115.1</b>	<b>1,074.4</b>	<b>1,095.9</b>	<b>21.6</b>	<b>1,167.8</b>

Sources: Argus and Euroilstock.

# US

Preliminary data for February showed that **US total commercial oil stocks** fell by 6.9 mb m-o-m, for the ninth consecutive month to stand at 1,203 mb. At this level, they were 149 mb, or 11%, lower than the same period a year ago, but 20 mb, or 1.7%, higher than the latest five-year average. Within the components, crude stocks rose by 5.7 mb, while product stocks fell by 12.5 mb, m-o-m.

**US crude commercial stocks** rose in February, the first build since September 2017. At 425.9 mb, they were 98 mb, or 19%, below last year at the same time, but almost in line with the latest five-year average. This build was mainly driven by lower crude oil throughputs, which decreased by nearly 500 tb/d to average 16.5 mb/d. At this level, refineries were running at 89.0%, 2.3 pp lower than in the previous month. Lower crude imports in February limited a further build in crude oil stocks. In February, crude inventories in Cushing, Oklahoma, fell by 8.3 mb versus January, ending the month at 28.2 mb.

In contrast, **total product stocks** fell by 12.5 mb m-o-m in February to stand at 776.7 mb. At this level, product stocks were 51.3 mb, or 6.2%, down from the level seen at the same time in 2017, but 20.3 mb, or 2.7%, above the seasonal average. Within products, the picture was mixed; gasoline and jet fuel saw builds, while distillates, residual fuel and other unfinished product stocks experienced stock draws, compared with the previous month.

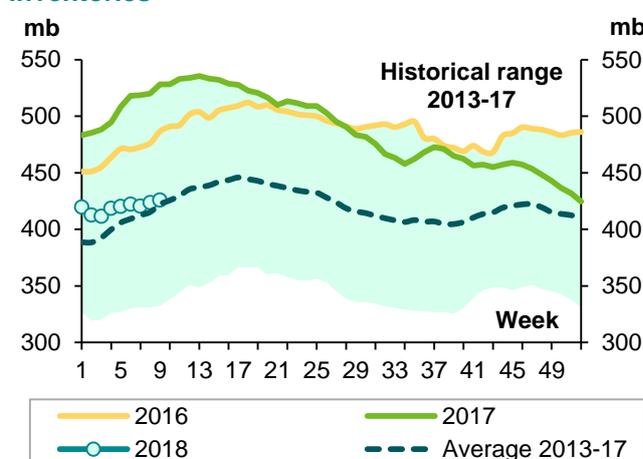
**Gasoline stocks** rose by 5.6 mb m-o-m in February for the fourth consecutive month to stand at 251.0 mb. At this level, gasoline stocks were 2.1 mb, or 0.8%, below a year ago at the same time, but were 9.6 mb, or 4.0%, below the seasonal norm. This build could mainly be attributed to higher gasoline production, which increased by around 100 tb/d to stand at 9.8 mb/d. Higher gasoline demand limited a further build in gasoline stocks.

**Jet fuel stocks** also increased by 0.1 mb m-o-m in February ending the month at 42.7 mb, down by 1.2 mb, or 2.8%, from last year at the same time, but 1.7 mb, or 4.1%, higher than the latest five-year average.

In contrast, **distillate stocks** fell by 4.4 mb m-o-m in February for the second consecutive month. At 137.4 mb, they indicated a deficit of 24.8 mb, or 15.3%, over the same period a year ago, and 0.7 mb, or 0.5%, above the latest five-year average. The drop in distillate stocks came on the back of lower production, which dropped by 320 tb/d in February compared with the previous month. Lower distillate demand limited a further drop in distillate stocks.

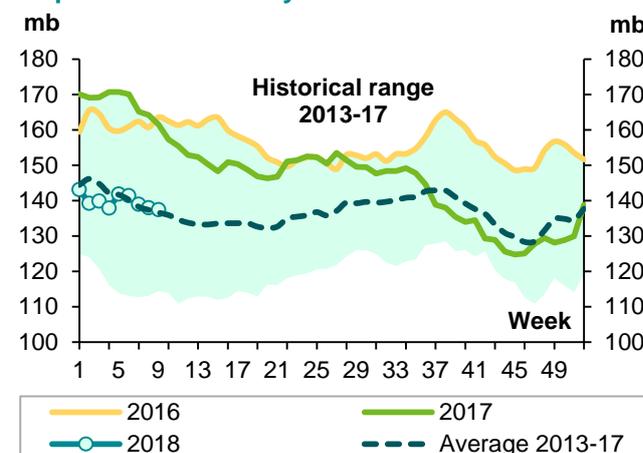
**Residual fuel stocks** also fell by 1.2 mb m-o-m to end the month at 32.7 mb. At this level, they stood 6.9 mb, or 17.4%, below last year at the same time and 6.7 mb, or 17%, below the latest five-year average.

**Graph 9 - 3: US weekly commercial crude oil inventories**



Sources: US Energy Information Administration and OPEC Secretariat.

**Graph 9 - 4: US weekly distillate inventories**



Sources: US Energy Information Administration and OPEC Secretariat.

**Table 9 - 3: US onland commercial petroleum stocks, mb**

	Dec 17	Jan 18	Feb 18	Change Feb 18/Jan 18	Feb 17
<b>Crude oil</b>	<b>421.1</b>	<b>420.3</b>	<b>425.9</b>	<b>5.7</b>	<b>523.6</b>
Gasoline	236.7	245.5	251.0	5.6	253.1
Distillate fuel	145.6	141.8	137.4	-4.4	162.2
Residual fuel oil	29.4	33.8	32.7	-1.2	39.6
Jet fuel	41.2	42.6	42.7	0.1	43.9
<b>Total products</b>	<b>811.0</b>	<b>789.2</b>	<b>776.7</b>	<b>-12.5</b>	<b>828.0</b>
<b>Total</b>	<b>1,232.1</b>	<b>1,209.5</b>	<b>1,202.6</b>	<b>-6.9</b>	<b>1,351.5</b>
<b>SPR</b>	<b>662.8</b>	<b>665.1</b>	<b>665.5</b>	<b>0.3</b>	<b>694.8</b>

Sources: US Energy Information Administration and OPEC Secretariat.

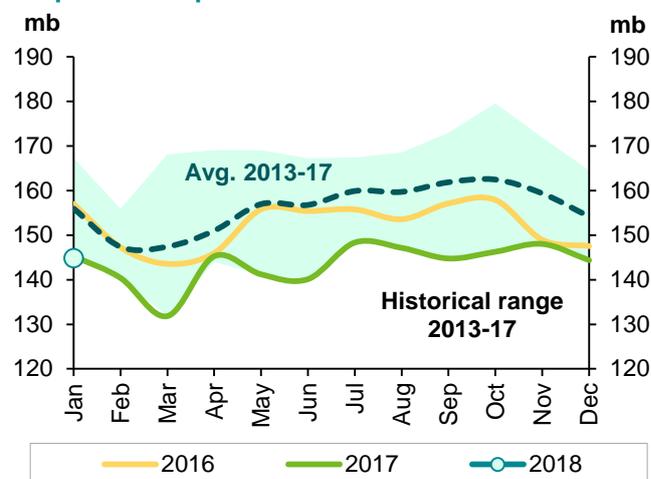
## Japan

In Japan, **total commercial oil stocks** rose slightly by 0.5 mb m-o-m in January, reversing the fall of last month to stand at 144.8 mb. At this level, they were 0.5 mb, or 0.3%, less than the same time a year ago and 11.1 mb, or 7.1%, below the five-year average. Within the components, crude and product stocks went up by 0.1 mb and 0.4 mb m-o-m, respectively.

Japanese **commercial crude oil stocks** rose in January to stand at 87.6 mb, which is 2.2 mb, or 2.6%, above the same period a year ago, but 2.8 mb, or 3.1%, below the seasonal norm. The build was driven by lower crude throughput, which decreased by around 30 tb/d or 1.5%, to average 3.4 mb/d. However, lower crude imports further limited the build in crude oil stocks. Indeed, crude imports fell by more than 100 tb/d, or 2.9%, to stand at 3.4 mb/d.

Japan's **total product inventories** also rose by 0.4 mb m-o-m ending January at 57.3 mb, which is 2.7 mb, or 4.5%, higher than in the same month of the previous year, and 8.3 mb, or 12.7%, lower than the seasonal norm. Within products, the picture was mixed; gasoline and residual fuel stocks increased, while distillate stocks witnessed a draw.

**Graph 9 - 5: Japan's commercial oil stocks**



Source: Ministry of Economic, Trade and Industry of Japan.

**Gasoline stocks** rose by 1.2 mb m-o-m in January to stand at 10.7 mb, which was 0.2 mb, or 2.3%, lower than the same time a year ago, and 1.0 mb, or 8.8%, below the latest five-year average. The build was driven by lower domestic sales, which fell by 13.5% from the previous month. Lower gasoline imports limited a further build in stocks.

**Total residual fuel oil stocks** also rose by 0.3 mb m-o-m in January to stand at 12.8 mb, which was 0.3 mb, or 2.2%, below the same period a year ago, and 1.8 mb, or 12.4%, less than the latest five-year average. Within the fuel oil components, fuel oil A and fuel B.C rose by 4.8% and 1.3%, respectively. The build was driven by lower domestic sales along with higher imports.

In contrast, **distillate stocks** fell by 2.4 mb m-o-m in January to stand at 24.7 mb, which is 2.4 mb, or 8.8%, below a year ago at the same time, and 4.6 mb, or 15.8%, below the seasonal average. Within the distillate components, gasoil stocks rose by 15.3% on the back of higher imports, which increased by more than 30%, along with lower domestic sales, which declined by 15% in January. Jet fuel and kerosene fell by 13% and 23%, respectively. The fall in both components was driven by lower production.

Table 9 - 4: Japan's commercial oil stocks\*, mb

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Change Jan 18/Dec 17</u>	<u>Jan 17</u>
<b>Crude oil</b>	<b>84.0</b>	<b>87.5</b>	<b>87.6</b>	<b>0.1</b>	<b>85.3</b>
Gasoline	11.0	9.4	10.7	1.2	10.9
Naphtha	8.9	7.9	9.2	1.2	8.9
Middle distillates	30.7	27.1	24.7	-2.4	27.1
Residual fuel oil	13.5	12.5	12.8	0.3	13.0
<b>Total products</b>	<b>64.0</b>	<b>56.9</b>	<b>57.3</b>	<b>0.4</b>	<b>59.9</b>
<b>Total**</b>	<b>148.0</b>	<b>144.4</b>	<b>144.8</b>	<b>0.5</b>	<b>145.3</b>

Note: \* At the end of the month.

\*\* Includes crude oil and main products only.

Source: Ministry of Economy, Trade and Industry of Japan.

## China

The latest information for China showed that **total commercial oil inventories** rose by 10.5 mb m-o-m in January, for the second consecutive month to stand at 368.3 mb. At this level, total commercial stocks were 9.7 mb lower than in the previous year. Within the components, crude and products stocks rose by 2.7 mb and 7.9 mb, respectively.

In January, **commercial crude stocks** rose to stand at 207.2 mb. At this level, commercial crude oil stocks stood at 18.7 mb below last year at the same time. The build was mainly attributed to higher crude imports, which increased by nearly 20%.

**Total product stocks** in China also rose by 7.9 mb in January to end the month at 161.0 mb, which was 8.9 mb above the same time a year ago. All products witnessed stock builds.

**Gasoline stocks** rose by 2.4 mb in January, to end the month at 76.5 mb, which is 13.1 mb higher than last year at the same time.

**Diesel inventories** also rose by 3.6 mb to end the month 64.2 mb. At this level, diesel stocks were 4.1 mb lower than the same time last year. The build in diesel stocks was mainly attributed to bad weather conditions leading to a suspension of infrastructure and industrial projects.

**Kerosene stocks** rose by 1.9 mb in January to stand at 20.3 mb, which was 0.1 lower than last year at the same time.

Table 9 - 5: China's commercial oil stocks, mb

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Change Jan 18/Dec 17</u>	<u>Jan 17</u>
<b>Crude oil</b>	<b>198.1</b>	<b>204.5</b>	<b>207.2</b>	<b>2.7</b>	<b>225.9</b>
Gasoline	70.8	74.1	76.5	2.4	63.4
Diesel	51.6	60.5	64.2	3.6	68.3
Jet/Kerosene	18.6	18.5	20.3	1.9	20.4
<b>Total products</b>	<b>141.0</b>	<b>153.2</b>	<b>161.0</b>	<b>7.9</b>	<b>152.1</b>
<b>Total</b>	<b>339.1</b>	<b>357.7</b>	<b>368.3</b>	<b>10.5</b>	<b>378.0</b>

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

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

### Singapore

At the end of January, **product stocks** in Singapore fell by 2.0 mb to stand at 44.6 mb, which was 4.1 mb, or 8.4%, below the same period a year ago. Light distillate and fuel oil stocks experienced stock draws, while middle distillates remained unchanged, compared with the December level.

**Light distillate stocks** and **fuel oil** stocks fell by 0.7 mb and 1.3 mb in January ending the month at 12.8 mb and 22.5 mb, respectively. Light distillate stocks remained at 0.9 mb below the same period a year ago, while fuel oil inventories stood 30.7 mb higher than during the same period last year.

In contrast, **middle distillates** remained unchanged in January versus December to stand at 9.3 mb. At this level, middle distillate stocks stood 3.8 mb, or 29% below a year ago at the same time.

### Amsterdam-Rotterdam-Antwerp (ARA)

**Product stocks** in ARA rose by 7.3 mb in January for the second consecutive month to stand at 45.1 mb. At this level, product stocks were 0.4 mb, or 0.8%, lower than the same time a year ago. All products witnessed builds, with the exception of jet fuel stocks.

**Gasoline, gasoil and fuel oil stocks** rose by 1.6 mb, 5.7 mb and 0.1 mb to stand at 8.9 mb, 22.3 mb and 6.0 mb, respectively. The build in these products stocks could be attributed to lower regional domestic demand.

In contrast, **jet fuel stocks** fell by 0.3 mb in January to stand at 5.0 mb, which was 0.3 mb, or 5.7%, below last year at the same time.

## Balance of Supply and Demand

Demand for OPEC crude in 2017 is estimated at 32.9 mb/d, which is 0.6 mb/d higher than the 2016 level. In comparison, according to secondary sources, OPEC crude production averaged 32.4 mb/d in 2017, falling short of the demand for OPEC crude by 0.5 mb/d.

In 2018, the demand for OPEC crude is projected at 32.6 mb/d, 0.2 mb/d less than the level seen in 2017. However, in the second half of the year, this expected to reach almost 33.5 mb/d.

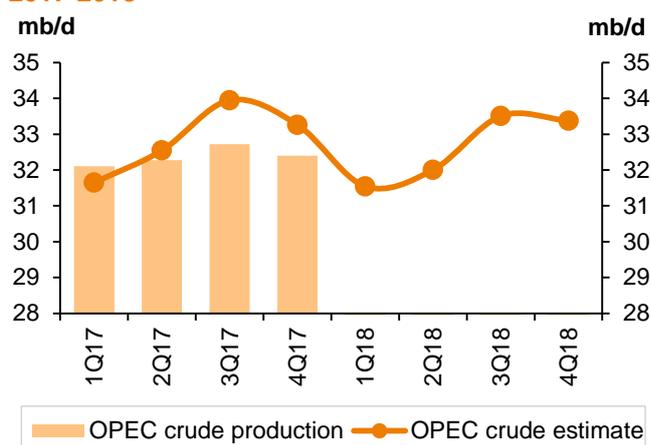
### Balance of supply and demand in 2017

**Demand for OPEC crude in 2017** remained unchanged from the previous month to stand at 32.9 mb/d, representing an increase of 0.6 mb/d from the 2016 level.

Within the quarters, all quarters remained unchanged from the previous month.

The first and the second quarters increased by 1.0 mb/d and 0.6 mb/d, respectively, while the third and fourth quarters grew by 0.5 mb/d and 0.3 mb/d, respectively, when compared with the same quarter a year earlier.

**Graph 10 - 1: Balance of supply and demand, 2017-2018\***



Note: \* 2017 = Estimate and 2018 = Forecast.  
Source: OPEC Secretariat.

**Table 10 - 1: Supply/demand balance for 2017\*, mb/d**

	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16
<b>(a) World oil demand</b>	<b>95.42</b>	<b>95.67</b>	<b>96.28</b>	<b>97.79</b>	<b>98.38</b>	<b>97.04</b>	<b>1.62</b>
Non-OPEC supply	57.00	57.82	57.47	57.49	58.69	57.87	0.87
OPEC NGLs and non-conventionals	6.14	6.20	6.26	6.35	6.42	6.31	0.17
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	<b>63.14</b>	<b>64.02</b>	<b>63.73</b>	<b>63.84</b>	<b>65.11</b>	<b>64.18</b>	<b>1.04</b>
<b>Difference (a-b)</b>	<b>32.27</b>	<b>31.65</b>	<b>32.55</b>	<b>33.95</b>	<b>33.26</b>	<b>32.86</b>	<b>0.58</b>
<b>OPEC crude oil production</b>	<b>32.64</b>	<b>32.11</b>	<b>32.28</b>	<b>32.73</b>	<b>32.40</b>	<b>32.38</b>	<b>-0.26</b>
<b>Balance</b>	<b>0.37</b>	<b>0.46</b>	<b>-0.27</b>	<b>-1.22</b>	<b>-0.87</b>	<b>-0.48</b>	<b>-0.85</b>

Note: \* 2017 = Estimate.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

## Balance of supply and demand in 2018

**Demand for OPEC crude in 2018** was revised down by 0.2 mb/d from the previous report to stand at 32.6 mb/d, 0.2 mb/d lower than 2017 level.

Within the quarters, the first two quarters were both revised down by 0.1 mb/d, while the third and fourth quarters were revised down by 0.2 mb/d and 0.5 mb/d, respectively, from the previous report.

The first quarter is expected to decline by 0.1 mb/d versus the same quarter in 2017, while the second and the third quarters are expected to drop by 0.5 mb/d and 0.4 mb/d, respectively. The fourth quarter is projected to increase by 0.1 mb/d when compared with the same quarter a year earlier.

**Table 10 - 2: Supply/demand balance for 2018\*, mb/d**

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17
<b>(a) World oil demand</b>	<b>97.04</b>	<b>97.27</b>	<b>97.85</b>	<b>99.38</b>	<b>100.01</b>	<b>98.63</b>	<b>1.60</b>
Non-OPEC supply	57.87	59.28	59.37	59.38	60.10	59.53	1.66
OPEC NGLs and non-conventionals	6.31	6.44	6.47	6.50	6.53	6.49	0.18
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	<b>64.18</b>	<b>65.72</b>	<b>65.84</b>	<b>65.88</b>	<b>66.63</b>	<b>66.02</b>	<b>1.84</b>
<b>Difference (a-b)</b>	<b>32.86</b>	<b>31.55</b>	<b>32.00</b>	<b>33.51</b>	<b>33.38</b>	<b>32.61</b>	<b>-0.25</b>

Note: \* 2018 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

# Appendix

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

	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
<b>World demand</b>													
<b>OECD</b>	45.8	46.4	46.9	47.0	46.9	47.7	47.8	47.4	47.4	47.2	48.0	48.2	47.7
Americas	24.2	24.6	24.7	24.6	25.0	25.1	25.2	25.0	24.8	25.2	25.4	25.4	25.2
Europe	13.5	13.8	14.0	13.8	14.2	14.7	14.3	14.2	13.9	14.3	14.8	14.4	14.3
Asia Pacific	8.1	8.1	8.1	8.6	7.7	7.9	8.4	8.2	8.6	7.7	7.9	8.4	8.2
<b>DCs</b>	30.1	30.8	31.4	31.5	31.9	32.3	32.0	31.9	32.2	32.6	33.0	32.7	32.6
<b>FSU</b>	4.7	4.6	4.6	4.6	4.4	4.8	5.1	4.7	4.7	4.5	4.9	5.2	4.8
<b>Other Europe</b>	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
<b>China</b>	10.8	11.5	11.8	11.9	12.4	12.3	12.7	12.3	12.3	12.8	12.7	13.1	12.7
<b>(a) Total world demand</b>	<b>92.0</b>	<b>94.0</b>	<b>95.4</b>	<b>95.7</b>	<b>96.3</b>	<b>97.8</b>	<b>98.4</b>	<b>97.0</b>	<b>97.3</b>	<b>97.8</b>	<b>99.4</b>	<b>100.0</b>	<b>98.6</b>
<b>Non-OPEC supply</b>													
<b>OECD</b>	24.3	25.3	24.8	25.4	25.1	25.4	26.4	25.6	27.0	27.2	27.2	27.7	27.3
Americas	20.1	21.1	20.6	21.1	20.9	21.3	22.3	21.4	22.7	22.9	23.1	23.4	23.0
Europe	3.6	3.8	3.8	3.9	3.8	3.7	3.7	3.8	3.9	3.8	3.7	4.0	3.8
Asia Pacific	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
<b>DCs</b>	11.8	12.0	11.9	11.9	11.9	11.9	11.9	11.9	11.9	12.0	12.2	12.2	12.1
<b>FSU</b>	13.5	13.7	13.9	14.1	14.1	13.9	14.1	14.1	14.0	13.9	13.8	13.9	13.9
<b>Other Europe</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>China</b>	4.3	4.4	4.1	4.0	4.0	3.9	4.0	4.0	4.0	3.9	3.9	3.9	3.9
<b>Processing gains</b>	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
<b>Total non-OPEC supply</b>	<b>56.2</b>	<b>57.7</b>	<b>57.0</b>	<b>57.8</b>	<b>57.5</b>	<b>57.5</b>	<b>58.7</b>	<b>57.9</b>	<b>59.3</b>	<b>59.4</b>	<b>59.4</b>	<b>60.1</b>	<b>59.5</b>
<b>OPEC NGLs + non-conventional oils</b>	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.3	6.4	6.5	6.5	6.5	6.5
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	<b>62.1</b>	<b>63.8</b>	<b>63.1</b>	<b>64.0</b>	<b>63.7</b>	<b>63.8</b>	<b>65.1</b>	<b>64.2</b>	<b>65.7</b>	<b>65.8</b>	<b>65.9</b>	<b>66.6</b>	<b>66.0</b>
<b>OPEC crude oil production (secondary sources)</b>	30.5	31.7	32.6	32.1	32.3	32.7	32.4	32.4					
<b>Total supply</b>	92.6	95.5	95.8	96.1	96.0	96.6	97.5	96.6					
<b>Balance (stock change and miscellaneous)</b>	0.6	1.5	0.4	0.5	-0.3	-1.2	-0.9	-0.5					
<b>OECD closing stock levels, mb</b>													
Commercial	2,706	2,989	2,985	3,032	3,018	2,971	2,851	2,851					
SPR	1,582	1,588	1,600	1,600	1,588	1,578	1,566	1,566					
<b>Total</b>	<b>4,288</b>	<b>4,577</b>	<b>4,585</b>	<b>4,632</b>	<b>4,606</b>	<b>4,548</b>	<b>4,417</b>	<b>4,417</b>					
<b>Oil-on-water</b>	924	1,017	1,102	1,043	1,052	997	997	997					
<b>Days of forward consumption in OECD, days</b>													
Commercial onland stocks	58.3	63.7	63.0	64.6	63.3	62.1	60.2	59.8					
SPR	34.1	33.9	33.8	34.1	33.3	33.0	33.1	32.8					
<b>Total</b>	<b>92.3</b>	<b>97.6</b>	<b>96.8</b>	<b>98.7</b>	<b>96.6</b>	<b>95.1</b>	<b>93.2</b>	<b>92.6</b>					
<b>Memo items</b>													
<b>(a) - (b)</b>	<b>29.9</b>	<b>30.2</b>	<b>32.3</b>	<b>31.6</b>	<b>32.5</b>	<b>33.9</b>	<b>33.3</b>	<b>32.9</b>	<b>31.5</b>	<b>32.0</b>	<b>33.5</b>	<b>33.4</b>	<b>32.6</b>

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

Source: OPEC Secretariat.

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

	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
<b>World demand</b>													
<b>OECD</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>DCs</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>FSU</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Other Europe</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>China</b>	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
<b>(a) Total world demand</b>	-	-	-	-	-	-	<b>0.1</b>	-	-	-	-	<b>0.1</b>	-
<b>Non-OPEC supply</b>													
<b>OECD</b>	-	-	-	-	-	-	-	-	0.2	0.1	0.2	0.4	0.2
Americas	-	-	-	-	-	-	0.1	-	0.1	0.1	0.2	0.4	0.2
Europe	-	-	-	-	-	-	-	-	0.1	-	-0.1	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-0.1	-
<b>DCs</b>	-	-	-	-	-	-	-	-	-0.2	-	-	0.2	-
<b>FSU</b>	-	-	-	-	-	-	-	-	0.1	-	-	-	-
<b>Other Europe</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>China</b>	-	-	-	-	-	-	-	-	0.1	-	-	-	-
<b>Processing gains</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total non-OPEC supply</b>	-	-	-	-	-	-	0.1	-	0.2	0.1	0.2	0.6	0.3
<b>OPEC NGLs + non-conventionals</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>(b) Total non-OPEC supply and OPEC NGLs</b>	-	-	-	-	-	-	<b>0.1</b>	-	<b>0.2</b>	<b>0.1</b>	<b>0.2</b>	<b>0.6</b>	<b>0.3</b>
<b>OPEC crude oil production (secondary sources)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total supply</b>	-	-	-	-	-	-	0.1	-	-	-	-	-	-
<b>Balance (stock change and miscellaneous)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>OECD closing stock levels (mb)</b>													
Commercial	-	-	-	-	2	-1	-37	-37	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	2	-1	-37	-37	-	-	-	-	-
<b>Oil-on-water</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Days of forward consumption in OECD</b>													
Commercial onland stocks	-	-	-	-	-	-	-1	-1	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-1	-1	-	-	-	-	-
<b>Memo items</b>													
<b>(a) - (b)</b>	-	-	-	-	-	-	-	-	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.5</b>	<b>-0.2</b>

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the February 2018 issue.

This table shows only where changes have occurred.

Source: OPEC Secretariat.

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

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>4Q15</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>1Q17</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>
<b>Closing stock levels, mb</b>												
<b>OECD onland commercial</b>	<b>2,989</b>	<b>2,985</b>	<b>2,851</b>	<b>2,989</b>	<b>3,021</b>	<b>3,060</b>	<b>3,068</b>	<b>2,985</b>	<b>3,032</b>	<b>3,018</b>	<b>2,971</b>	<b>2,851</b>
Americas	1,561	1,598	1,499	1,561	1,592	1,611	1,621	1,598	1,608	1,595	1,572	1,499
Europe	993	972	939	993	1,008	1,011	997	972	1,021	998	966	939
Asia Pacific	435	414	412	435	421	438	450	414	404	424	433	412
<b>OECD SPR</b>	<b>1,588</b>	<b>1,600</b>	<b>1,566</b>	<b>1,588</b>	<b>1,595</b>	<b>1,592</b>	<b>1,596</b>	<b>1,600</b>	<b>1,600</b>	<b>1,588</b>	<b>1,578</b>	<b>1,566</b>
Americas	697	697	664	697	697	697	697	697	694	681	676	664
Europe	475	481	478	475	478	474	477	481	484	484	479	478
Asia Pacific	416	421	424	416	419	421	421	421	422	423	423	424
<b>OECD total</b>	<b>4,577</b>	<b>4,585</b>	<b>4,417</b>	<b>4,577</b>	<b>4,616</b>	<b>4,652</b>	<b>4,664</b>	<b>4,585</b>	<b>4,632</b>	<b>4,606</b>	<b>4,548</b>	<b>4,417</b>
<b>Oil-on-water</b>	<b>1,017</b>	<b>1,102</b>	<b>997</b>	<b>1,017</b>	<b>1,055</b>	<b>1,094</b>	<b>1,068</b>	<b>1,102</b>	<b>1,043</b>	<b>1,052</b>	<b>997</b>	<b>997</b>
<b>Days of forward consumption in OECD, days</b>												
<b>OECD onland commercial</b>	<b>64</b>	<b>63</b>	<b>60</b>	<b>64</b>	<b>66</b>	<b>65</b>	<b>65</b>	<b>63</b>	<b>65</b>	<b>63</b>	<b>62</b>	<b>60</b>
Americas	63	65	60	63	65	64	65	65	64	64	62	60
Europe	73	70	67	73	72	70	70	70	72	68	68	67
Asia Pacific	51	48	48	51	55	56	54	48	52	54	52	48
<b>OECD SPR</b>	<b>34</b>	<b>34</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>33</b>	<b>33</b>	<b>33</b>
Americas	28	28	27	28	28	28	28	28	28	27	27	27
Europe	35	35	34	35	34	33	34	35	34	33	34	34
Asia Pacific	49	49	49	49	54	54	50	49	55	53	50	49
<b>OECD total</b>	<b>98</b>	<b>97</b>	<b>93</b>	<b>98</b>	<b>100</b>	<b>98</b>	<b>98</b>	<b>97</b>	<b>99</b>	<b>97</b>	<b>95</b>	<b>93</b>

Sources: Argus Media, Euroilstock, IEA, JODI, METI, OPEC Secretariat and US Energy Information Administration.

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

				Change					Change				
	2014	2015	2016	3Q17	4Q17	2017	17/16	1Q18	2Q18	3Q18	4Q18	2018	18/17
US	13.0	14.0	13.6	14.3	15.2	14.3	0.7	15.4	15.8	16.0	16.1	15.8	1.5
Canada	4.3	4.4	4.5	4.9	5.0	4.8	0.3	5.2	5.0	5.0	5.2	5.1	0.3
Mexico	2.8	2.6	2.5	2.2	2.1	2.2	-0.2	2.2	2.1	2.1	2.1	2.1	-0.1
<b>OECD Americas*</b>	<b>20.1</b>	<b>21.1</b>	<b>20.6</b>	<b>21.3</b>	<b>22.3</b>	<b>21.4</b>	<b>0.8</b>	<b>22.7</b>	<b>22.9</b>	<b>23.1</b>	<b>23.4</b>	<b>23.0</b>	<b>1.6</b>
Norway	1.9	1.9	2.0	1.9	1.9	2.0	0.0	2.0	1.9	1.8	1.9	1.9	-0.1
UK	0.9	1.0	1.0	1.0	1.0	1.0	0.0	1.1	1.1	1.1	1.2	1.1	0.1
Denmark	0.2	0.2	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	0.6	0.7	0.7	0.7	0.0	0.7	0.6	0.6	0.7	0.7	0.0
<b>OECD Europe</b>	<b>3.6</b>	<b>3.8</b>	<b>3.8</b>	<b>3.7</b>	<b>3.7</b>	<b>3.8</b>	<b>0.0</b>	<b>3.9</b>	<b>3.8</b>	<b>3.7</b>	<b>4.0</b>	<b>3.8</b>	<b>0.0</b>
Australia	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 Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
<b>OECD Asia Pacific</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>
<b>Total OECD</b>	<b>24.3</b>	<b>25.3</b>	<b>24.8</b>	<b>25.4</b>	<b>26.4</b>	<b>25.6</b>	<b>0.7</b>	<b>27.0</b>	<b>27.2</b>	<b>27.2</b>	<b>27.7</b>	<b>27.3</b>	<b>1.7</b>
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.8	0.9	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.2	0.3	0.0
Asia others	0.2	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
<b>Other Asia</b>	<b>3.6</b>	<b>3.7</b>	<b>3.7</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>-0.1</b>	<b>3.5</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>0.0</b>
Argentina	0.7	0.7	0.7	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Brazil	2.9	3.1	3.1	3.3	3.3	3.3	0.2	3.4	3.4	3.6	3.7	3.5	-0.2
Colombia	1.0	1.0	0.9	0.9	0.9	0.9	0.0	0.8	0.8	0.8	0.8	0.8	-0.1
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
L. 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
<b>Latin America</b>	<b>5.0</b>	<b>5.2</b>	<b>5.1</b>	<b>5.2</b>	<b>5.2</b>	<b>5.2</b>	<b>0.1</b>	<b>5.2</b>	<b>5.3</b>	<b>5.4</b>	<b>5.5</b>	<b>5.3</b>	<b>0.1</b>
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	0.9	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle East</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>0.0</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>0.0</b>
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
Congo	0.3	0.3	0.3	0.4	0.4	0.4	0.1	0.4	0.4	0.4	0.4	0.4	0.0
Egypt	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.6	0.7	0.0
Ghana	0.1	0.1	0.1	0.2	0.2	0.2	0.1	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	0.3	0.2	0.2	0.2	0.0	0.3	0.2	0.2	0.2	0.2	0.0
Africa other	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
<b>Africa</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>0.1</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>0.1</b>
<b>Total DCs</b>	<b>11.8</b>	<b>12.0</b>	<b>11.9</b>	<b>11.9</b>	<b>11.9</b>	<b>11.9</b>	<b>0.0</b>	<b>11.9</b>	<b>12.0</b>	<b>12.2</b>	<b>12.2</b>	<b>12.1</b>	<b>0.2</b>
<b>FSU</b>	<b>13.5</b>	<b>13.7</b>	<b>13.9</b>	<b>13.9</b>	<b>14.1</b>	<b>14.1</b>	<b>0.2</b>	<b>14.0</b>	<b>13.9</b>	<b>13.8</b>	<b>13.9</b>	<b>13.9</b>	<b>-0.1</b>
Russia	10.7	10.8	11.1	11.1	11.1	11.2	0.1	11.1	11.0	11.0	11.0	11.0	-0.2
Kazakhstan	1.6	1.6	1.6	1.7	1.8	1.7	0.2	1.8	1.9	1.7	1.9	1.8	0.1
Azerbaijan	0.9	0.9	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.7	0.8	0.8	0.0
FSU others	0.4	0.4	0.4	0.3	0.3	0.4	0.0	0.3	0.4	0.3	0.3	0.3	0.0
<b>Other Europe</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>
<b>China</b>	<b>4.3</b>	<b>4.4</b>	<b>4.1</b>	<b>3.9</b>	<b>4.0</b>	<b>4.0</b>	<b>-0.1</b>	<b>4.0</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<b>-0.1</b>
<b>Non-OPEC production</b>	<b>54.0</b>	<b>55.6</b>	<b>54.8</b>	<b>55.3</b>	<b>56.5</b>	<b>55.7</b>	<b>0.9</b>	<b>57.0</b>	<b>57.1</b>	<b>57.1</b>	<b>57.9</b>	<b>57.3</b>	<b>1.6</b>
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2	2.2	0.0
<b>Non-OPEC supply</b>	<b>56.2</b>	<b>57.7</b>	<b>57.0</b>	<b>57.5</b>	<b>58.7</b>	<b>57.9</b>	<b>0.9</b>	<b>59.3</b>	<b>59.4</b>	<b>59.4</b>	<b>60.1</b>	<b>59.5</b>	<b>1.7</b>
OPEC NGL	5.7	5.8	5.9	6.1	6.1	6.1	0.2	6.2	6.2	6.2	6.3	6.2	0.2
OPEC Non-conventional	0.3	0.3	0.2	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
<b>OPEC (NGL+NCF)</b>	<b>5.9</b>	<b>6.0</b>	<b>6.1</b>	<b>6.3</b>	<b>6.4</b>	<b>6.3</b>	<b>0.2</b>	<b>6.4</b>	<b>6.5</b>	<b>6.5</b>	<b>6.5</b>	<b>6.5</b>	<b>0.2</b>
<b>Non-OPEC &amp; OPEC (NGL+NCF)</b>	<b>62.1</b>	<b>63.8</b>	<b>63.1</b>	<b>63.8</b>	<b>65.1</b>	<b>64.2</b>	<b>1.0</b>	<b>65.7</b>	<b>65.8</b>	<b>65.9</b>	<b>66.6</b>	<b>66.0</b>	<b>1.8</b>

Note: \* OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

	2015	2016	2017	Change 2017/16	1Q17	2Q17	3Q17	4Q17	Jan 18	Feb 18	Change Feb/Jan
US	977	509	875	366	739	892	947	921	937	968	31
Canada	192	131	207	76	299	115	208	204	279	323	44
Mexico	52	26	17	-8	17	23	18	12	18	19	1
OECD Americas	1,221	665	1,099	434	1,054	1,030	1,174	1,137	1,234	1,310	76
Norway	17	17	15	-2	14	17	13	15	14	13	-1
UK	14	9	9	0	9	9	11	6	5	7	2
OECD Europe	117	96	92	-4	100	92	88	88	84	84	0
OECD Asia Pacific	17	7	15	9	14	17	15	16	15	16	1
<b>Total OECD</b>	<b>1,355</b>	<b>768</b>	<b>1,206</b>	<b>438</b>	<b>1,168</b>	<b>1,139</b>	<b>1,277</b>	<b>1,240</b>	<b>1,333</b>	<b>1,410</b>	<b>77</b>
Other Asia*	202	180	186	6	184	182	178	199	207	194	-13
Latin America	145	68	70	2	61	62	75	82	79	84	5
Middle East	102	88	74	-14	74	76	75	70	70	73	3
Africa	29	17	16	-1	15	17	17	15	15	15	0
<b>Total DCs</b>	<b>478</b>	<b>353</b>	<b>346</b>	<b>-7</b>	<b>334</b>	<b>337</b>	<b>346</b>	<b>365</b>	<b>371</b>	<b>366</b>	<b>-5</b>
<b>Non-OPEC rig count</b>	<b>1,833</b>	<b>1,121</b>	<b>1,552</b>	<b>431</b>	<b>1,502</b>	<b>1,477</b>	<b>1,622</b>	<b>1,606</b>	<b>1,704</b>	<b>1,776</b>	<b>72</b>
Algeria	51	54	54	0	51	56	54	53	50	53	3
Angola	11	6	3	-4	3	3	2	2	1	4	3
Ecuador	12	4	6	2	7	8	5	6	4	6	2
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	1	0
Gabon	4	1	1	0	0	1	1	2	2	3	1
Iran**	54	59	61	2	61	61	61	61	61	61	0
Iraq**	52	43	49	6	41	49	54	52	56	58	2
Kuwait**	47	44	54	9	55	55	53	52	53	54	1
Libya**	3	1	1	0	1	1	1	1	1	1	0
Nigeria	30	25	28	3	27	28	27	28	31	35	4
Qatar	8	8	10	2	11	11	10	7	6	9	3
Saudi Arabia	155	156	149	-7	152	150	148	147	143	148	5
UAE	42	51	52	1	50	51	53	53	54	53	-1
Venezuela	110	100	91	-9	95	95	89	85	90	89	-1
<b>OPEC rig count</b>	<b>579</b>	<b>552</b>	<b>558</b>	<b>6</b>	<b>554</b>	<b>568</b>	<b>561</b>	<b>550</b>	<b>553</b>	<b>575</b>	<b>22</b>
<b>World rig count***</b>	<b>2,412</b>	<b>1,673</b>	<b>2,110</b>	<b>437</b>	<b>2,056</b>	<b>2,045</b>	<b>2,183</b>	<b>2,156</b>	<b>2,257</b>	<b>2,351</b>	<b>94</b>
<i>of which:</i>											
Oil	1,750	1,189	1,541	352	1,464	1,503	1,608	1,591	1,685	1,780	95
Gas	563	370	466	96	477	441	478	466	478	478	0
Others	100	113	103	-10	115	101	98	98	94	93	-1

Note: \* Other Asia includes Indonesia.

\*\* Estimated data when Baker Hughes Incorporated did not reported the data.

\*\*\* Data excludes China and FSU.

Totals may not add up due to independent rounding.

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

# 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
MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report

MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)
NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
OSP	Official Selling Price
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index
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

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## OPEC Basket average price

US\$/b



down 3.37 in February

February 2018	63.48
January 2018	66.85
<b>Year-to-date</b>	<b>65.25</b>

## February OPEC crude production

mb/d, according to secondary sources



down 0.08 in February

February 2018	32.19
January 2018	32.26

## Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
<b>2017</b>	3.8	2.5	2.3	1.7	2.5	6.9	6.4
<b>2018</b>	3.8	2.4	2.7	1.5	2.2	6.5	7.2

## Supply and demand

mb/d

<b>2017</b>	<b>17/16</b>		<b>2018</b>	<b>18/17</b>	
World demand	97.0	1.6	World demand	98.6	1.6
Non-OPEC supply	57.9	0.9	Non-OPEC supply	59.5	1.7
OPEC NGLs	6.3	0.2	OPEC NGLs	6.5	0.2
<b>Difference</b>	<b>32.9</b>	<b>0.6</b>	<b>Difference</b>	<b>32.6</b>	<b>-0.2</b>

## OECD commercial stocks

mb

	Nov 17	Dec 17	Jan 18	Jan 18/ Dec 17	Jan 17
Crude oil	1,473	1,424	1,437	12.8	1,522
Products	1,433	1,427	1,428	1.0	1,548
<b>Total</b>	<b>2,906</b>	<b>2,851</b>	<b>2,865</b>	<b>13.7</b>	<b>3,070</b>
Days of forward cover	61.1	60.1	60.0	-0.1	65.4

Next report to be issued on 12 April 2018.