Monthly Oil Market Report

12 February 2018

Feature article:
Review of recent global oil demand trends

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## Oil Market Highlights

### **Crude Oil Price Movements**

The OPEC Reference Basket increased for the fifth-straight month in January, gaining a sharp 7.7% to average \$66.85/b, the highest monthly average since November 2014. Oil prices were supported by continuing efforts by OPEC and participating non-OPEC producers to balance the market and ten consecutive weeks of crude inventory draws amid healthy economic growth and improving oil demand. ICE Brent was \$4.99 higher at \$69.08/b in January, while NYMEX WTI surged \$5.71 to \$63.66/b. The ICE Brent/NYMEX WTI spread narrowed 73¢ to \$5.42/b. Hedge funds raised net long positions in ICE Brent and NYMEX WTI to 1.08 million contracts, a new all-time high record. The market structures for Brent, WTI and Dubai are in sustained backwardation. In the first week of February, crude oil futures lost around \$6/b from the end of January amid an overall decline in equity markets and a slide in the US dollar as well as stronger-than-expected US supply and a build in US inventories.

### **World Economy**

The global GDP growth forecast was revised up by 0.1 percentage points to 3.8% for both 2017 and 2018, mainly supported by advanced economies. US growth was revised up in 2018 to 2.7%, after growth of 2.3% in 2017. Growth in the Euro-zone was lifted to 2.5% in 2017 and 2.2% in 2018. Japan's growth forecast remains unchanged in both 2017 and 2018 at 1.8% and 1.6%, respectively. While China's 2017 growth was better than expected at 6.9%, the 2018 growth forecast remains unchanged at 6.5%. Also, India's GDP growth forecast remains unchanged at 7.2% in 2018, after growth of 6.5% in 2017.

### **World Oil Demand**

World oil demand growth in 2017 is estimated to increase by 1.60 mb/d, representing an upward adjustment of some 30 tb/d compared to last month's projections, mainly to reflect the continuing better-than-expected data in OECD Europe in 3Q17. Total world oil demand stood at 97.01 mb/d in 2017. In 2018, world oil demand is foreseen to reach 98.60 mb/d, representing growth of 1.59 mb/d, 60 tb/d higher than the previous month's projections and mainly reflecting the positive economic outlook.

### **World Oil Supply**

Non-OPEC supply in 2017 was revised up by 0.07 mb/d, mainly due to an upward revision in the OECD, to average 57.86 mb/d, representing growth of 0.86 mb/d. For 2018, non-OPEC supply forecast was revised up by 0.32 mb/d, to average 59.26 mb/d, representing growth of 1.40 mb/d, which was also revised up by 0.25 mb/d. Expectations for higher production in the US, UK and Brazil, as well as lesser declines in Mexico and China were the main reasons behind the upward adjustment. OPEC NGLs and non-conventional liquids' production averaged 6.31 mb/d in 2017, up by 0.17 mb/d y-o-y. OPEC NGLs are expected to grow by 0.18 mb/d to average 6.49 mb/d in 2018. In January 2018, OPEC crude oil production decreased by 8 tb/d, according to secondary sources, to average 32.30 mb/d.

## **Product Markets and Refining Operations**

Product markets in the Atlantic Basin showed mixed performance in January as refining margins in the US turned around from the declining trend recorded in the previous month, showing some gains, mainly at the top of the barrel supported by cold weather-related refinery outages. Meanwhile, in Europe, product markets lost some ground with weakening seen at the bottom of the barrel due to supply-side pressure. In Asia, product markets weakened, with losses seen all across the barrel, except for the middle distillate complex, pressured by slower seasonal demand. Due to higher scheduled maintenance in February, product markets in the USGC are expected to receive some support on the back of lower product supplies.

#### **Tanker Market**

Dirty tanker spot freight rates experienced a general downward trend in January, which affected vessels of different classes on all reported routes. VLCC, Suezmax and Aframax average spot freight rates declined by 17%, 31% and 13% m-o-m, respectively. The decline was driven by low tonnage demand, limited inquiries and port maintenance as well as a prolonged tonnage list. Similarly, clean tanker spot freight rates were weak, mainly as fixtures to eastern destinations showed lower rates than in the previous month.

### **Stock Movements**

Total OECD commercial oil stocks fell in December to stand at 2,888 mb. At this level, OECD commercial stocks were 109 mb above the latest five-year average. Crude and products stocks indicated a surplus of around 100 mb and 9 mb above the seasonal norm, respectively. In line with the existing overhang, the market is only expected to return to balance towards the end of this year. In terms of days of forward cover, OECD commercial stocks stood at 61.0 days in December, some 1.1 days higher than the latest five-year average.

## **Balance of Supply and Demand**

Demand for OPEC crude in 2017 is estimated to stand at 32.8 mb/d, some 0.6 mb/d higher than the 2016 level. In 2018, demand for OPEC crude is forecast at 32.9 mb/d, slightly higher than the 2017 level.

## **Feature Article**

### Review of recent global oil demand trends

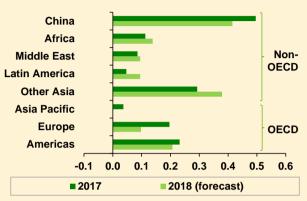
World oil demand growth exceeded 1.40 mb/d for the third consecutive year to register an increase of 1.6 mb/d in 2017. Total global demand is now near the 97.0 mb/d threshold. Cumulatively, between 2015 and 2017, the world has added around 5 mb/d of demand for oil products on the back of healthy economic conditions globally and a relatively steady product price environment.

OECD Americas' oil demand grew by a healthy 0.23 mb/d in 2017, driven by the solid economic momentum which supported light and middle distillate consumption.

In OECD Europe and Asia Pacific, following stable growth in the past two years, oil demand remained in positive territory in 2017, collectively rising by 0.23 mb/d. Improvements in the economy, healthy petrochemical and transportation sectors, and colderthan-normal temperatures earlier in the year lent support to oil demand growth.

In non-OECD. China's oil demand growth was robust in 2017, increasing by nearly 0.5 mb/d as the petrochemical and the transportation sectors continued to expand at a healthy pace.

Graph 1: Oil demand growth by region, mb/d

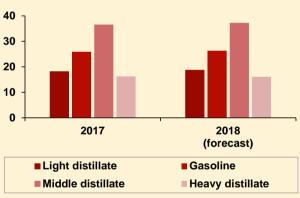


Source: OPEC Secretariat.

Oil demand growth in Other Asia - primarily India- increased by 0.23 mb/d, this is despite slower-thanexpected oil demand growth from India in 1Q17, post demonetisation. Meanwhile, Latin America and Middle East oil demand growth flipped into positive territory in 2017, with the two regions adding a combined 0.13 mb/d, on the back of an uptick in economic conditions in Brazil, along with firm growth in some countries in Middle East (Graph 1).

For 2018, the major assumptions accounted for in the Graph 2: Oil demand growth by product, mb/d oil demand forecast include: a steady rise in global economic activities, which are projected to increase by 3.8% y-o-y; transportation fuels - namely gasoline, jet fuel and diesel oil - are anticipated to provide the bulk of growth in 2018, propelled by steady vehicle sales in the US, China and India; and capacity additions as well as expansions in petrochemical sector projects, which are expected to provide support to light distillates requirements, mainly in the US, and to a lesser extent in China (Graph 2).

Conversely, oil demand is assumed to be limited by a number of factors, namely: the level of substitution with other fuels in OECD Americas, Asia Pacific, and the Middle East; a steady increase in efficiency gains, and a reduction in subsidies, which are anticipated to



Source: OPEC Secretariat.

growth in 2018.

reduce oil demand in the Middle East, but mitigated by higher household income. Finally, the degree of digitalization and technological development in various sectors is also expected to relatively cap oil demand

As a result, oil demand in 2018 is projected to grow by 1.59 mb/d, broadly to reach 98.6 mb/d. The OECD is foreseen to rise by around 0.32 mb/d, with OECD Americas and Europe being firmly in the positive, while OECD Asia Pacific is anticipated to decline. In the non-OECD region, growth is forecast at 1.26 mb/d, with China being the major contributing country to overall growth, followed by Other Asia, including India.

Recently, healthy and steady economic development in major global oil demand centres was the key driver behind strong oil demand growth. This close linkage between economic growth and oil demand is foreseen to continue, at least for the short term.

## **Feature Article**

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## **Crude Oil Price Movements**

The OPEC Reference Basket (ORB) ended up for a fifth straight month, gaining a sharp 7.7% in January to average 66.85/b, the highest monthly average since November 2014. Prices were driven by strong bullish oil market fundamentals as well as non-fundamental factors. Prices were supported by efforts to balance the market by OPEC and participating non-OPEC producers, together with consecutive weeks of US crude oil inventory draws amid healthy economic growth and improving oil demand. Geopolitical tensions and a weaker US dollar also supported the oil complex. Speculative activity also increased with net long positions reaching all-time highs in all markets. Compared to the previous year, the January ORB value was 27.6%, or \$14.46, higher, than the \$52.40/b seen in the same month a year earlier.

Crude oil futures ended January almost 25% higher than at the same time last year to reach their highest value in more than three years. ICE Brent averaged \$4.99, or 7.8% higher, at \$69.08/b, while NYMEX WTI surged \$5.71, or 9.9%, to average \$63.66/b. Compared to the January 2017, ICE Brent was \$13.63, or 24.6%, higher, while NYMEX WTI rose by \$11.05, or 21.0%. The spread between NYMEX WTI and ICE Brent eased on the back of the steep declines in US inventories, particularly the drop seen in Cushing, Oklahoma. However, the transatlantic spread still continues to support US crude exports to Europe and Asia, despite narrowing by 73¢ to \$5.42/b in January.

Most recently, oil futures posted a sixth straight day of losses, pressured by the turmoil in in global equity markets sparked by inflation fears and stronger-than-expected US supply figures. Also, oil is inversely correlated with the dollar, which has strengthened as equities markets slid more than 11% from this year's peak in late January. By Friday February 9, oil prices deteriorated with NYMEX WTI and ICE Brent crude futures sliding nearly 10% over the first 6 trading sessions in February to their lowest values since Mid-December.

Hedge funds raised their combined futures and options positions in NYMEX WTI by 84,139 contracts or 20.4%, to 496,111 lots, the highest on record. Similarly, net long positions in ICE Brent rose by 23,423 contracts to 584,707 lots, also a new all-time high record. The long-to-short-ratio in ICE Brent speculative positions remained unchanged at almost 11:1, while that of NYMEX WTI surged to 14.5:1. Total futures and options open interest volume in the two exchanges increased by 582,329 lots, or 9.7%, to 6.60 million contracts.

The sweet/sour differential widened globally, largely supported by sharp increases in outright sweet crude prices and more availability of sour crude alternatives, particularly in Europe, due to a wider Brent/Dubai spread, despite ongoing limited supplies of heavy sour crudes on the back of the OPEC and participating non-OPEC producing countries' production adjustment agreement.

## **OPEC Reference Basket**

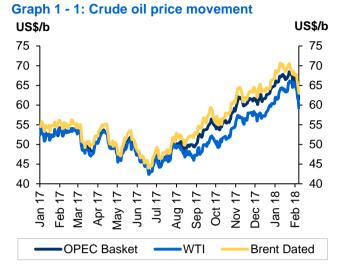
The **ORB** ended higher for the fifth straight month, gaining a sharp 7.7% in January, m-o-m, to average \$66.85/b, the highest monthly average since November 2014.

Prices improved over the month following ten consecutive weeks of US crude stocks draws by the end of the month. Rising crude exports also helped lower crude inventories, which were down by 47.4 mb over 10 weeks to stand at 411.58 mb, the lowest level since February 2015, according to the Energy Information Administration (EIA) data. Higher exports and solid refinery activity have offset the impact of climbing production levels on stocks along with higher US output.

The increase in crude prices was also driven, in part, by a weaker dollar. Before recovering toward the end of the month, the US dollar index fell to its lowest point since December 2014. Further support also came from the ongoing commitment by OPEC and non-OPEC producing countries to the Declaration of Cooperation.

Expectations of firm demand based on stronger economic growth forecasts also underpinned higher oil prices. The International Monetary Fund (IMF) raised its 2018 forecast for global GDP growth by 0.2 percentage points (pp) to 3.9% in its latest World Economic Outlook, released on 22 January.

M-o-m, the ORB value rose \$4.79, or 7.7%, to settle at \$66.85/b on a monthly average. Compared to the previous year, the ORB value was 27.6%, or \$14.46, higher versus the \$52.40/b seen in January 2017.



Sources: Argus Media, OPEC Secretariat and Platts.

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

			Chang	е	Year-to-d	ate
	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec	<u>%</u>	<u>2017</u>	<u>2018</u>
Basket	62.06	66.85	4.79	7.7	52.40	66.85
Arab Light	62.50	67.42	4.92	7.9	52.29	67.42
Basrah Light	61.44	66.11	4.67	7.6	51.66	66.11
Bonny Light	64.64	69.92	5.28	8.2	54.98	69.92
Es Sider	63.09	68.23	5.14	8.1	53.08	68.23
Girassol	64.97	69.77	4.80	7.4	54.41	69.77
Iran Heavy	60.87	65.85	4.98	8.2	51.90	65.85
Kuwait Export	60.94	65.74	4.80	7.9	51.48	65.74
Qatar Marine	61.54	66.36	4.82	7.8	53.44	66.36
Merey	56.04	59.14	3.10	5.5	46.81	59.14
Murban	63.84	68.81	4.97	7.8	55.97	68.81
Oriente	59.66	63.53	3.87	6.5	48.64	63.53
Rabi Light	63.17	68.16	4.99	7.9	53.13	68.16
Sahara Blend	64.74	69.93	5.19	8.0	54.84	69.93
Zafiro	64.34	69.23	4.89	7.6	53.80	69.23
Other Crudes						
Dated Brent	64.14	69.13	4.99	7.8	54.58	69.13
Dubai	61.61	66.15	4.54	7.4	53.71	66.15
Isthmus	62.57	67.57	5.00	8.0	54.98	67.57
LLS	63.31	67.80	4.49	7.1	54.05	67.80
Mars	60.16	64.10	3.94	6.5	49.91	64.10
Minas	56.95	60.91	3.96	7.0	50.63	60.91
Urals	63.75	68.69	4.94	7.7	53.42	68.69
WTI	57.94	63.70	5.76	9.9	52.50	63.70
Differentials						
Brent/WTI	6.20	5.43	-0.77	-	2.08	5.42
Brent/LLS	0.83	1.33	0.50	-	0.53	1.32
Brent/Dubai	2.53	2.98	0.45	-	0.88	2.98

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

**ORB component values** in January improved along with the relevant crude oil benchmarks and positive monthly changes in their respective OSP differentials due to ongoing sustained backwardation. Crude oil physical benchmarks Dubai, Dated Brent and WTI spot prices increased by \$4.54, \$4.99 and \$5.76, respectively.

Besides the sizable increase of 7.8% in Dated Brent, the West (WAF) and North African light sweet crude Basket components' price differentials edged higher due to falling inventories in the US and robust refinery demand in Europe, causing their values to rise to near \$70/b. Saharan Blend, Es Sider, Girassol, Bonny Light, Equatorial Guinea's Zafiro and Gabon's Rabi values increased on average by \$5.05, or 7.9%, to \$69.21/b. Nevertheless, spot demand for WAF crude, which is sold heavily in Asia Pacific, was sluggish over the month, with several February cargoes unsold as the March loading programme emerged. Moreover, WAF crudes have become more expensive for Asia-Pacific buyers because of the widening Brent-Dubai spread.

Latin American ORB components, Venezuelan Merey and Ecuador's Oriente, edged up to \$59.14/b and \$63.53/b, respectively, gaining \$3.10, or 5.5%, and \$3.87, or 6.5%. Tight sour crude supplies in the US Gulf Coast (USGC) 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 the need for a heavier feedstock to blend with coastal light sweet crudes continued to support these grades.

Supported by tighter supplies, healthy demand and the uplift in OSP offsets, the value of multiple-region destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – improved further. On average, these grades' values expanded by \$4.84, or 7.9%, for the month, to \$66.28/b. Middle East crudes were supported by ICE Brent's high premium to benchmark Dubai swaps, which is making Dubai-linked crudes look a better value than longer-haul Atlantic Basin supplies.

Equally, Middle Eastern spot components, Murban and Qatar Marine, saw their values improving by \$4.97, or 7.8%, to \$68.81/b and \$4.82, or also 7.8%, to \$66.36/b, respectively. The Middle East crude market stayed firm on support from robust refining margins which underpinned demand, while a North Sea pipeline outage also provided support.

On 9 February, the ORB was up at \$61.52/b, \$5.33 below the January average.

## The oil futures market

Crude oil futures ended January almost 30% higher than in the same month a year earlier, to reach their highest value in more than three years. Prices were driven up by strong bullish oil market fundamentals as well as non-fundamental factors. Prices have been supported by efforts to balance the market by OPEC and participating non-OPEC producers, together with consecutive weeks of US crude oil inventory draws amid healthy economic growth and improving oil demand. Geopolitical tensions and a weaker US dollar also supported the oil complex. Speculative activity also increased with net long positions reaching all-time highs in all markets, but fund managers seem unconcerned about the threat of a short-term reversal because the medium-term fundamentals appear solid. Oil consumption is growing rapidly as a result of synchronised growth in the major economies. OPEC and the non-OPEC producing countries have reiterated their commitment to output adjustments, while global inventories continued to draw.

Earlier in the month, futures prices rose about 2% to hit the highest levels in 2-½ years, supported by strong economic data from the US and Germany, as well as tensions in the Middle East. Prices continued to move higher, as US inventory reports showed considerable consecutive draws on crude inventories. Prices rose further, touching their highest since December 2014, supported by OPEC-led production adjustments. Crude futures prices continued to increase, settling at three-year highs with Brent futures prices briefly moving above \$70/b on data showing steady declines in US stocks, geopolitical tensions and continuing commitment to the Declaration of Cooperation by its participating countries. Moreover, oil prices rose amid increasing investment flows into asset classes such as commodities, equities and US treasury yields, while the US dollar fell sharply against other major currencies. Crude futures prices hovered near a three-year high above \$70/b on signs that production adjustments by OPEC and non-OPEC participating countries are balancing the market, although surging US production remained a concern.

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

During the last decade of the month, oil prices initially dropped off three-year highs as traders took profits, but healthy demand underpinned prices near \$70/b, a level not seen since the market slump in 2014. Crude oil futures rose alongside US equities, while a number of USGC refinery problems boosted the NYMEX RBOB gasoline crack spread. Comments that OPEC and participating non-OPEC producers will continue to cooperate on oil output adjustments beyond 2018 supported the market, along with improving expectations for the world economy. US crude stocks fell for the 10th-straight week and the US dollar dropped 0.7% in January.

On the last trading session in the month of January, oil prices rebounded from earlier losses to end higher, as strong demand for gasoline and distillate products and news that OPEC countries maintained heavy supply adjustments in January offset the EIA reporting a rise in oil inventories for the first time in nearly three months.

In January, **ICE Brent** rose \$4.99, or 7.8%, higher to \$69.08/b, while **NYMEX WTI** surged \$5.71, or 9.9%, to average \$63.66/b. Y-t-d, ICE Brent is \$13.63, or 24.6%, higher, while NYMEX WTI rose by \$11.05, or 21.0%, from January a year earlier.

Most recently, oil futures posted six straight days of losses, wiping away the year's gains so far in a string of high-volume trading sessions, pressured by the turmoil in global equity markets which was sparked by inflation fears and stronger-than-expected US supply figures. Furthermore, the price of oil is inversely correlated to the dollar, which has strengthened as equity markets slid more than 11% from this year's peak in late January. By Friday, 9 February, oil prices deteriorated with NYMEX WTI and ICE Brent crude futures sliding nearly 10% over the first six trading sessions in February to their lowest values since mid-December. NYMEX WTI fell below \$60/b for the first time since December to settle at \$59.20/b, while ICE Brent dropped to \$62.79/b, its lowest settlement since 13 December. Both oil futures skidded to their biggest weekly losses in two years.

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

			Chan	ge	Av	erage
	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec	<u>%</u>	<u>2017</u>	<u>2018</u>
NYMEX WTI	57.95	63.66	5.71	9.9	52.61	63.66
ICE Brent	64.09	69.08	4.99	7.8	55.45	69.08
Transatlantic spread	6.15	5.42	-0.73	-11.8	2.84	5.42

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

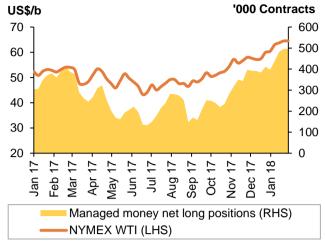
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

**Hedge funds** continued to increase their bullish positions in oil, even as prices hit their highest levels since the slump began in 2014, brushing aside concerns about overheated markets and the risk of a correction. Hedge funds were more bullish on the outlook for petroleum than at any time on record, even though prices have already nearly tripled over the last two years. The ratio of hedge fund long positions to short positions climbed to a record of more than 11:1, up from a low of less than 2:1 at the end of June 2017. Since the start of 2015, such lopsided hedge fund positioning has usually preceded a sharp reversal in the price trend.

The speculator group raised its combined futures and options positions in **NYMEX WTI** by 84,139 contracts or 20.4%, m-o-m, to 496,111 lots, the US Commodity Futures Trading Commission (CFTC) said. That was the highest on record.

**Gross short positions** dropped 11.3% to the lowest since July 2014 at 36,808 contracts, while **gross long positions** surged 17.5% to the highest at 532.919 contracts. CFTC data showed.

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

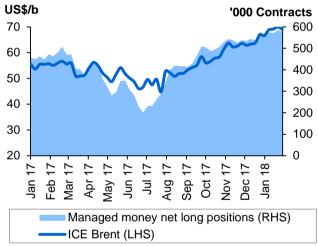


Sources: CFTC, CME Group and OPEC Secretariat.

Similarly, hedge funds and money managers raised their combined futures and options net length positions in **ICE Brent** by 23,423 contracts to 584,707 lots, to a new all-time high record, according to ICE data.

The **long-to-short-ratio** in ICE Brent speculative positions remained unchanged at almost 11:1, while that of NYMEX WTI surged to 14.5:1. The total futures and options open interest volume in the two exchanges increased by 582,329 lots, or 9.7%, to 6.60 million contracts.

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



Sources: Intercontinental Exchange and OPEC Secretariat.

The **daily average traded volume** for NYMEX WTI contracts in January surged by 347,121 lots, or 34.4%, to 1,357,326 contracts, while that of ICE Brent was 94,417 contracts higher, up by 12.2% at 866,327 lots. Daily aggregate traded volume for both crude oil futures markets increased by 441,538 contracts to 2.2 million futures contracts, or about 2.2 billion b/d of crude oil.

**Total traded volume** in NYMEX WTI in January was almost double, 41.1%, higher at 28.50 million contracts, while ICE Bent it was 23.5% higher at 19.06 million contracts.

## The futures market structure

The **market structure** of all three major oil benchmarks, Brent, Dubai and WTI continued in sustained backwardation as the oil markets continue to tighten and global oil demand is robust.

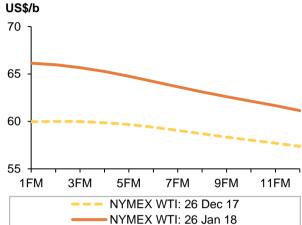
Until recently, inter-month spreads in **WTI** lagged behind other benchmarks, reflecting the high levels of stocks around the WTI contract's delivery point at Cushing, Oklahoma. However, stocks at Cushing have drawn down sharply over the last 2½ months, from more than 64 mb to just 37 mb by 26 January.

Cushing crude stocks are now 27 mb below the same time in 2017, according to data from the EIA and around 15 mb below the latest five-year average. Over the same period, the six-month WTI calendar spread has swung into a backwardation of more than \$2.50/b from a small contango 12 weeks ago, catching up with Brent and Dubai.

The backwardation in **Brent** firmed in January as the global market tightened due to lesser supplies from OPEC and some participating non-OPEC producers. In addition to the wider Brent/Dubai spread, Atlantic Basin crude shipments to Asia-Pacific were further hit by Brent firming backwardation, which caused crudes to lose value travelling long-haul to Asia.

The **Dubai** market structure has been in backwardation since August, signalling strong demand for spot cargoes. Differentials for some Middle Eastern crudes continued to set high premiums against Dubai in recent months. This sustained backwardation has caused further commercial refinery crude stock draws in Asia, particularly in China, a trend that has continued since August. This steep backwardation in the Dubai structure is pushing official selling prices (OSPs) higher for all Middle Eastern crudes, which was reflected in the strong gains in ORB Middle East components.

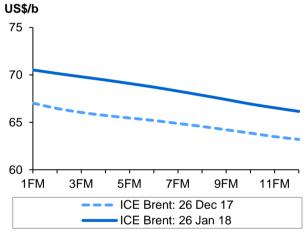
**Graph 1 - 4: NYMEX WTI forward curves** 



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

Graph 1 - 5: ICE Brent forward curves



*Note: FM = future month.* 

Sources: Intercontinental Exchange and OPEC Secretariat.

The North Sea Brent **M1/M3**  $85\phi/b$  backwardation increased to  $88\phi/b$ , up  $3\phi$ . The Dubai M1  $75\phi/b$  premium to M3 decreased to  $69\phi/b$ , easing  $6\phi$ . In the US, the WTI contango of  $3\phi/b$  flipped to a backwardation where M1/M3 narrowed  $29\phi$  to  $27\phi/b$ .

The **transatlantic spread** between the benchmarks, NYMEX WTI and ICE Brent, eased over the month on steep declines in US inventories particularly in Cushing, Oklahoma. Steady declines in stocks at Cushing – the delivery point for the NYMEX crude contract-contributed to the narrowing spread. Inventories there have declined in ten of the last eleven weeks by 25.3 mb to 39.24 mb, the lowest level since January 2015. Tightening stocks and inter-month price spreads on US crude have narrowed the discount between WTI and Brent spot prices to less than \$4/b on some instance over the month, from more than \$7/b seen late last year. Nevertheless, the spread continued to be high enough to support robust exports of US crude to Europe and Asia.

The Brent/WTI spread had soared in August, sending a signal to US producers to export more crude in order to reduce the glut at home. As expected, US exports took a step higher in mid-September, and have remained elevated since. The Brent/WTI spread topped \$7/b as recently as 26 December. US crude exports averaged 1.28 mb/d over the four weeks ending 19 January, compared with 679 tb/d a year earlier. US crude exports averaged 1.77 mb/d during the week ending 26 January.

In January, the first-month ICE Brent/NYMEX WTI spread narrowed 73¢ to \$5.42/b.

Table 1 - 3: NYMEX WTI and ICE Brent forward curves, US\$/b

		<u>1FM</u>	<u>2FM</u>	<u>3FM</u>	<u>6FM</u>	<u>12FM</u>	<u>12FM-1FM</u>
NYMEX WTI	26 Dec 17	59.97	60.00	59.98	59.39	57.37	-2.60
	26 Jan 18	66.14	65.97	65.67	64.20	61.15	-4.99
	Change	6.17	5.97	5.69	4.81	3.78	-2.39
ICE Brent	26 Dec 17	67.02	66.46	66.04	65.19	63.20	-3.82
	26 Jan 18	70.52	70.15	69.80	68.71	66.15	-4.37
	Change	3.50	3.69	3.76	3.52	2.95	-0.55

*Note: FM = future month.* 

Sources: CME Group and Intercontinental Exchange.

## The light sweet/medium sour crude spread

The **sweet/sour differential** widened globally, largely supported by sharp increases in outright sweet crude prices and more availability of sour crude alternatives, particularly in Europe, due to the wider Brent/Dubai spread, despite ongoing limited supplies of heavy sour crudes due to the OPEC and participating non-OPEC producing countries' supply agreement.

In **Europe**, the light sweet North Sea Brent premium to Urals medium sour crude continued to rebound from record lows that have not been seen since 2015, but remained generally at a very low level. The spread increased by 5¢, to the advantage of Brent, to average 44¢/b. Urals differentials to Dated Brent have been pressured by the supply overhang of ample volumes of Middle Eastern and US crude oil in the European market which has undermined demand for Urals. Urals crude differentials also softened on limited demand for the grade, as the arbitrage window to the East remains shut and buyers have a wide variety of alternative grades to choose from. Nevertheless, the North Sea light sweet grades were undermined by a return to usual export levels after the Forties pipeline outage in December. Higher US exports and lacklustre arbitrage opportunities to Asia also weighed.

Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, the Tapis premium over Dubai increased further this month as domestic light sweet crudes continued to be more attractive due to a wider Brent-Dubai spread, which increased by 45¢ to \$2.98/b from \$2.53/b in the previous month, theoretically discouraging the flow of west-east arbitrage for Atlantic-Basin crudes. The Tapis/Dubai spread widened by 66¢ to \$5.34/b.

In the **USGC**, the LLS premium over medium sour Mars increased by 55¢ to \$3.70/b, despite limited sour crude imports. The deteriorating arbitrage pushed USGC light-sweet LLS and offshore medium-sour Mars to their lowest values to WTI since July 2017. LLS fell by nearly \$1.27/b against the benchmark, while Mars fell by \$1.82/b. But prospects of heavy sour supply tightness because of pipeline congestion in Canada supported the sour USGC market.

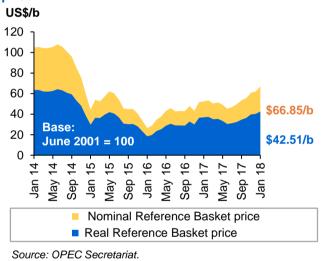
## Impact of US dollar and inflation on oil prices

On average, the **US dollar (USD)** started the year with steep falls against major currency counterparts and the currencies of emerging markets. However, since the beginning of February, the US dollar has recovered some of the earlier losses amid increased volatility in financial markets. On average, the dollar decreased by 2.9% m-o-m against the euro, amid the expectation that with further acceleration in the Euro-zone economy, the ECB will shift towards a slightly less accommodative stance. Against the Swiss franc, the dollar decreased on average by 2.6% m-o-m. On average, the dollar declined against the pound sterling by 2.9% m-o-m, while against the Japanese yen, it dropped by 1.9% on a monthly average comparison.

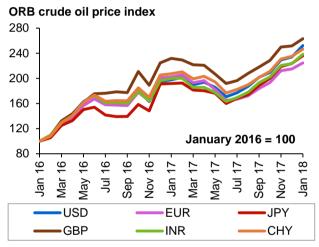
On average, the USD declined against the Chinese yuan in December by 2.4%. The dollar also dropped by 0.9% m-o-m against the Indian rupee. Against commodity exporters' currencies, the dollar decreased by 2.5% m-o-m against the Brazilian real, partly due to political developments, while against the Russian ruble the dollar declined by 3.5% in January.

Against NAFTA member currencies, the dollar decline persisted in spite of a potential breakdown of the trade negotiations. It fell by 0.3% against the Mexican peso in January, while against the Canadian dollar it dropped by 2.7%

Graph 1 - 7: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price<sup>1</sup>



**Graph 1 - 8: ORB crude oil price index comparing to different currencies** 



Source: OPEC Secretariat.

In **nominal terms**, the price of the OPEC Reference Basket (ORB) increased by \$4.79, or 7.7%, from \$62.06/b in December to \$66.85/b in January.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to \$42.51/b in January from \$40.22/b (base June 2001=100) in the previous month. Over the same period, the US dollar decreased by 2.1% against the import-weighted modified Geneva I + US dollar basket<sup>1</sup>, while inflation was relatively flat.

<sup>&</sup>lt;sup>1</sup> 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 January, average energy prices increased by around 9% with gains seen in crude oil, natural gas and coal prices. The best performer of the group was natural gas in the US, which rose by around 28% on average, but gains were quickly reversed in February.

In the group of non-energy commodities, base metal prices showed a broad-based increase of around 5% on average as continuing strength of global manufacturing, a weaker dollar and increased demand following a reduction in Chinese metal output during the winter months, continued supporting prices. Gold prices advanced on average by 5%, extending a rally that started in mid-December on a perceived dovish US Federal Reserve meeting result.

Most recently, an outburst in volatility in equity markets has translated into some declines in commodity prices. The decline has been more accentuated in energy commodities and smaller in comparison in industrial metals.

## Trends in selected commodity markets

Average **energy prices** in January increased by around 9.2% after having increased by 23.6% in 2017. The increase was broad-based for crude oil and coal and was particularly steep for natural gas in the US and Europe.

Table 2 - 1: Commodity price data

Commodity	Unit	Мо	onthly aver	ages	% Change	Yea	r-to-date
Commodity	Offic	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan 18/Dec 17	<u>2017</u>	<u>2018</u>
Energy*		76.2	77.8	85.0	9.2	68.9	85.0
Coal, Australia	US\$/mt	96.6	102.2	106.8	4.5	83.7	106.8
Crude oil, average	US\$/b	59.9	61.2	66.2	8.2	53.6	66.2
Natural gas, US	US\$/mbtu	3.0	2.8	3.5	28.3	3.3	3.5
Natural gas, Europe	US\$/mbtu	6.0	6.6	7.6	15.2	5.5	7.6
Non-energy*		84.8	84.6	87.4	3.3	84.7	87.4
Food*		89.9	89.1	91.4	2.6	93.2	91.4
Base metal*		92.6	92.2	97.0	5.3	79.1	97.0
Precious metals*		99.3	97.3	102.7	5.5	93.6	102.7

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

Source: World Bank, Commodity price data.

In January, the **Henry Hub natural gas index** was up 78¢, or 28.3%, to \$3.54/mmbtu, after trading at an average of \$2.76/mmbtu in the previous month. The increase was mainly related to below-average temperatures that have translated into larger-than-average withdrawals from inventories in the first three weeks of the month. However, towards the end of the month and at the beginning of February, prices declined on a milder weather outlook for the month of February, while inventory withdrawals were well below average in the latest storage report. The US EIA said utilities withdrew 99 bcf of working gas from underground storage during the week ending 26 January 2018. Median analysis expectation was of a 102 bcf withdrawal. This withdrawal contrasts with a five-year average withdrawal of 160 bcf for the same week. Total working gas in underground storage stood at 2,197 bcf, 16.2% lower than the previous five-year average.

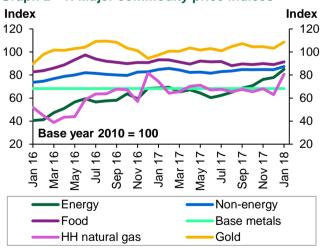
**Natural gas import prices** in **Europe** increased, with average prices up by 15.2% to \$7.56/mmbtu, partly on the effect of oil indexation. However, spot prices fell as consequence of reduced demand due to mild temperatures at the end of December and the beginning of January. Natural gas inventories for EU Member States decreased to 49.3% full at the end of December from close to 64.9% in the previous month, according to Gas Infrastructure Europe.

Australian **thermal coal prices** increased to \$106.8/Mt, amid increasing demand from China. Raw coal output in China in December was 1.1% higher y-o-y – according to the National Bureau of Statistics, and up by almost 5% m-o-m as previous plans for coal substitution during the winter months were scaled back, and demand for power generation increased. Furthermore, amid freezing temperatures in January, trade data shows an increase in Chinese coal imports to 27.81 million Metric Tonnes (MMT) in January, from 22.74 MMT in December. Compared to January 2017 the increase was by 11.6%. Natural gas imports of China remain strong, with a slight decline to 7.8 MMT in January, from 7.9 MMT. Rising imports have been related to the demand increase as a result of the fuel substitution plan of the government. Compared to January 2017 gas imports were up by 33.3%.

Average **base metal prices** increased by 5.3% in January. The increase was broad-based amid continuing strength in global manufacturing, the impact of environmental restrictions on Chinese output, overall weakness in the US dollar and the expectation of further supply disruptions in 2018 due to labour disputes in South American mines. Global manufacturing prospects point towards continuing expansion in activity in January as shown by the JP Morgan Global Manufacturing Purchasing Managers' Index (PMI) at 54.4, slightly lower than the seven-year high of 54.5 in December, with prospects remaining unchanged in the largest metal consumer China, where the Caixin Manufacturing PMI remained at 51.5, unchanged from the previous month. In January, unwrought copper imports declined slightly to 443k MMT, though they were up by 16.6% y-o-y due to the impact of winter pollution restrictions on reduced refined copper supply. Iron ore prices rose by 5.7% m-o-m on increasing demand ahead of the lifting of winter restrictions. This was reflected in higher imports of iron ore which reached 100.3MMT up by 19.3% m-o-m, and by 9.1 % y-o-y in January as mills engaged in a brisk restocking ahead of the end of the aforementioned restrictions.

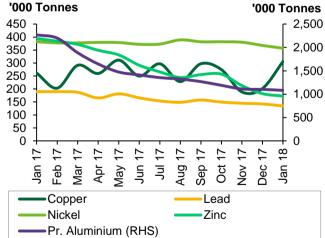
Meanwhile, **gold** prices have advanced significantly since mid-December after the US Fed statement signalled a steady path of interest rate increases. However towards the end of the month, with signs of further acceleration in the US economy which translated into further gains in the labour market, market assessment of the pace of increases in interest rates by the US Fed were adjusted upwards, thereby weakening gold prices.





Source: World Bank, Commodity price data.

Graph 2 - 2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

### Investment flows into commodities

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

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

	Open ir	nterest	Net length				
	<u>Dec 17</u>	<u>Jan 18</u>	<u>Dec 17</u>	<u>% OI</u>	<u>Jan 18</u>	<u>% OI</u>	
Crude oil	2,511	2,575	391	16	453	18	
Natural gas	1,514	1,428	-48	-3	110	8	
Precious metals	657	753	99	15	220	29	
Copper	253	288	70	28	86	30	
Total	4,935	5,043	313	75	571	100	

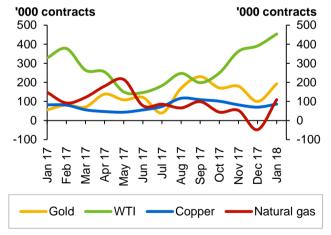
Note: Data on this table is based on monthly average. Source: US Commodity Futures Trading Commission.

**Henry Hub's natural gas OI** decreased by 5.7% m-o-m in January. Money managers switched to a net long position of 109,510 contracts, mainly as a result of well below average temperatures in the US at the beginning of the month.

**Copper's OI** increased by 14.1% m-o-m in January. Money managers increased their net long positions by 22.7% to 86,095 contracts. However, there was a large decrease in net length towards the end of the month, particularly after the end of the month when large deliveries to stocks were registered in the LME system.

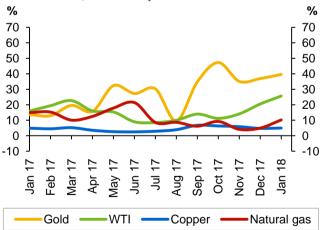
**Precious metals' OI** increased by 14.5% in January. Money managers increased their bullish bets by 1.23 times during the month to 220,044 contracts on average.

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**

Global economic growth has continued its improving momentum recently, leading to another revision in the global economic growth forecast for both 2017 and 2018 by 0.1 percentage points (pp) to stand at 3.8% for both 2018 and 2017. Strong growth in the US, along with rising growth levels in the Euro-zone and the UK and solid output numbers in Japan supported the OECD momentum. Also, emerging and developing economies' momentum continues.

OECD growth was revised up by 0.1 pp for both 2018 and 2017, to now stand at 2.4% and 2.5%, respectively. Underlying growth in the US continues to strengthen and the additional support of the US tax cut and the improving business and consumer sentiment have lifted the 2018 GDP growth forecast further to 2.7%, following growth of 2.3% in 2017. Growth in Japan remains robust, already reflected in the forecast of 1.6% for 2018 and 1.8% for 2017. The Euro-zone continues to enjoy a good dynamic, leading to an upward revision to growth in 2018 of 2.2%, following GDP growth of 2.5% in 2017.

In the emerging economies, the major economies' growth forecasts remained almost unchanged this month, except for the forecast for Brazil. As the Brazilian economy continues recovering, economic growth was revised up by 0.2 pp for both 2018 and 2017, to now stand at 2.1% and 1.0%, respectively. India's growth forecast remains at 7.2% in 2018, following growth of 6.5% in 2017. China's GDP growth expectation remains unchanged at 6.5% in 2018, after reported growth of 6.9% in 2017. Russia is forecast to continue its recovery in 2018, with growth of 1.8% in 2018, after 1.9% in 2017.

As some major economies have reached their short-term growth potential, further upside for global growth in the near-term is now limited. Numerous challenges remain and are mainly related to the political sphere and the upcoming monetary policy decision in the US and the Euro-zone in combination with currently rising asset market's volatility.

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

					Euro-					
	World	OECD	US J	lapan	zone	UK	China	India	Brazil	Russia
2017	3.8	2.5	2.3	1.8	2.5	1.8	6.9	6.5	1.0	1.9
Change from previous month	0.1	0.1	0.0	0.0	0.1	0.3	0.1	0.0	0.2	0.0
2018	3.8	2.4	2.7	1.6	2.2	1.5	6.5	7.2	1.9	1.8
Change from previous month	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.2	0.0

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

Source: OPEC Secretariat.

## **OECD**

## **OECD Americas**

### US

The **growth dynamic in the US continues**, albeit at a slightly lower level in 4Q17, which was reported at 2.6% q-o-q at a seasonally-adjusted annualised rate (SAAR). However, with the support of the latest tax-reform, an ongoing thriving labour market and also a recovering US energy sector, the growth dynamic should be expected to gain pace in the current year. Business and consumer sentiment is holding up well, while most recently the uncertainty about the path of the Fed's monetary policy was creating some volatility in US asset markets, with a subsequent global spill-over, a topic that will need further close monitoring. As valuation in equities and bonds may have temporarily reached high levels, market participants are seemingly getting more worried. However, underlying inflation at around 2% still seems to be in check and the outlook of the Fed's monetary policy to hike rates three times this year, while continuing to reduce its balance sheet

at a reasonable and gradual pace, appears to remain intact. The economy is doing well in general, and although it seems to currently be growing above potential, the annual growth levels are not signalling a considerable overheating that would otherwise lead to unexpected changes in monetary policy. However, a rising deficit, in combination with a deteriorating sovereign credit profile, as well as an overheating labour market, could lead to quicker-than-anticipated monetary tightening, a scenario that would have a subsequent effect on the oil-market as it may impact asset market valuations as well as economic activity in general, but particularly in emerging and developing economies via capital outflows from these economies — a subject that the Fed as highlighted numerous times as a key consequence of its policy.

**GDP** growth remains solid, while it has slowed down slightly in 4Q17, which showed growth of 2.6% in the first of three releases for the quarter, below the 3Q17 number of 3.2% q-o-q. 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. The inventory drawdown in the last quarter of the year impacted GDP negatively by 0.7 pp, however, this will most likely rebound in 1Q18 and hence should be compensated for in the current quarter.

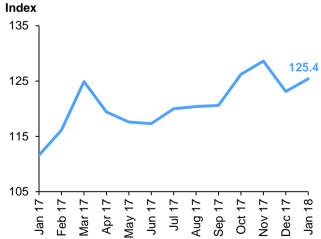
The Fed's **monetary policy** moved to the forefront as the fear of rising interest rates was pressuring asset markets. This was mainly triggered by the slightly better-than-expected labour market's hourly earnings number, a first sign that inflation may be supported by income growth. While the Fed laid out in its last meeting that gradual normalisation will continue in 2018, markets feared that this would be more rapid than currently estimated. Also the budgetary situation may require the Fed to raise interest rates sooner than expected, if the late-cycle fiscal stimulus leads to rising deficits and the consequential effects. **Inflation** numbers are still not implying any necessity to move beyond the current gradual normalisation of monetary policies, as it remained at 2.1% in December, the fourth consecutive month of inflation above 2%. Core inflation – excluding volatile items such as food and energy – rose to 1.8% in December, slightly higher, compared with 1.7% y-o-y in November. Thus, core-inflation is expected to gradually move towards the Fed's inflation target of around 2% and may pick up further.

The improvements in the **labour market** continued in January. Non-farm payrolls increased by 200.000 jobs in January, after rising by an upwardly-revised 160,000 in December. The unemployment rate remained at 4.1%, while the most widely reviewed element was the average hourly earnings growth for the private sector. This rose by 2.9% y-o-y, compared to 2.7% y-o-y in December and 2.5% y-o-y in November. This was indeed the largest growth number since the financial crisis in 2009, but it remains to be seen whether this will be a prolonged trend. Also positively, long-term unemployment numbers fell to stand at 21.5%, compared to 22.9% in December and 23.9% a month earlier, indicating a substantial improvement in the labour market. This also was the lowest level in almost 10 years. Another important element in the labour market mix, the participation rate remained at 62.7% in January, but should be expected to improve if the income level rises further.

**Industrial production** saw a strong rise in January, moving to 3.6% y-o-y growth from an already strong November level of 3.5% y-o-y. Also, **domestic demand** held up very well in December, supported by growth in retail sales, which stood at 5.5% y-o-y, after an already strong November number of 6.0% y-o-y.

The generally positive trend in the domestic side of the economy was also underscored by the rising Conference Board's **Consumer Confidence Index**, which rose to 125.4 in January, coming from 123.1 in December.

Graph 3 - 1: US consumer confidence index

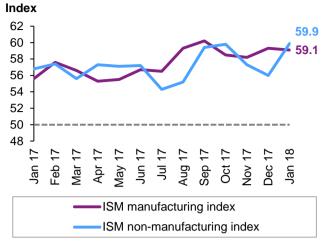


Sources: The Conference Board and Haver Analytics.

January's **PMI** for the manufacturing sector, as provided by the ISM, also indicated ongoing support in the underlying economy. The manufacturing PMI remained almost unchanged at a very high level as it stood at 59.1 in January, compared to 59.3 in December. Also, the important index for the services sector, which constitutes more than 70% of the US economy, rose again strongly, after two months of retracting, as it moved to a level of 59.9, the highest level since 2005.

Taking into consideration the strong growth momentum at the end of the last year and as indicated by the lead-indicators in January, the 2018 **GDP growth forecast** was revised up to 2.7%, compared to 2.6% in the previous month and after growth of 2.3% in 2017.

**Graph 3 - 2: Manufacturing and non-manufacturing ISM indices** 



Sources: Institute for Supply Management and Haver Analytics.

### Canada

The Canadian economy continues its significant recovery as it benefits of the growth momentum in the US, its most important trading partner, the general improving global economic situation and the recovery in oil prices. **Industrial production** rose by a significant level of 4.6% y-o-y in November, after an already high 4.1% y-o-y in October, as per latest available monthly data. The oil-sector remains an important supporting factor, showing output growth of 3.3% y-o-y in November and 4.5% in October. **Retail trade** continued to expand at a considerable level of 6.5% y-o-y in November, after 6.1% y-o-y in October, all at a nominal seasonally-adjusted level. The PMI index for manufacturing confirms strong momentum in this sector at a level of 55.9 in January, after 54.7 in December.

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

### **OECD** Asia Pacific

### **Japan**

After some temporary domestic weakness, the Japanese economy seems to recover to its above-average growth levels as domestic consumption improved considerably at the end of the year. Exports are holding up well so far and the government-led stimulus continues. Particularly, exports seem to have benefited from the currently synchronised global growth momentum, despite the recent strength of the yen, but also the rise in inflation may provide a sound base for improving domestic consumption. As the government is now considering new tax incentives to raise wages by up to 3% and also lift capex in an effort to raise productivity, inflation may rise further. However, it remains to be seen to what extent the announced support for higher wage-growth will develop and what this could mean for the international competitiveness of Japanese enterprises. As the economy is expected to grow close to 2% this year, it is also important to highlight that the economy seems to have reached its short-term growth potential, so the upside from the currently strong growth levels are limited.

Positively, **inflation** increased considerably in the latest two available months to move to 1.0% y-o-y in December from 0.6% y-o-y in November and only 0.2% y-o-y in October. 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 December, monthly earnings rose by 0.5% y-o-y, following growth of 0.7% y-o-y in November. Hence, after 3Q17 wage growth at 0.3% y-o-y, 4Q17 growth improved again to 0.5% y-o-y, the same sturdy level as in 2Q17. Therefore, the combination of a tight labour market and the government's aim of a 3% annual wage rise should turn out to be supportive for wage growth and inflation. Core inflation — which excludes food and energy — and is more wage-dependent, remained stagnant, rising by only 0.1% y-o-y in December. Given the tightness in the labour market, the **unemployment rate remained low** at 2.8% y-o-y in December, a slight uptick from November, when it stood at 2.7%.

In the meantime, the BoJ continued its monetary stimulus, indicating that this will continue, but probably at a slightly lower rate somewhere in the future. It noted in its January statement that Japan's economy is likely to continue expanding on the back of highly accommodative financial conditions and through the government's past stimulus measures, maintaining growth at a pace above potential in the current fiscal year. Inflation is expected to continue improving with medium- to long-term inflation expectations projected to rise gradually, however the momentum is not yet sufficiently firm, and thus developments in prices will continue to warrant support. The BoJ confirmed that it will continue with its quantitative and qualitative monetary easing (QQE) measures with Yield Curve Control as long as it sees it 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. This confirmed the main policy after at the end of 2017, the head of the BoJ questioned the probably too expansionary monetary policies, highlighting the possibility that interest rates may be so low that they are unable to stimulate the economy any more. So, 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 vear.

**Japanese exports** were a considerable support for the economy again in December, when external trade rose by 9.5% y-o-y, compared to very strong growth of 16.2% y-o-y in November. Additionally, **industrial production** continued to expand significantly. It rose by 5.5% y-o-y in December, compared to already considerable growth of 3.5% y-o-y in November. Manufacturing orders point at a continuing expansionary dynamic, as orders rose by 6.4% y-o-y in November, after 13.4% y-o-y in October. These levels form a good base for a continuation of manufacturing activity in the near-term.

After **domestic retail demand** growth weakened considerably in October, declining by 0.2% y-o-y, demand has recovered considerably since. As per latest available data, retail sales expanded by 3.6% y-o-y in December following 2.1% y-o-y in November. Given this solid momentum over the past months, the October decline may have been a temporary dip. The recovery was strong across the product ranges, but mostly supported by motor vehicle sales, which grew by 7.8% y-o-y in December following 4.3% y-o-y in November.

Graph 3 - 3: Japanese retail trade

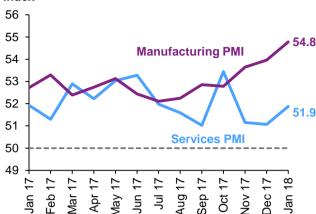


Sources: Ministry of Economy, Trade and Industry and Haver Analytics.

The latest **PMI numbers** confirm a positive trend in both the manufacturing sector and the domestically dominating services sector. The manufacturing PMI rose to 54.8 in January, compared to 54.0 in December. The services sector PMI stood at 51.9 in January, compared to 51.1 November.

The most recent developments confirm a solid underlying growth dynamic in the Japanese economy, a trend that has already been considered in the GDP growth numbers. Therefore both the 2018 and the 2017 growth forecasts remain unchanged at 1.8% and 1.6%, respectively. While this is a solid trend, 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 PMIs** Index 56



Sources: IHS Markit, Nikkei and Haver Analytics.

### South Korea

While some slowing indicators in the South Korean economy were released lately, the general performance seems to be relatively well supported. Geopolitical risks remain a concern, but these worries have slightly abated lately. Industrial output rose by 1.9% y-o-y in December, after 2.0% y-o-y in November. This is at the seasonally adjusted level, while the non-seasonally adjusted level was clearly negative in December, declining by 0.7% y-o-y, a discrepancy that will need to be monitored. Export growth recovered in January, growing by 4.4% y-o-y, after having turned into negative territory in December, falling by 0.1% y-o-y. The consumer sentiment index stands at a level of 110 in January, almost the same high level as in December at 111. Supported by some of these improving indicators, the latest PMI number for the manufacturing sector in January reflect an improvement, moving to 50.7 in January, compared with 49.9 in December.

This slow-down in 2018 GDP growth has 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**

While the economic situation in the Euro-zone continues to surprise to the upside, some political, sovereign debt and banking sector-related challenges remain. The underlying economy, supported by the labour market, continues improving as output levels expand considerably, while inflation remains low. The positive labour market development translated into rising consumer confidence and business sentiment levels. The upcoming elections in Italy will constitute an important event. So far it seems that there is no clear majority and moreover the euro-sceptics are leading the polls. In Germany, the coalition-talks have been finalized, but in order to finally confirm and establish a government, the Social Democrats had promised to let their members vote on supporting the outcome before the beginning of March, so some uncertainty remains. The banking sector remains weak and sovereign debt levels remain high in the Euro-zone. Central government debt on average in the Euro-zone has remained at an almost flat record-high level of around 76% over the past four years. In Italy, the level even stood at almost 128% in 3Q17 and in Greece it has remained above 180% over the past years. Business sentiment has remained high as the European Commission's economic sentiment index stood at 114.7 in January, only slightly below the 115.3 seen in December, which constituted a peak level for more than 10 years. However, challenges in the Euro-zone remain. Aside from the issues in the banking sector political challenges remain, but also the independence-seeking region of Catalonia has raised economic uncertainty in Spain, although so far the impact seems to have been limited.

Inflation remains a concern as it is still relatively low. However, as the economic growth has maintained considerable momentum, the ECB may consider some further monetary tightening, based on recent comments by some ECB officials. So far it has decided upon a 50% reduction of monthly QE purchases to €30 billion starting in January and running until September 2018. It was highlighted that QE could be continued beyond that time, if necessary, and until there is a sustained adjustment in the path of inflation. The main policy rate stands at 0.00% and the rate for deposit facilities at -0.4%. Moreover, officials from the ECB have reiterated that the situation in the Euro-zone's banking sector remains weak as bad loans continue to weigh on balance sheets. Despite these challenges in the banking sector, 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 December, rising by 1.8% y-o-y, after an increase of 1.5% y-o-y in the previous month. Amid the balance-sheet weakness of the banking sector, the ECB has discussed tougher capital rules, but this would particularly affect Italy's banking sector, another subject that will make the Italian elections an important event.

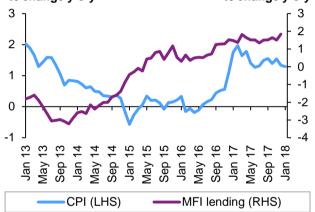
Labour market developments continued to support growth. The unemployment rate remained at 8.7% in December, the lowest level since the onset of the financial crisis in 2009 and staying clearly below the 9% level. This compares with an average unemployment rate in 2017 of 9.1% and 10.0% in 2016. Within the Euro-zone, the levels of unemployment improved on a national level, but continue to differ widely. In Spain the December unemployment rate stood at 16.4%, while in Germany it reached a new low of 3.6%, in Italy it fell to 10.8% and in France to 9.2%.

**Inflation** fell to reach 1.3% y-o-y again in January, the lowest level in 6 months. This compares to last year's average of an already low 1.5% y-o-y This comes despite the improvements in the labour market. 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, tobacco and food remained low, but improved slightly in January to stand at 1.0%, compared with 0.9% y-o-y in December. However, all inflation indicators remain well below the ECB's approximate 2% inflation target.

% change y-o-y % change y-o-y 3

Graph 3 - 5: Euro-zone CPI and lending activity

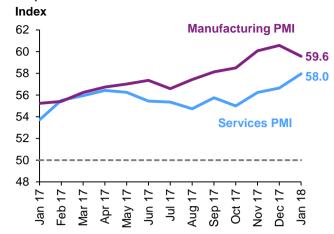


Sources: Statistical Office of the European Communities, European Central Bank and Haver Analytics.

Retail sales continued to recover, after dipping to 2.0% y-o-y growth in October, to reach 3.3% y-o-y in December and 4.9% y-o-y in November. The development in October seems to have been a temporary dip following strong developments in the previous months. **Industrial production** grew by a healthy 3.3% y-o-y in November, after 3.9% v-o-v in October and 3.4% v-o-v in September, 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 remained almost unchanged at a very high level as it stood at 59.6 in January, compared to 60.6 in December and 60.1 in November. The important PMI for the services sector, which constitutes the largest sector in the Euro-zone, even improved, moving to a new record level of 58.0, pointing at a healthy growth trend in the near term. This compares to 56.6 in December and 56.2 in November, indicating a clear upside trend.

Graph 3 - 6: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

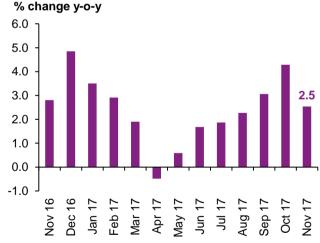
Given the ongoing strong momentum in the economy, the 2018 **GDP growth forecast** was lifted to 2.2%, from 2.1% in the previous month. This comes after the release of better-than-expected 2017 growth of 2.5%. Political uncertainties, Brexit procedures, the weakness in the banking sector as well as monetary policies remain important factors to monitor.

### UK

Supported by the global growth momentum in general and solid domestic consumption, UK GDP growth in 4Q17 turned out better than expected at 0.5% q-o-q seasonally adjusted (sa) growth rate. This marks the highest quarterly growth level in the past year, supported by good momentum in domestic private household consumption. In comparison, GDP growth stood at 0.4% q-o-q sa in 3Q17, after 0.3% q-o-q sa increase in 1H17.

The **unemployment rate** remained surprisingly low at 4.3% in October, as per the latest available data. However, contrary to the Euro-zone and most EU-Members, unemployment in the UK increased from 4.2% in September. As a sign of a potentially weakening labour market, wage growth rose only by 2.2% y-o-y, after having grown by higher rates for most of 2017. Still the labour market's impact to lift inflation, among other elements, remains intact as inflation stood at 3.0% y-o-y in December, but it also retracted slightly from a higher growth rate of 3.1% y-o-y in November. These inflation rates also filter negatively into 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.

Graph 3 - 7: UK industrial production

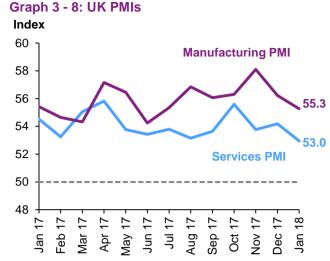


Sources: Office for National Statistics and Haver Analytics.

**Industrial production** was also holding up well at 2.5% y-o-y growth in November, supported by exports and the weakening pound sterling, while retail trade rose by 4.4% y-o-y in December, after 4.6% y-o-y in November and 3.3% y-o-y in October.

In connection with the most recent economic developments, the **PMI** for manufacturing remained at a considerably high level of 55.3, but also indicated some slowing momentum, when compared with the December level of 56.2 and 58.1 in November. The very important services sector, which constitutes the majority of the UK's economy, also retracted to 53.0 from to 54.2 in December and 53.8 in November.

In the meantime, the Brexit negotiations remain challenging and are far from finalised, despite a looming deadline in March 2019. Numerous challenges with respect to the divorce bill agreement remain and many details will still need to be hammered out. Also, the timeline and content remains very ambitious, considering the complexity of the many issues.



Sources: CIPS, IHS Markit and Haver Analytics.

Still, some politicians in the UK entertain the idea of a second referendum, once the agreement between the UK and the EU is finalised. Despite these challenges, both sides remain committed to finding an agreement by the second half of this year, which may define a transition period after March 2019. However, the latest demand by the EU on immigration rights may continue to drag these negotiations on.

While **GDP** growth in 2017 has been significantly better than expected at 1.8%, it still marks a slow-down from previous years. Consequently, and as some of this momentum will be carried over into 2018, the GDP growth for the current year has been lifted to 1.5%, compared with 1.4% in the previous month.

## 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	
	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
Brazil	1.0	1.9	3.4	3.6	-10.7	-31.4	-8.0	-7.0	78.4	84.3
Russia	1.9	1.8	3.7	3.9	41.6	41.0	-2.1	-1.3	11.8	12.4
India	6.5	7.2	3.8	4.7	-47.6	-57.5	-3.1	-3.2	50.0	48.9
China	6.9	6.5	1.5	2.0	92.6	127.7	-4.3	-4.4	18.9	22.1

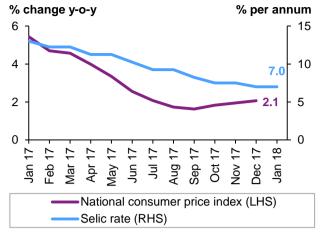
Note: \*2017 = Estimate and 2018 = Forecast.

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

### **Brazil**

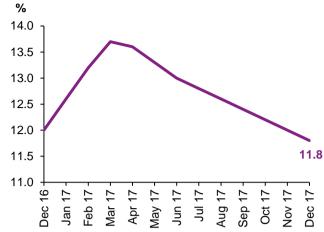
The **trade surplus** remained largely the same in the first month of 2018 compared with the corresponding month in 2017. Trade surplus stood at \$2.77 billion in January 2018 vs 2.71 in January 2017. Exports went up by nearly 14% y-o-y, while imports rose by 16.4% y-o-y in January 2018. For the whole of 2017, Brazil's trade surplus went up by 41% y-o-y to register \$67 billion. Exports jumped 18.5% to \$217.7 billion and imports rose by 10.5% y-o-y to \$150.7 billion. China remained the main destination of Brazilian exports, followed by the US and Argentina, and was also the main exporter to Brazil. Exports were supported by higher sales of soybeans, corn, crude oil and semi-manufactured products. In 3Q17, the economy of Brazil registered its highest rate of growth in more than three years. Its GDP grew by 1.4% y-o-y in 3Q17, signalling the fastest growth since 1Q14, supported by improvements in private consumption and net exports.

Graph 3 - 9: Brazil's inflation vs. interest rate



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

Graph 3 - 10: Brazil's unemployment rate



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

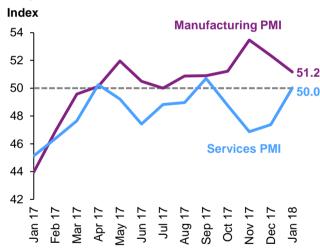
**Inflation** increased for the third month in a row in December to 2.1% y-o-y, from 2.0% y-o-y in November. The central bank kept its benchmark interest rate intact at 7.00% in January 2018 after lowering it from 7.50% in November to 7.00% in December. The **unemployment rate** posted its eighth back-to-back fall in December, registering 11.8% vs 12.0% in November, representing the lowest rate of unemployment since July 2016. In January 2018, the **consumer confidence index** surpassed 90 points for the first time since October 2014, registering 90.0, up from December's 89.2.

Graph 3 - 11: Brazil's consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 12: Brazil's manufacturing and services PMIs



Sources: IHS Markit and Haver Analytics.

In January 2017, the **manufacturing** sector continued to grow as business conditions improved. The IHS Markit Brazil Manufacturing PMI posted 51.2 in January, down from 52.4 in December. The survey outcomes showed across-the-board increases in new orders in the major segments of consumer, intermediate and capital goods. Production also continued to rise, albeit at a slower pace in three months. As for new export orders, firms indicated that focusing on the domestic market and challenging the external environment led to a drop in new export demand. Improvements in received new orders supported the services sector in January and helped it to stabilize after a long episode of contraction, which lasted for nearly three years with a few short-lived rebound moments. The IHS Markit Brazil **Services** PMI Business Activity Index registered 50.0 in January, up from 47.4 in December.

The economy of Brazil started 2018 on a positive note. A stabilization in service activity, coupled with sustained expansion in manufacturing production, led to an upturn in private sector output. This — alongside positive indications in terms of stabilizing inflation, reducing unemployment rate and bringing up consumer confidence — lent support to notably higher growth in 2018 vis-a-vis 2017.

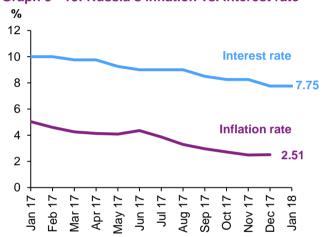
Brazil's GDP is expected to grow by 1.0% and 1.9% in 2017 and 2018, respectively.

### Russia

Russia's trade surplus rose by more than 28% y-o-y in November to \$11.5 billion, as exports increased faster than imports. Exports rose by 25.2% y-o-y in November, while imports rose by 23.5% y-o-y. In October, the trade surplus increased by 50% y-o-y in October, from \$6.6 billion to \$9.8 billion. The trade surplus increased by almost 30% y-o-y in the first 11 months of 2017. **GDP** grew by 1.8% y-o-y in 3Q17, the second-highest amount since the beginning of 2014, as reported by the Federal State Statistics Service. Household consumption continued its upwards trend in 3Q17, rising by 5.2% y-o-y from 4.4% in the previous quarter, while growth in the 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. The GDP posted growth of 2.5% y-o-y in 2Q17, up from 0.5% in the previous quarter. This represents the fastest rate of growth since 3Q12.

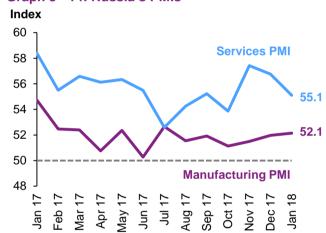
The **ruble** appreciated by 3.5% m-o-m vs the dollar in January after being largely stable in December. In a year-on-year comparison, the ruble was 5.7% higher in January 2018 from its level a year earlier. **Inflation** was also stable in December at November's level of 2.5% y-o-y. The rise in crop productivity and shortage of long-term storage facilities put downward pressure on inflation in 4Q17. In January, the central bank left its benchmark one-week repo rate at December's 7.75%.

Graph 3 - 13: Russia's inflation vs. interest rate



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

Graph 3 - 14: Russia's PMIs



Sources: IHS Markit and Haver Analytics.

The IHS Markit Russia **manufacturing** PMI was in growth territory in January. The index rose to its strongest reading since July 2017 to 52.1, fractionally higher than December's 52.0. The index survey showed an increase in production to a six-month high, together with a rise in new orders. While remaining upbeat, the manufacturing PMI data for 4Q17 suggests some slowdown in the pace of growth. The average reading of the index registered 51.5 in 4Q17 vs 52.0 in 3Q17.

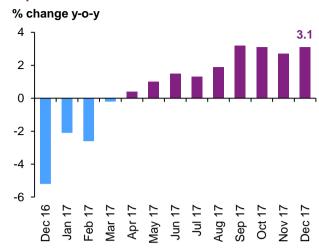
The positive momentum in **industrial production** seen since March was reversed in November and December, as industrial activity declined by 3.6% and 1.5% y-o-y, respectively. The **services** activity PMI suggests a solid overall improvement in January, though the rate of improvement was slower than in December. The index posted 55.1 in January, from December's 56.8. The survey highlighted that while growth in new orders continued, it was at its slowest pace in five months in January.

**Business confidence** was reported at its highest level since July 2011. For the ninth month in a row, **retail sales** increased in December. The rate of increase was 3.1% y-o-y, from 2.7% a month earlier. This represents the second-highest rate of expansion in retail sales since April 2017.

Graph 3 - 15: Russia's industrial production



Graph 3 - 16: Russia's retail sales



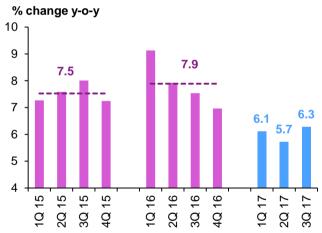
Sources: Federal State Statistics Service and Haver Analytics.

Considering that the services sector showed a solid start to 2018, with strong expansion in output and new business, alongside rising optimism among firms in the manufacturing sector in front of the year-ahead outlook and broad-based improvements noted in the economy of Russia in 2017, **Russia GDP** is anticipated to grow by 1.9% and 1.8% in 2017 and 2018, respectively.

### India

India's official economic survey 2017 scheduled in that government's Parliament by the Union Minister for Finance and Corporate Affairs (UMFCA) predicts that India's GDP growth is expected at about 7.0%-7.5% in 2018, an increase from its prediction of 6.75% growth this fiscal year. The UMFCA survey underlines the role of the Goods and Services Tax (GST), the new Indian Code<sup>2</sup>. implementation recapitalization package to strengthen public sector banks, further liberalisation of the Foreign Direct investment (FDI and export improvements through the global recovery as contributing to economic growth in 2018. The survey highlights that policy caution will be necessary in the coming year emerging macroeconomic concerns, especially if high international oil prices persist or elevated stock prices correct sharply, provoking a "sudden stall" in capital flows. Oil prices pose an important risk to the positive outlook for India in 2018.

Graph 3 - 17: India's GDP growth



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

The pace of India's economic growth will improve in the **fiscal year (FY) 2018** (ending March 2019) as domestic demand will gradually recover from the "double shock" of demonetization in November 2016 and introduction of the new goods and services tax (GST) in July 2017. Tentative improvements in the industrial sector seen in late 2017 should gain further momentum through 2018, supported by a recovery in private consumption and investment and the continuation of credit flow.

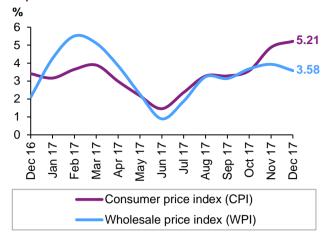
<sup>&</sup>lt;sup>2</sup> The Insolvency and Bankruptcy Code, 2016 (IBC) is the bankruptcy law of India which seeks to consolidate the existing framework by creating a single law for insolvency and bankruptcy. A strong insolvency framework where the costs and time incurred are minimized in attaining liquidation has been long overdue in India. The code will be able to protect the interests of small investors and make the process of doing business a less cumbersome process.

The GDP growth rate remained unchanged at 6.5% for 2017 and 7.2% for 2018.

India's **CPI inflation** increased by 5.21% y-o-y in December 2017, higher than the 4.88% in November, and remained in the CPI comfort zone. It is the highest inflation rate since July 2016 amid a faster rise in the cost of food and housing. The central bank targets inflation at 4%, with a tolerance band of ±2%.

India's wholesale price index (WPI) decreased to 3.58% y-o-y in December 2017, from 3.93% y-o-y in November. The cost of primary articles increased at a slower pace of 3.86% in December (from 5.28% in November), mainly due to a 4.72% rise in the cost of food (from 6.06% a month earlier), namely vegetables (56.46%, compared with 59.80% in November). Meantime, the cost of manufactured products rose by 2.61%, the same as in the prior month, while the cost of fuel and power rose 9.16% (after rising 8.82% the previous month).

#### Graph 3 - 18: India's inflation



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

India's **2018 budget** delayed fiscal consolidation to win rural voter support ahead of 2018-19 state and general elections. On 1 February, the country's Finance Minister, Mr. Arun Jaitley, announced the fifth budget of the Bharatiya Janata Party (BJP)-led government, the last full budget of the current administration before the general election (currently scheduled for 2019). India's fiscal deficit is projected at 3.3% of GDP for FY 2018, exceeding the 3% target of the government's medium-term fiscal consolidation plan. Additional spending will support domestic demand recovery, with real GDP growth projected to accelerate to 7.4% in FY 2018, from an estimated 6.5% in FY 2017, but this will probably be inflationary, requiring the central bank to switch to monetary policy tightening in mid-2018.

On **balance**, the boost to rural confidence, continued infrastructure investment, and easing financial stress in the banking sector as a result of a government-initiated recapitalisation of public banks should provide sufficient support to domestic demand recovery in FY 2018, particularly as additional policy shocks like demonetisation and the GST are not anticipated ahead of elections. Higher inflation and a potential correction in the stock market provide additional downside risks.

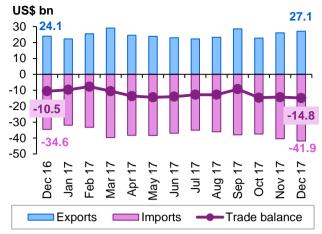
The Indian budget spurs **inflation** worries ahead of Reserve Bank of India (RBI) policy. India's federal budget could push up inflation and prompt the central bank to hike interest rates sooner, raising the probability of a scenario that could hurt the nascent economic recovery. India's full annual budget will be delivered before a general election to be held by May next year, and includes raised government spending for rural areas and support to farmers, while slowing the pace of fiscal consolidation. Inflationary pressures are up at a time when retail inflation was at a 17-month high. That would make the RBI more cautious when it announces a monetary policy review in mid-February 2018. The probability of rate hikes in the next fiscal year has gone up. A cautious stance by the RBI would increase the probability of interest rate increases in the coming fiscal year. That, in turn, could raise tensions between the government and the central bank, which has resisted the pressure to make deep rate cuts to boost growth, as it worried about increasing inflation. The Government of India's proposed budget will increase the minimum support price guarantee to farmers. In particular, is likely to have a direct inflationary impact. According to the latest CPI inflation figure for December (5.21%), it is above the central bank's 4% target. It could also put pressure on the fiscal deficit and hurt exports if domestic prices are higher than global prices for these crops. According to this fiscal push, if growth improves and revenues can pick up, then investments will pick up.

#### India's Fifth Budget highlighted the following subjects:

- There was a heavy focus on rural and social schemes, but actual spending allocations are modest and reduce the gap between rural and urban India
- Infrastructure spending and measures to promote "Made in India"
- Long-term capital-gains tax risks correction in equity markets

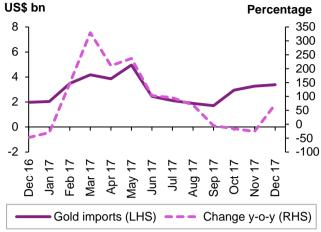
Moody's says India's budget 2018 will create a balance between "fiscal prudence and growth".

Graph 3 - 19: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

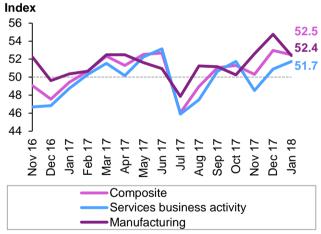
Graph 3 - 20: India's gold imports



Sources: Ministry of Commerce and Industry and Haver Analytics.

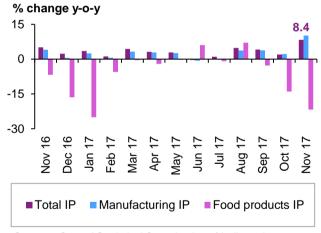
India's **trade** deficit widened to US\$14.88 billion in December 2017 from US\$10.55 billion a year earlier. Imports jumped by 21.1% y-o-y to US\$41.91 billion, the highest value since November 2014, as purchases rose for petroleum, crude and products (34.9%); electronic goods (19.2%); precious stones (94%); gold (71.5%); and machinery, as well as electrical and non-electrical goods(11.2%). Exports increased by 12.4% to US\$27 billion and imports to India jumped 21.1% y-o-y to US\$41.91 billion in December 2017, reaching their highest value since November 2014. India is heavily dependent on crude oil imports, with petroleum crude accounting for about 34% of total inward shipments. The country also imports gold and silver (12% of total imports), machinery (10%), electronic goods (7%) and pearls, precious and semi-precious stones (5%). India's main import partners are China (10.7% of total shipments), the United Arab Emirates (8%), Saudi Arabia (7%), Switzerland (7%) and the United States (5%).

Graph 3 - 21: India's PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 22: India's industrial productions



Sources: Central Statistical Organisation of India and Haver Analytics.

The **Nikkei Manufacturing PMI** in India fell to 52.4 in January 2018, from 54.7 the prior month, and far below the market consensus of 54.5. Following the strongest improvement in 60 months for December, growth momentum across India's manufacturing economy lost some impetus as output, new orders and employment rose at slower rates during January. Encouragingly, new export orders rose at the sharpest pace since September 2016. On the price front, input cost inflation remained marked and broadly similar to December's eight-month high. In spite of increasing cost pressures, firms were restricted in their ability to fully pass these on to clients due to intense competition. As a result, charges rose only marginally. The reading points to the weakest expansion in the manufacturing sector since October 2017, as both output and new orders expanded the least in three months, buying activity rose less and sentiment remained weak by historical standards. At the same time, employment increased at its softest pace since last October, while new export orders rose to their highest figure since September 2016.

### China

China's economy grew 6.9% in 2017, ending the year on a positive note as official figures topped the government target of around 6.5%. GDP growth in the 4Q17 stood at 6.8%, unchanged compared with the previous quarter. Rising contributions from net exports and government stimulus were the main contributors to a recovery in China's economic growth in 2017, while growth momentum is expected to slow during 1H18. The stabilisation of economic growth in the fourth quarter was largely driven by faster growth in the services sector, which accelerated from 8.0% in 3Q17 to 8.3% in 4Q17. Improvements in the services sector came with accelerations in leasing and business services, as well as real estate, while government-led transportation and finance sectors slowed owing to increasing scrutiny of local debt and monetary control. However, growth in the industry and construction sectors declined to a historical low of 5.7%, reflecting the impact of China's environmental protection policies. The services sector accounted for 51.6% of nominal GDP in 2017, contributing 58.8% to real GDP growth.

On the **demand side**, domestic consumption contributed 58.7% to GDP growth in 2017, down from 64.6% in 2016, the first decline since 2014. Meanwhile, gross fixed capital formation accounted for 32.1% of real growth, down from 42.2% in 2016. A decline in contributions from consumption and investment was due to an acceleration in exports, as net exports (exports-imports) contributed 9.1% to real growth compared with a 6.8% drag in 2016.

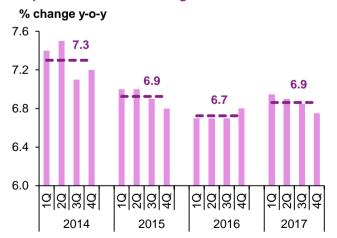
Slower contraction in the mining sector and faster growth in utilities were the main drivers of headline stabilisation. However, manufacturing output moderated, particularly in the computer, electrical machinery, and pharmaceutical sectors, likely reflecting slower growth of exports in December.

Acceleration in the manufacturing sector was the main contributor to the headline improvement, while real estate and infrastructure investment slowed. Manufacturing investment growth rose by 4.8% through December, compared with 4.1% in the first 11 months and in 2016, largely driven by a continuous rebound in industrial profit and a low baseline effect.

Volume growth in the housing market slowed from November. The y-t-d growth of completed residential floor space, ongoing construction, and starts all declined from November, largely owing to the tightening of borrowing rules for developers and mortgages.

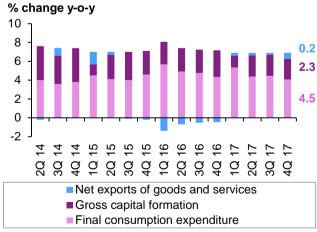
The Chinese economy is going through a phase of "creative destruction", as lively new economy sectors like e-commerce and online financial services coexist with still-dominant old economy sectors. The world's second-largest economy has been fighting debt for years as it tries to balance economic stability against the potential fallout from any sharp deceleration. Resilient external demand and robust domestic household consumption will bolster China's economy in 2018.

Graph 3 - 23: China's GDP growth



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

Graph 3 - 24: China's GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

China's **trade surplus** widened sharply to US\$54.69 billion in December 2017 from US\$40.50 billion in the same month a year earlier. It was the largest trade surplus since January 2016, as exports surged by 10.9% and imports grew by only 4.5%.

**Exports** rose by 10.9% y-o-y to a record value of US\$231.79 billion in December, after 12.3% growth was seen the previous month. The figure came above market estimates of a 9.1% gain due to sustained global demand. Exports of refined fuel hit a record high of 6.17 million tonnes, above the previous peak of 5.79 million tonnes registered in November.

**Imports** increased by 4.5% y-o-y to US\$177.10 billion in December, much slower than the 17.7% seen m-o-m and below market expectations of 13% growth. It was the weakest increase in inbound shipments since December 2016. Crude oil imports came in at 33.7 million tonnes in December, or 7.94 mb/d, down from November's 9.01 mb/d, which is the second-highest level on record. Purchases of liquefied natural gas hit a record of 7.89 million tonnes.

China's **CPI** inflation rose 1.8% y-o-y in December, after seeing a 1.7% rise in November and coming slightly below market consensus. The CPI slowdown movement was mainly due to a further decrease in the cost of food.

China's **producer price index** (PPI) increased by 4.9% y-o-y in December, compared with a 5.8% in November.

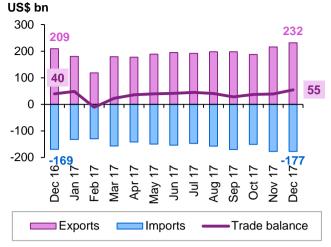
The Chinese government uses mergers as a way to revamp state-owned enterprises (SOEs) by decreasing overcapacity. By merging operating in similar business areas, the Chinese government hopes to allocate resources more efficiently. Furthermore, it wants to use SOE mergers to create global corporate giants to improve their international competitiveness. Therefore, it is likely that the consolidation of centrally owned SOEs will accelerate in the coming years. However, it is worth noting that there is a danger that SOE mergers could create unwieldy monopolies and reduce efficiency.

China's **foreign exchange reserves** rose to US\$3,140 billion in December, from US\$3,119 billion at the end of November and above market expectations of US\$3,130 billion. It was the highest value seen since September 2016.

Meanwhile, the value of **gold reserves** increased to US\$76.47 billion at the end of December from US\$75.83 billion at the end of November.

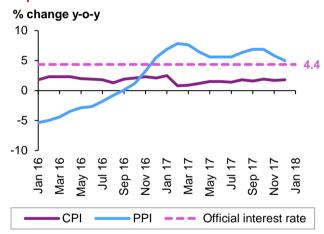
The official *National Bureau of Statistics (NBS)* **Manufacturing PMI** in China fell to 51.3 in January 2018 from 51.6 the previous month, remaining below market estimates of 51.5. It was the lowest reading since May 2017.

Graph 3 - 25: Chinese trade balance, NSA



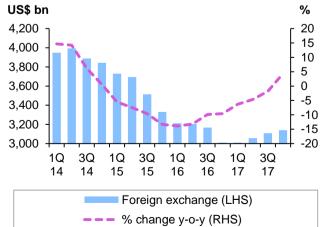
Sources: China Customs and Haver Analytics.

Graph 3 - 26: China's CPI and PPI



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

Graph 3 - 27: Chinese foreign reserves, NSA

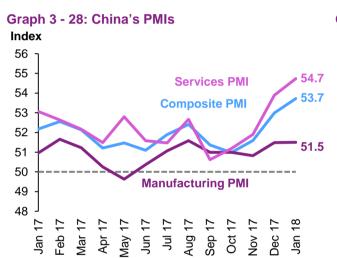


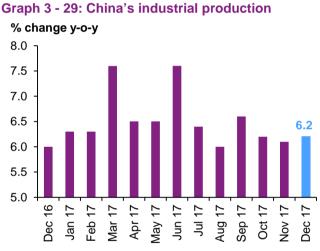
Sources: State Administration of Foreign Exchange and Haver Analytics.

In January, all manufacturing components declined m-o-m. Output decreased to 53.5 (from 54.0 the previous month), new orders reduced to 52.4 (from 53.4), while confidence hit its lowest point in eight months, falling to 56.8 (from 58.7). Additionally, buying activity rose from the prior month to 52.9 (from 53.6). Meanwhile, new export orders dropped markedly to 49.5 (from 51.9). Employment also declined for the 10th straight month to 48.3 (from 48.5). Raw materials in stock decreased to 48.8 (from 48.0) and orders in hand continued to decrease to 45.3 (from 46.3) amid a slight lengthening in suppliers' delivery time at 49.2 (from 49.3).

The **Caixin Manufacturing PMI** in China stood at 51.5 in January 2018, unchanged from the prior month's figure and matching market consensus. It remained the highest reading since August 2017, as new orders and new export orders continued to increase, while output rose its most in 13 months. In addition, firms increased their buying activity and confidence hit its highest level in four months. Upward pressure on prices of industrial products eased markedly as increases in both input costs and output prices slowed sharply. The manufacturing industry had a good start to 2018.

The official **non-manufacturing PMI** in China unexpectedly increased to 55.3 in January 2018 from 55.0 in the preceding month, beating market consensus of 55.0. It was the strongest expansion in services activity since September, as new orders (51.9 from 52.0 in December) and new export orders (50.1 from 51.5) continued to expand and business sentiment reached its highest point in four months (61.7 from 60.9). Meantime, employment fell slightly less than a month earlier (49.4 from 49.3). Also, orders in hand (44.4 from 43.8) declined at slower rate, while suppliers' delivery time was stable at 51.6.





Sources: China National Bureau of Statistics and Haver Analytics.

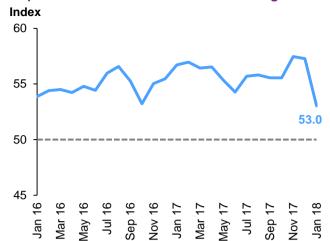
China's **GDP growth** remained unchanged at 6.5% for 2018. The country's growth momentum is most likely to slow during 1H18. The government will be comfortable with the pace of economic slowdown and will focus on rebalancing in the future.

### **OPEC Member Countries**

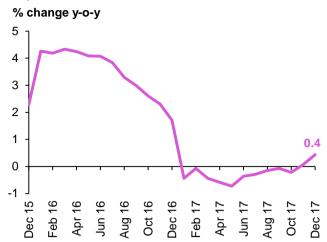
Sources: Caixin, IHS Markit and Haver Analytics.

In **Saudi Arabia**, budget spending is expected to increase by 5.6% y-o-y in 2018, whereas 2018's deficit is anticipated to fall to 7.3% of GDP, from around 8.9% in 2017. The non-oil and gas sector in Saudi Arabia grew by 1.0% y-o-y in 2017, faster than 2016's rise of 0.2%. Inflation increased for the second consecutive month in December by 0.4% y-o-y, from 0.1% in November, due to the higher prices of beverages, tobacco, water supply, and health. The non-oil private sector continued growing in January, albeit at a slower pace than in December. The Emirates NBD Saudi Arabia PMI for January registered 53.0, up from 57.3 in December, suggesting continued solid improvement in the business conditions of the non-oil private sector. The survey showed improvements in employment and business optimism, while business activity and new orders grew at a softer pace in January. A sustained improvement in employment over many months indicates continued capacity enhancement, which in turn reflects optimism that demand will rebound. In fact, business optimism came back to its highest point since May 2017. The survey also revealed an increase in average cost burdens in the non-oil private sector by their fastest pace since July 2014, which is largely connected to fuel subsidy cuts and VAT implementation in January.

Graph 3 - 30: Saudi Arabia's manufacturing PMIs



Graph 3 - 31: Saudi Arabia's inflation



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Sources: General Authority for Statistics and Haver Analytics.

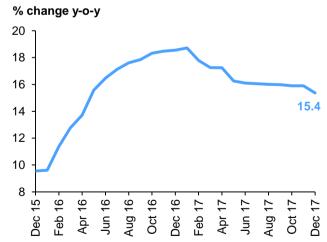
In **Nigeria**, inflation dropped in December to its lowest point since April 2016, posting 15.4% y-o-y from 15.9% in November. The slowdown was noted across the board for all consumer goods and services except for health, transport, and communication. Inflation in Nigeria reacted to two episodes of currency depreciation since 2014. The first was in December 2014 and March 2015 when the naira depreciated by nearly 17%. The second episode was during June-July 2016 when the naira depreciated by nearly 45%. In December 2016, inflation hit its highest point since October 2005 at 18.6% y-o-y. GDP posted a relatively strong rate of growth in 3Q17 at 1.4% y-o-y. This represents the fastest pace of growth since 4Q15. The economy of Nigeria came out of recession in 2Q17 following five quarters of recession. The economy registered 0.8% y-o-y growth in 2Q17, from a contraction of 1.0% y-o-y the previous quarter, according to the National Bureau of Statistics. The central bank kept its benchmark interest rate intact in January at 14%. The Stanbic IBTC Bank Nigeria PMI signalled strong improvement in private sector business conditions in January. The index went up to 57.3 from December's 56.8, which is the highest reading since December 2014. The survey revealed the second-highest expansion in output on record, which was driven by record acceleration in new orders. In 2017, the index averaged 54.2, compared with 48.4 in 2016.

Graph 3 - 32: Nigeria's manufacturing PMIs



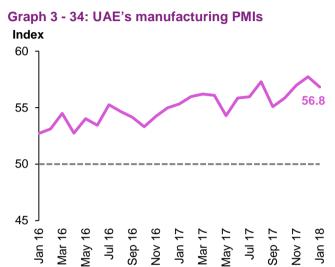
Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics.

**Graph 3 - 33: Nigeria's inflation** 



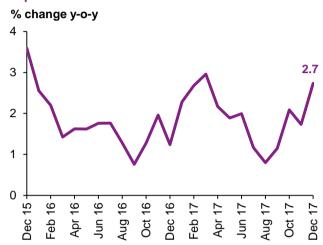
Sources: National Bureau of Statistics and Haver Analytics.

Inflation in the **United Arab Emirates** (UAE) increased in December to its highest point since March 2017 to 2.7% y-o-y, from 1.7% in November. For the whole of 2017, average of consumer price inflation stood at 2.0% over 2016. The price of housing, water, electricity and gas changed by -0.3% y-o-y in December, following November's 0.4%. The prices of textiles and clothing increased by 1.0% y-o-y in December, double the inflation rate posted in November. Meanwhile, food and soft drinks prices also experienced a double rate of growth in December compared with the previous month. Expansion in the country's non-oil private sector continued in January 2018, albeit slower than December's 34-month high, according to the Emirates NBD UAE PMI. The index rise registered 56.8 in January from 57.7 in December. Yet, it is still higher than the full series average of 54.6. The survey highlighted a faster rise in activity amid an acute increase in new orders, while input costs steeply increased due to a VAT introduction that led a firm to use inventories rather than purchasing, hence negatively affecting purchasing activity in January.



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 35: UAE's inflation



Sources: General Authority for Statistics and Haver Analytics.

### Other Asia

In **Indonesia**, GDP grew by 5.2% y-o-y in 4Q17, up from 5.1% in 3Q17. This brings full year growth to 5.1% y-o-y, which the highest annual growth since 2013. The main drivers of this faster growth in 4Q17 were higher GFCF, lower imports, and an increase in government consumption. In 4Q17, the GFCF posted its highest growth since 1Q13, at 7.3% y-o-y, up from 7.1% y-o-y in 3Q17. Import 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, notably 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 saw faster y-o-y growth in 4Q17 over 3Q17.

Indonesia's trade balance switched to deficit mode in December 2017. From a \$1.1 billion surplus in December 2016, the trade balance posted a \$0.3 billion deficit in December 2017. Exports increased by 6.9% y-o-y to \$14.8 billion in December, whereas imports jumped by 17.8% y-o-y to \$15.1 billion. Operating conditions in the country's manufacturing sector stabilized in January as suggested by Indonesia's Nikkei Manufacturing PMI. The index edged closer to the neutral 50.0 mark at 49.9 in January, up from December's 49.3 due to general a stabilization in production, whereas total new orders fell slightly.

### **Africa**

In **South Africa**, the trade surplus widened in December by nearly 28% y-o-y to reach 15.7 billion rand, highlighting the biggest trade surplus ever in available historical data since January 2010. Imports went up by 9.0% y-o-y and exports rose by 11.6% y-o-y in December. Inflation in South Africa rose by 4.5% y-o-y in for the month, slightly higher than November's 4.4%, as transport prices went up on the back of increased prices for fuel. The inflation rates for all other expenditure categories were slightly lower. GDP grew by 1.3% y-o-y in 3Q17, its strongest since 1Q15, thanks to faster growth in private consumption and GFCF.

In **Egypt**, the pound appreciated by 0.6% m-o-m vs the dollar in January 2018, after depreciating by 0.8% m-o-m in December. It lost nearly 95% of its value to the dollar from November 2016 through April 2017. Inflation slowed to 22.3% y-o-y in December after falling to below 30% y-o-y for the first time in November, posting 26.7% y-o-y, the lowest rate of inflation since November 2016. Inflation hit a record high of 33% y-o-y in July 2017 on the back of cuts for fuel and energy subsidies. After falling back into recession in December, Egypt's non-oil private sector stabilized in January, as suggested by the Emirates NBD Egypt PMI. The index rose to 49.9 in January, up from December's 48.3 on the back of acceleration in new export orders and output stabilization. However, the long streak of employment shrinking which started in June 2015 continued in January, albeit marginally slower.

### **Latin America**

In **Chile**, inflation of 2.3% y-o-y was recorded in 2017, the lowest in five years. The central bank kept its benchmark interest rate intact at the beginning of February 2018, citing a receding risk to the economy, together with a stronger peso and tamed inflation, which is expected to stay lower than previous estimates. The central bank also noted that activity indicators for 4Q17 were slightly better than expected. Consumer consumption sustained the observed improvement in the past months as sales of durable goods remained strong in 4Q17. On the other hand, consumption of non-durable goods was subdued, though it started to improve recently. At the end of 2017, mining and industrial exports showed notable increases in terms of volumes and values which is contrary to previous quarters.

## **Transition region**

The manufacturing sector in the **Czech Republic** signalled expansion in January through the IHS Markit Czech Republic Manufacturing PMI. The index registered 59.8 in January 2018, similar to the reading posted at the end of 2017. These represent the strongest readings of the index since January 2011, on the back of the highest rate of expansion in production since February 2011. This momentum has boosted business confidence to its highest level since the beginning of 2016. The survey highlighted the importance of new orders, especially demand from abroad. Growth in new orders in January was the second-highest since May 2014. Alongside the increase in new orders, employment in the manufacturing sector improved further in January.

## **World Oil Demand**

In 2017, world oil demand growth was revised higher by around 30 tb/d from the previous month's estimations. Global oil demand growth is pegged at 1.60 mb/d for 2017. The upward revisions are primarily a reflection of better-than-expected data from OECD Americas in 4Q17 and OECD Europe in 3Q17, supported by healthy petrochemical and transportation sectors. Total global oil demand in now pegged at 97.01 mb/d.

In 2018, world oil demand growth was revised up by around 60 tb/d to 1.59 mb/d compared with last month's assessment, leading to total global consumption of around 98.60 mb/d. The upward revision was mainly in line with improving economic outlook in OECD America, Europe and Other Asia.

## World oil demand in 2017-2018

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

							Change 20	17/16
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>Growth</u>	<u>%</u>
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	8.39	8.16	0.04	0.45
Total OECD	46.90	47.04	46.92	47.69	47.82	47.37	0.47	1.00
Other Asia	12.85	12.87	13.30	12.95	13.47	13.15	0.29	2.28
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	6.46	6.52	0.05	0.72
Middle East	7.97	8.11	7.91	8.42	7.79	8.06	0.09	1.07
Africa	4.10	4.25	4.19	4.14	4.26	4.21	0.11	2.76
Total DCs	31.39	31.49	31.90	32.33	31.98	31.93	0.54	1.71
FSU	4.63	4.56	4.39	4.77	5.09	4.70	0.07	1.52
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	12.61	12.30	0.50	4.20
Total "Other regions"	17.13	17.14	17.46	17.77	18.49	17.72	0.59	3.44
Total world	95.42	95.67	96.28	97.79	98.29	97.01	1.60	1.67
Previous estimate	95.42	95.67	96.28	97.77	98.20	96.99	1.57	1.64
Revision	0.00	0.00	0.00	0.02	0.09	0.03	0.03	0.03

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

							Change 2	018/17
	<u>2017</u>	<u>1Q18</u>	<u> 2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	<u>Growth</u>	<u>%</u>
Americas	24.98	24.81	25.24	25.36	25.41	25.21	0.23	0.91
of which US	20.23	20.09	20.54	20.53	20.58	20.44	0.21	1.02
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	8.40	8.15	0.00	-0.02
Total OECD	47.37	47.36	47.22	48.01	48.17	47.69	0.32	0.68
Other Asia	13.15	13.24	13.69	13.33	13.84	13.53	0.38	2.88
of which India	4.47	4.65	4.66	4.32	4.97	4.65	0.18	4.11
Latin America	6.52	6.37	6.60	6.92	6.56	6.61	0.10	1.46
Middle East	8.06	8.20	7.99	8.53	7.89	8.15	0.10	1.18
Africa	4.21	4.39	4.33	4.27	4.40	4.35	0.14	3.28
Total DCs	31.93	32.19	32.61	33.04	32.70	32.64	0.71	2.21
FSU	4.70	4.66	4.50	4.89	5.20	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	12.30	12.28	12.82	12.71	13.03	12.71	0.42	3.37
Total "Other regions"	17.72	17.68	18.01	18.33	19.05	18.27	0.56	3.13
Total world	97.01	97.23	97.85	99.38	99.92	98.60	1.59	1.64
Previous estimate	96.99	97.17	97.79	99.30	99.77	98.51	1.53	1.57
Revision	0.03	0.06	0.06	0.08	0.15	0.09	0.06	0.06

Note: \* 2018 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

### **OECD**

Based on the latest available data, oil demand growth in the **OECD regions** was revised higher by 18 tb/d in 2017. This is primarily a reflection of better-than-expected data in major consuming countries within the OECD during 3Q17 and 4Q17. Moreover, in 2018 oil demand growth in the OECD regions was revised higher by 33 tb/d.

In the US, better-than-expected demand for middle distillates and fuel oil permitted an upward revision for US oil demand growth of 70 tb/d in 4Q17, while 3Q17 data was adjusted lower by 50 tb/d in 3Q17 due to less transportation fuel and petrochemical feedstock demand during the hurricane season. For 2018, oil demand in OECD America was also revised upward (by 20 tb/d for 2018) due to a better economic outlook than in the previous month's report.

OECD Europe continued to perform above initial projections due to a number of factors, including better economic activity and growing vehicle sales. Thus, upward adjustments of 50 tb/d were carried out in 3Q17. For 2018, oil demand in OECD Europe was also revised upward by 13 tb/d amid a better economic outlook than in the previous month's report.

### **OECD Americas**

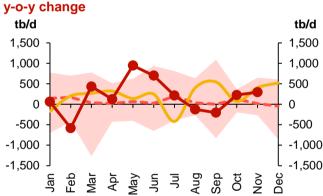
#### US

The latest available November data for the **US** implies a robust increase in oil requirements of around 0.63 mb/d, or 3.2%, y-o-y. This monthly gain is supported by healthy economic growth and colder weather in the same month, while higher prices for gasoline m-o-m and y-o-y weakened gasoline demand performance. Gains were essentially determined by increasing LPG, jet/kerosene, gas/diesel oil and residual fuel oil demand and were partly offset by losses in gasoline. As such, oil demand has been supported by a rebounding petrochemical sector, as more and more capacities are ramping up operations after completely or partially shutting down during the hurricane season at the end of 3Q17. LPG demand consequently increased by 0.31 mb/d, or around 12%, y-o-y.

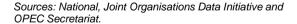
Gasoline demand dropped by 0.1 mb/d, or 1.1%, as car sales in November declined by 1.0% y-o-y. However, miles driven increased y-o-y, adding 1.1% in the same month, though remaining far below levels recorded during November 2016, when a rise of close to 4% y-o-y was recorded.

With monthly data available for 11 months of 2017, US oil demand seems to be growing solidly by around 0.2 mb/d y-o-y, with jet/kerosene, LPG and gas/diesel oil, in particular for the industrial and aviation sectors, showing the largest bulk of growth.

Preliminary weekly data for December 2017 and January 2018 appears to extend the existing overall positive picture. However, there are diverse developments in relation to the main petroleum product categories. Gasoline's performance is positive, while cold weather supports residual fuel oil and gas/diesel oil usage. Furthermore, in line with a number of holidays during the months of December and January, jet/kerosene remained bullish, y-o-y.

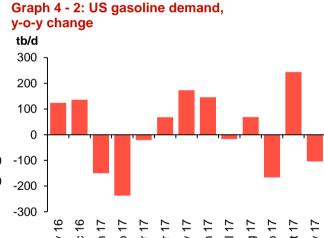


Graph 4 - 1: OECD Americas oil demand,



Historical range

2016



Source: US Energy Information Administration.

The outlook for **2018**, US oil demand is positive, though dependent on developments in the US economy and the oil price, which may impact road transportation as well as the industrial sectors, particularly the upstream oil industry. The risks for 2018 oil demand are slightly skewed towards the upside, compared with last month's projections.

Historical average

2017

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

			Change 2017/2016			
	<u>Nov 17</u>	<u>Nov 16</u>	tb/d	<u>%</u>		
LPG	2,833	2,520	313	12.4		
Naphtha	229	226	3	1.3		
Gasoline	9,141	9,245	-104	-1.1		
Jet/kerosene	1,726	1,634	92	5.6		
Diesel oil	4,165	3,938	227	5.8		
Fuel oil	433	305	128	42.0		
Other products	2,042	2,068	-25	-1.2		
Total	20,569	19,936	634	3.2		

Sources: US Energy Information Administration and OPEC Secretariat.

#### Mexico

In **Mexico**, December demand decreased strongly for another month. Gains in demand for gasoline, jet/kerosene and diesel have been more than offset by shrinking demand for LPG, mainly as a result of substitution with other energy commodities. Complete monthly data for 2017 shows Mexican oil demand to be bearish compared with 2016 – although jet/kerosene and residual fuel oil usage implied gains, these have been more than offset by shrinking demand in all other petroleum product categories, notably LPG, naphtha, gasoline and gas/diesel oil.

Mexican oil demand is expected to remain flat in 2018, with risks skewed to the downside, compared with last month's projections, and as a result of the country's economy and the degree of fuel substitution with other energy commodities.

### Canada

The latest November data for **Canada** shows slightly declining oil demand compared with the same month in 2016. Despite demand for the majority of main petroleum products growing y-o-y, this was more than offset by strong losses for LPG.

The 2018 projections for Canadian oil demand are unchanged from those in the previous month's report and foresee slight growth y-o-y, with the risk balanced between the upside and downside.

In 2017, **OECD Americas' oil demand** grew by 0.24 mb/d compared with 2016. In 2018, OECD Americas oil demand is projected to gain an additional 0.23 mb/d compared with 2017.

## **OECD Europe**

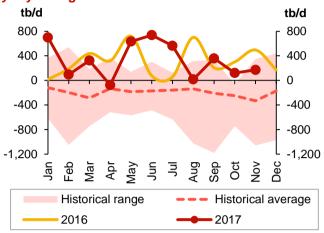
**Oil demand in OECD Europe** surged for yet another year, with available data for 11 months indicating a healthy gain of 0.18 mb/d. Since 2015, oil demand in Europe has increased by a solid 0.68 mb/d. This very significant cumulative growth comes after a period of consecutive yearly declines since 2007, wiping out an accumulated total of 2.36 mb/d during this period. November 2017 oil demand data points toward strong gains, pegged at 0.17 mb/d.

Oil demand continued to grow in a number of countries such as France, Italy, Belgium and Poland, particularly in the road transportation sector and specifically for automotive diesel. Overall economic momentum continued to provide support, with industrial activities increasing in November by 3.44% compared with the same period in 2016, boosting demand for middle distillates. Diesel oil demand picked up pace during the month, adding 0.12 mb/d or around 1.9% y-o-y. Automotive diesel was a firm supporter of diesel demand, as the rise in vehicle sales continued in November by 5.9% y-o-y after similar gains were made during the month of October. Total new passenger car registrations in 2017 reached 15.12 million units, a 3.22% increase y-o-y.

Higher petrochemical margins compared with the same period in 2016 incentivized European steam crackers to operate at maximum capacity. Moreover, prices for co-products from naphtha crackers were bullish; as demand for naphtha grew substantially in November, up by as much as 0.15 mb/d, or 12.6%,

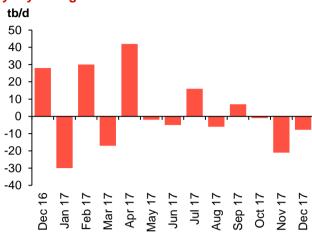
y-o-y, with the bulk of this growth originating from the Netherlands, which saw a rise of 92 tb/d. On the other hand, LPG demand declined by 0.12 mb/d, or 10.0%, y-o-y, amid declining margins compared with naphtha, forcing European crackers to switch their feedstock intake to naphtha.

**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.

The outlook for the region's oil demand in 2018, however, is not expected to be as strong as in 2017, with risks — predominantly related to the structure of oil demand in the region and the high statistical base line of comparison — continuing to point toward the downside.

**OECD Europe's oil demand** for 2017 grew surprisingly by 0.20 mb/d compared with 2016, while 2018 oil demand is projected to grow only slightly, by around 0.10 mb/d.

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

			Change 20	17/2016
	<u>Dec 17</u>	<u>Dec 16</u>	<u>tb/d</u>	<u>%</u>
LPG	499	500	-1	-0.3
Naphtha	662	667	-5	-0.7
Gasoline	1,085	1,063	22	2.1
Jet/kerosene	756	728	28	3.8
Diesel oil	3,322	3,324	-2	-0.1
Fuel oil	246	244	2	0.9
Other products	551	598	-47	-7.9
Total	7,121	7,124	-3	0.0

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

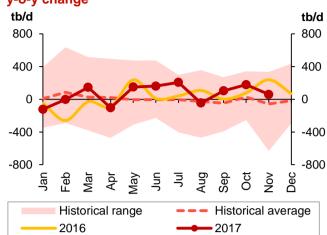
Sources: JODI, UK Department of Energy and Climate Change, Unione Petrolifera and OPEC Secretariat.

### **OECD Asia Pacific**

### **Japan**

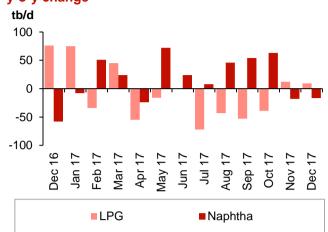
According to preliminary data from the *Japanese Ministry of Economy Trade*, and *Industry (METI)*, **Japanese oil demand** decreased by 0.03 mb/d, or 0.6%, y-o-y in December. This monthly decrease was the result of falling demand in all main petroleum product categories, with the exception of middle distillate products. Declines were particularly visible for naphtha, gasoline, residual fuel oil, as well as the direct burning of crude and residual fuel oil for electricity generation. Some of these losses have been, however, partly offset by strong demand for jet kerosene and LPG.

# **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.

Monthly data for the whole of 2017 shows an approximate drop of 1.5% in Japanese oil demand for the year, with requirements for the majority of main petroleum categories shrinking — the only exceptions being jet kerosene and naphtha. Based largely on projections for the country's overall economy, Japanese oil demand is estimated to decline once again in the current year and risk expectations are skewed to the downside.

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

			Change 2017/2016	6
	<u>Dec 17</u>	<u>Dec 16</u>	<u>tb/d</u>	<u>%</u>
LPG	528	519	9	1.8
Naphtha	820	837	-17	-2.0
Gasoline	908	914	-6	-0.7
Jet/kerosene	829	776	53	6.8
Diesel oil	891	881	10	1.1
Fuel oil	311	339	-28	-8.2
Other products	378	427	-49	-11.5
Total	4,665	4,693	-28	-0.6

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

### **South Korea**

In **South Korea**, the latest available November data shows moderate oil demand growth, up by 25 tb/d, or around 1.0%, y-o-y. This is considered to be the lowest growth level in 2017, mainly dragged down by sluggish demand for fuel oil and LPG for the power generation and petrochemical sectors. On the other hand, almost all main petroleum product category requirements rose, particularly naphtha, jet kerosene and gas/diesel oil. The outlook for South Korean oil demand during 2018 remained positive, mainly as a result of expectations for healthy developments in the country's economy. Available data up to November showed another month of exceptionally solid oil demand growth.

**Australian** year-to-date oil demand is strongly increasing by 0.07 mb/d, or 7.5%, with the bulk of gains seen for diesel used in industrial activities.

**OECD Asia Pacific oil demand** for 2017 grew slightly by 0.04 mb/d, contrary to a contract in the initial forecasts, rising for the third year in a row. The region's oil demand is projected to remain flat in 2018.

### Non-OECD

Based on the latest available data, oil demand growth in the **non-OECD regions** was revised marginally upward during **2017**, despite some negative downward revisions in the Middle East during 4Q17. Additionally, oil demand growth projections for 2018 were adjusted higher by 27 tb/d mainly due to improved assumptions in the Other Asia region and Latin America.

In **2018**, Other Asia oil demand projections have been revised upwards by 10 tb/d as outlooks and assumptions for countries such as Thailand, Malaysia, Indonesia and others have improved compared with last month's projections.

In the Middle East, oil demand growth was revised marginally lower in 2017. Demand was up by 20 tb/d in 3Q17 and down by 30 tb/d in 4Q17, mainly reflecting better-than-expected data in various countries of the region during 3Q17 (Kuwait, IR Iran, Saudi Arabia and the UAE). However, the high level of substitution in Saudi Arabia and Iraq and slower-than-expected economic development in the region has reduced oil demand in 4Q17.

In 2018, Latin America's oil demand projections have been adjusted upwards by 10 tb/d as major assumptions in transportation and construction sectors have improved compared with last month's forecast.

In China, an upward revision of 50 tb/d in 4Q17 is accounted for with better-than-expected demand by the petrochemical and transportation sectors in the country.

### China

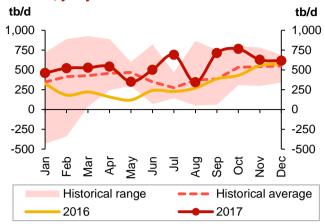
Chinese oil demand continued to grow solidly, recording an increase above 0.6 mb/d in December, or 5%, y-o-y. Total consumption reached approximately 11.86 mb/d. Oil demand growth was mostly determined by ongoing increases in LPG usage in the petrochemical industry, jet/kerosene and gasoline consumption in the transportation sector and fuel oil in the industrial sector. LPG demand growth continued its anticipated gains, recording an increase of close to 92 tb/d y-o-y and bringing total consumption to approximately 1.87 mb/d, mainly as a result of the startup of operations in a number of propane dehydrogenation plants (PDH), in addition to extra support from the residential sector.

Jet/kerosene demand rose by around 30 tb/d, or 5.5% y-o-y, with total demand at approximately 0.57 mb/d. This development can be related to a recent uptick in travel activities during end-of-the-year holidays. Gasoline requirements were higher in comparison with December 2016, rising by 0.17 tb/d y-o-y, according to statistics and analysis from the Chinese Association of Automobile Manufacturers (CAAM). However, in December, sales of passenger cars reached 2.1 million units; slightly lower by 1.4% from December 2016. As for the passenger cars by type, SUVs continued to experience solid growth compared with the same period last year, with sales increasing by more than 13.3%, y-o-y. However, MPV purchases declined by 17.1% compared with the same period in 2016. Diesel oil demand was higher y-o-y by around 0.20 mb/d, equating to 5.7% y-o-y, as coal production peaked in the country due to a government easing of restrictions.

Going forward in **2018** – as economic development in China is assumed to be at slightly lower levels than in 2017 – oil demand growth is expected to record marginally lower levels than in 2017. The continuation of fuel quality programmes targeting fewer emissions, as well as ongoing fuel substitution with natural gas and coal, are assumed in projections for 2018. In terms of products, gasoline and LPG are assumed to lead growth in 2018 to fulfil the demand arising from ever-growing vehicle sales and ongoing improvements in the petrochemical sector.

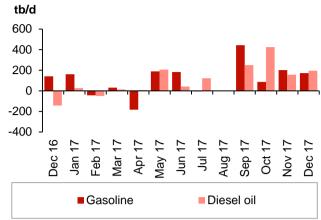
For 2017 Chinese oil demand grew by 0.50 mb/d, while oil demand in 2018 is projected to increase by 0.42 mb/d.

# 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.

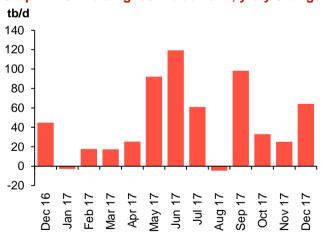
### India

In **India**, oil demand for December grew strongly, increasing by around 0.29 mb/d, or 6.1% y-o-y. However, 2017 ended with a rise of only 73 tb/d y-o-y, far lower than growth levels registered in 2016 of 0.34 mb/d y-o-y.

Looking at the product mix, gasoline, diesel oil, "other products" and LPG increased, while jet/kerosene and naphtha declined. Gasoline demand rose by 64 tb/d in December, recording the highest level of growth in 4Q17. Overall passenger vehicle sales were firm during the month, up by 5.2% according to the Society of Indian Automobile Manufacturers (SIAM). Moreover, two-wheeler sales have skyrocketed, rising by 41.5% y-o-y, mainly attributed to a low baseline of comparison, as sales declined during December 2016 due to the demonetization policy creating a liquidity crunch.

Data from April to December 2017 indicates twowheeler sales at 11.8%, while gasoline demand growth is pegged at 57 tb/d during the same period. Diesel oil demand surged by 0.14 mb/d following a similar level of growth in November, while total diesel oil consumption stood at 1.81 mb/d in December. Upticks in infrastructure spending by the Indian government, especially in road construction, as well as increases in the sale of diesel oil-driven vehicles, contributed to this solid gain. Indian LPG, which increased by 45 tb/d, or around 6.0% compared with the same period in 2016, saw total consumption at around 0.8 mb/d, supported by a consumption uptick in the residential sector. On the other hand, fuel oil demand growth was in negative territory as a result of lower-than-anticipated consumption in cement production due to a ban set by the Supreme Court.

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



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

Going forward, projections in **2018** for Indian oil demand are bullish, supported by various factors, including steady economic conditions, as well as a low baseline, as 2017 oil demand data remained modest compared with the past three years. As such, gasoil demand is anticipated to rise strongly, encouraged by the construction sector and healthy commercial vehicle sales.

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

			Change 2017/201	6
	<u>Dec 17</u>	<u>Dec 16</u>	<u>tb/d</u>	<u>%</u>
LPG	799	753	45	6.0
Naphtha	288	291	-4	-1.3
Gasoline	687	623	64	10.3
Jet/kerosene	245	255	-10	-3.8
Diesel oil	1,811	1,667	143	8.6
Fuel oil	267	298	-30	-10.2
Other products	937	858	78	9.1
Total	5,033	4,746	287	6.1

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

### Other Asia

#### Indonesia

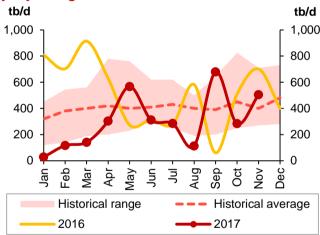
In **Indonesia**, the latest November data shows an increase of more than 3.9% y-o-y, with all products rising at different magnitudes. Significant increases were seen in petrochemical feedstocks, with LPG and naphtha rising by more than 11% and 3%, respectively.

#### **Thailand**

**Thailand's** latest available data for the month of November indicates oil requirements increasing by 77 tb/d, or 5.8%, y-o-y. The bulk of the increases are for light distillate and middle distillate fuels, namely, naphtha/LPG and jet/diesel oil, highlighting improvements in the industrial and transportation sectors.

Looking forward, the outlook remains as described in the last month's MOMR, with assumptions including healthy economic growth coupled with steady developments in the transportation and petrochemical sectors. Indonesia, Thailand, Singapore and the Philippines are projected to contribute positively to oil demand growth in 2018. Light distillates — including LPG, naphtha and gasoline — will be the products leading oil demand next year.

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



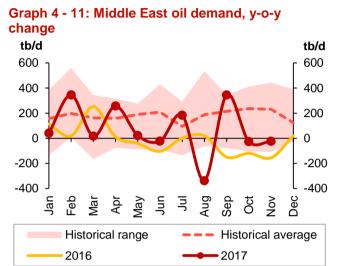
Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

Other Asia's oil demand grew by 0.29 mb/d in 2017. As for 2018, oil demand is forecast at 0.38 mb/d.

### Middle East

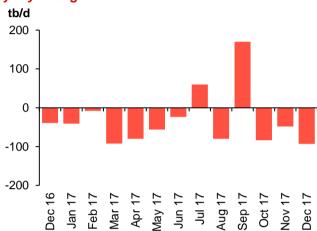
### Saudi Arabia

Oil demand in **Saudi Arabia** grew during the month of December for the first time in 4Q17 and for the fifth time in 2017, supported by historical increases in gasoline. Oil requirements inched up by around 84 tb/d or 3.8% y-o-y, with total oil consumption at 2.29 mb/d.



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.

Gasoline demand growth led products during the month of December, rising by a huge 0.15 mb/d, or 25.4% y-o-y, overshadowing declines in diesel oil and direct crude burning. The rise in gasoline demand growth can be attributed to a one-time high pre-purchase of the fuel, as the government approved a new round of energy price increases together with targeted subsidies for low- and middle-income citizens to offset the impact of the changes.

Saudi Arabia announced increases in local gasoline prices of 127% and a threefold rise in electricity tariffs, in addition to activating a 5% value-added tax (VAT) as it attempts to rationalize consumption and gradually bring prices to market levels. Moreover, jet/kerosene demand also increased by 24 tb/d, or 23.8% y-o-y, supported by healthy data in the aviation sector. Crude oil for the purposes of burning declined by around 0.1 mb/d to total 0.26 mb/d, somewhat offset by fuel oil, which inched up by 11 tb/d to total 0.52 mb/d. Diesel oil demand declined by around 11.1% y-o-y as a result of less-than-anticipated demand from the transportation and industrial sectors. It is worth highlighting that retail prices for diesel in the transportation sector in Saudi Araba are still subsidized.

### Other Countries in the Middle East

Oil demand performance was rather mixed in the region as growth in oil requirements declined in **Iraq** due to high levels of substitution in the power generation sector, while oil demand increased in **IR Iran** and the **UAE**.

Going forward, Middle East oil demand is subject to the performance of various economies in the region, with the impact of oil prices on government spending plans needing to be closely monitored. Moreover, subsidy reduction influences on consumer behaviour and oil product substitution with natural gas and other commodities are important factors to track going forward.

For 2017, **Middle East oil demand** growth was up by 86 tb/d, while in 2018 oil demand is projected to grow by around 95 tb/d.

### **Latin America**

#### **Brazil**

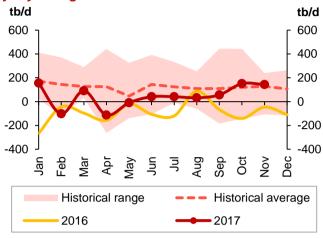
Latest data suggests that **Brazilian** oil demand declined in December for only the third time in 2017, shedding around 23 tb/d or around 0.9% y-o-y as weakening demand for fuel oil and gasoline dragged overall demand growth lower. Fuel oil consumption decreased for the first time after five consecutive months of y-o-y increases. The product fell by 19 tb/d or 20.1% y-o-y in response to improvements in hydro power generation reducing fuel oil demand the sector. Gasoline demand also retreated for the fourth consecutive month, dropping by 75 tb/d, or 8.7%, y-o-y.

As highlighted in the previous assessment, retail prices for gasoline are now less competitive compared with ethanol, encouraging more consumption of ethanol. Gasoline retail prices hovered at around 4.06 reais per litre in December compared with 2.88 reais per litre for ethanol. Ethanol consumption consequently rose by around 72 tb/d or 30.9%, y-o-y.

Diesel oil grew in December, albeit at a lower magnitude compared with the previous month. The product rose by a mere 10 tb/d or 1.1% y-o-y, in line with healthy manufacturing activities, with industrial production recording a 5.10% increase y-o-y as reported by the *Instituto Brasileiro de Geografia* e *Estatistica*.

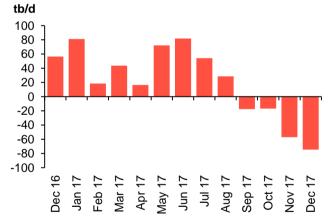
Overall 2017 oil demand growth in Brazil rebounded from the declines experienced in 2016, with an increase of 28 tb/d, or 1.1%, y-o-y. Most products recorded decent gains, apart from fuel oil and jet/kerosene, which declined marginally. An overall uptick in economic activity, in addition to the retail price advantage of gasoline vs. ethanol in the first eight months of 2017 and the low base line of comparison, have prompted a return of growth in oil demand.

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.

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

			Change 20	17/2016
	<u>Dec 17</u>	<u>Dec 16</u>	<u>tb/d</u>	<u>%</u>
LPG	223	232	-9	-3.9
Naphtha	145	143	2	1.4
Gasoline	783	858	-75	-8.7
Jet/kerosene	113	117	-4	-3.3
Diesel oil	863	853	10	1.1
Fuel oil	77	96	-19	-20.1
Other products	372	300	72	23.9
Total	2,575	2,598	-23	-0.9

Note: \* = Inland deliveries.

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

### **Argentina**

In **Argentina**, oil demand increased in November by 1.2% y-o-y. All main petroleum product categories increased, with the exception of fuel oil, which declined by 6.3% y-o-y.

#### Venezuela

In **Venezuela**, oil demand weakened in November, down by 2.5% y-o-y as naphtha, gasoline and diesel oil recorded declines.

#### **Ecuador**

In **Ecuador**, November exhibited solid oil demand data with gains of around 11.7% y-o-y. LPG, naphtha, gasoline, jet/kerosene and fuel oil requirements were on the rise, while diesel oil and other product categories declined.

In **2018**, projections for oil demand growth in **Latin America** were similar to last month's projections, accounting for a general improvement in the overall regional economy. Brazil is projected to be the main contributor to growth, with transportation fuels leading. In terms of products, diesel oil and gasoline have higher growth potential and are expected to fuel the industrial and transportation sectors.

**Latin America oil demand** growth increased by 47 tb/d during 2017, while the 2018 outlook shows oil demand growth of 95 tb/d.

# **World Oil Supply**

World oil supply in January 2018 increased by 0.35 mb/d m-o-m, to average 97.67 mb/d, representing an increase of 1.75 mb/d y-o-y. Preliminary non-OPEC oil supply in January, including OPEC NGLs, was up by 0.36 mb/d m-o-m and rose by 1.63 mb/d y-o-y to average 65.36 mb/d.

For 2017, non-OPEC supply was revised up by 0.07 mb/d from last month's MOMR, mainly due to the upward revision in OECD by 69 tb/d to average 57.86 mb/d, representing growth of 0.86 mb/d y-o-y.

For 2018, following a new forecast for higher production in the US, Mexico, UK, Brazil, China and minor downward revisions in Norway, Malaysia and Congo, non-OPEC supply was revised up by 0.32 mb/d, representing y-o-y growth of 1.40 mb/d, with total supply at 59.26 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.

In January 2018, OPEC crude oil production decreased by 8 tb/d, according to secondary sources, to average 32.30 mb/d.

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

		Change		Change
Region	<u>2017</u>	2017/16	<u>2018</u>	<u>2018/17</u>
OECD Americas	21.39	0.78	22.82	1.43
OECD Europe	3.79	-0.01	3.82	0.02
OECD Asia Pacific	0.40	-0.03	0.42	0.02
Total OECD	25.58	0.74	27.06	1.48
Other Asia	3.62	-0.09	3.58	-0.04
Latin America	5.19	0.09	5.33	0.14
Middle East	1.24	-0.04	1.25	0.01
Africa	1.86	0.06	1.90	0.04
Total DCs	11.90	0.02	12.05	0.15
FSU	14.06	0.20	13.92	-0.14
Other Europe	0.12	-0.01	0.13	0.00
China	3.99	-0.11	3.87	-0.12
Non-OPEC production	55.65	0.85	57.02	1.37
Processing gains	2.21	0.01	2.23	0.03
Non-OPEC supply	57.86	0.86	59.26	1.40

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

Source: OPEC Secretariat.

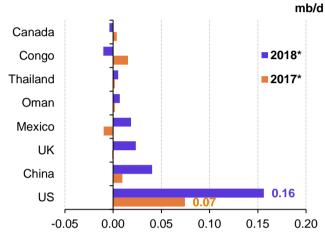
# Monthly revisions on non-OPEC supply growth forecast

Preliminary non-OPEC oil supply in **January 2018** saw growth of 0.33 mb/d m-o-m to average 58.88 mb/d, while oil supply in OECD Americas was up by 0.12 mb/d to average 22.40 mb/d, followed by OECD Europe (+ 0.18 mb/d), Latin America (+0.05 mb/d) and the Middle East (+0.03 mb/d). The **non-OPEC oil supply estimate for 4Q17** was revised up by 219 tb/d on updated data, mainly from the US owing to higher-than-expected production in November by 295 tb/d, to reach a new record of 58.63 mb/d on a quarterly basis, up by 1.15 mb/d q-o-q and an increase of 1.06 mb/d compared with 4Q16. Moreover, **historical non-OPEC oil supply data** in 1Q17, 2Q17 and 3Q17 was revised down by 30 tb/d, 9 tb/d and 17 tb/d, respectively, due to revisions in production data of Vietnam, Congo, and China.

As a result, non-OPEC oil supply in 2017 was revised up by 0.07 mb/d to average 57.86 mb/d, to now show growth of 0.86 mb/d y-o-y. The non-OPEC oil supply forecast for 2018 was also revised up in absolute terms by 0.32 mb/d to average 59.26 mb/d, with oil supply growth for the year also revised up by 0.25 mb/d to 1.40 mb/d. Major revisions on a country basis in the month of February were seen in OECD Americas — the absolute supply estimation for the US was revised up for 2017 by 74 tb/d, which was carried over into 2018, while Mexico's production forecast was revised down by 10 tb/d.

For 2018, the US total liquids supply forecast was revised up by 0.16 mb/d, to show annual growth of 1.30 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 0.04 mb/d. Mexico's liquids supply growth forecast was also revised up by 0.02 mb/d, due to a lower expected annual decline rate, to now see a contraction of 0.12 mb/d (*Graph 5 - 1*).

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



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

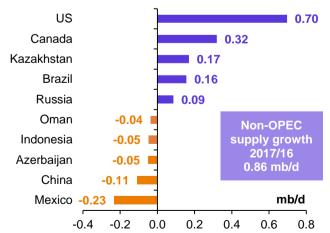
Source: OPEC Secretariat.

# Non-OPEC oil supply highlights in 2017

Estimated non-OPEC oil supply in **4Q17** shows an increase of 1.15 mb/d q-o-q, mainly from the US, Canada, Norway, UK, Other OECD Europe, Brunei, Malaysia, Thailand, Colombia, Latin America others, Ghana, Sudans, Africa others, Russia, Kazakhstan, Azerbaijan, and China to reach a record high of 58.63 mb/d. On the other hand, oil production in countries such as Mexico, Denmark, Australia, India, Indonesia, Brazil, Bahrain, and Egypt, declined compared with 3Q17.

Estimated non-OPEC supply for 2017, considering the revisions to all quarters, has been revised upward by 69 tb/d since last month's assessment to average 57.86 mb/d, to show growth of 0.86 mb/d, y-o-y (*Table 5 - 2*). While estimated oil supply growth in the US, Canada, Norway, Malaysia, Congo and China improved, expected growth in Brazil, Bahrain and Kazakhstan has been adjusted lower.

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



Note: \* 2017 = Estimate. Source: OPEC Secretariat. The US remains the key driver of non-OPEC supply growth, adding 0.70 mb/d to non-OPEC production in 2017, supported by Canada with 0.32 mb/d, Brazil with 0.16 mb/d, Kazakhstan with 0.17 mb/d, Russia with 0.09 mb/d, Ghana with 0.07 mb/d and Congo with 0.06 mb/d.

In contrast, oil supply in 2017 is mainly expected to contract in Mexico by 0.23 mb/d, China by 0.11 mb/d, Azerbaijan by 0.05 mb/d, Indonesia by 0.05 mb/d, Oman by 0.04 mb/d, and in Egypt, Colombia, Argentina, Vietnam and Australia by 0.03 mb/d each (*Graph 5 - 2*).

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.

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

							Change 2	2017/16
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>Growth</u>	<u>%</u>
Americas	20.61	21.08	20.91	21.34	22.23	21.39	0.78	3.80
of which US	13.63	13.79	14.08	14.28	15.16	14.33	0.70	5.11
Europe	3.81	3.94	3.80	3.68	3.76	3.79	-0.01	-0.35
Asia Pacific	0.42	0.39	0.39	0.41	0.40	0.40	-0.03	-6.59
Total OECD	24.84	25.41	25.10	25.43	26.38	25.58	0.74	2.99
Other Asia	3.71	3.67	3.61	3.58	3.62	3.62	-0.09	-2.47
Latin America	5.10	5.19	5.20	5.19	5.19	5.19	0.09	1.79
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	1.86	1.89	1.86	0.06	3.61
Total DCs	11.88	11.94	11.89	11.88	11.91	11.90	0.02	0.18
FSU	13.86	14.13	14.14	13.90	14.05	14.06	0.20	1.41
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
Total "Other regions"	18.09	18.27	18.29	17.97	18.13	18.17	80.0	0.45
Total non-OPEC								
production	54.81	55.62	55.28	55.28	56.43	55.65	0.85	1.54
Processing gains	2.19	2.21	2.21	2.21	2.21	2.21	0.01	0.50
Total non-OPEC supply	57.00	57.83	57.49	57.48	58.63	57.86	0.86	1.50
Previous estimate	57.02	57.80	57.48	57.46	58.41	57.79	0.77	1.35
Revision	-0.02	0.03	0.01	0.02	0.22	0.07	0.09	0.15

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

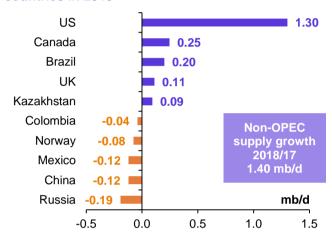
# Non-OPEC oil supply highlights in 2018

**Non-OPEC** supply in **2018** is forecast to increase by 1.40 mb/d compared with growth of 0.86 mb/d in 2017. Non-OPEC supply for the year was revised up by 321 tb/d in absolute terms, compared with last month's assessment, to average 59.26 mb/d, and is now expected to grow at a faster pace, leading also to an upward revision in y-o-y growth by 0.25 mb/d to average 1.40 mb/d, compared to the previous *MOMR*.

The key drivers for growth in 2018 are the US (1.30 mb/d), Canada (0.25 mb/d), Brazil (0.20 mb/d), UK (0.11 mb/d), Kazakhstan (0.09 mb/d) and Ghana (0.05 mb/d), while production is forecast to decline in Russia (0.19 mb/d), China (0.12 mb/d), Mexico (0.12 mb/d), Norway (0.08 mb/d) and Colombia (0.04) as seen in *Graph 5-3*.

This is mainly due to an updated assessment on both components of the US production forecast – tight crude and NGLs. In September 2017 US production showed m-o-m growth of 0.21 mb/d, which continued in October at 0.49 mb/d m-o-m, despite a temporary disruptions due to the hurricanes and flooding in Texas. In November, production again saw a robust increase by 0.53 mb/d m-o-m, with not only crude production surpassing the 10 mb/d level – the all-time production peak reached in the 1970s – but also NGLs output showing a new record of 4.05 mb/d. As a result, US total liquids supply reached a new all-time record of 15.42 mb/d.

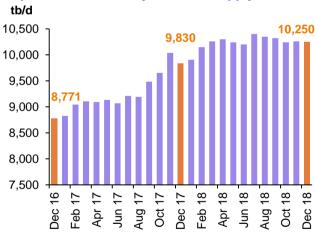
Graph 5 - 3: Annual supply changes for selected countries in 2018\*



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

According to the most recent assessment, the steady oil price recovery since summer 2017 and renewed interest in growth opportunities has led to oil majors catching up in terms of exploration activity this year, both in the shale industry and offshore deep water. US crude output growth is forecast to taper off and even stagnate in 2H18 as seen in *Graph 5 - 4*. Nevertheless, compared with the last month's assessment, US oil supply growth was revised up by 0.15 mb/d to average 1.30 mb/d.

Graph 5 - 4: US monthly crude oil supply



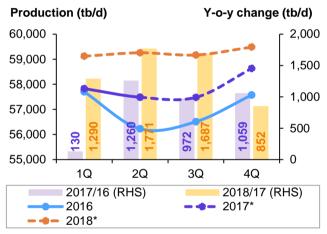
Note: 2018 = Forecast. Source: OPEC Secretariat.

The expected growth in UK oil production was also added by 0.02 mb/d to now average growth of 0.11 mb/d. The 2018 supply forecasts for Mexico and China are seen to contract less, as production is projected to pick up somewhat from a year earlier. Minor upward and downward revisions were also applied to the supply forecasts of Norway, Malaysia, Thailand, Brazil, Bahrain, Oman, Congo and Kazakhstan.

Graph 5 - 5 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 the regular seasonal pattern, however 3Q17 shows a dip on the back of the experienced hurricanes in GoM and unexpected offshore heavy maintenance in 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, leading to a higher quarterly distribution throughout the year.

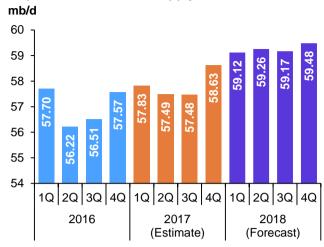
Non-OPEC supply in 1H18 is forecast to average 59.19 mb/d, higher by 1.13 mb/d than 2H17 and higher by 1.53 mb/d over 1H17, while 2H18 is forecast higher by 0.14 mb/d than 1H18, averaging 59.33 mb/d.

**Graph 5 - 6: Non-OPEC liquids supply quarterly forecast, 2016-2018** 



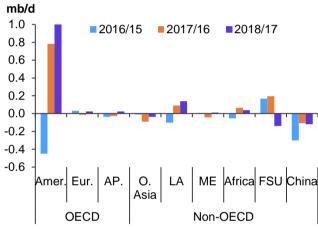
Note: \*2017 = Estimate and 2018 = Forecast. Source: OPEC Secretariat.

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



Source: OPEC Secretariat.

**Graph 5 - 7: Regional non-OPEC supply growth, y-o-y change** 



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

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

							Change 20	18/17
	<u>2017</u>	<u>1Q18</u>	<u> 2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	Growth	<u>%</u>
Americas	21.39	22.62	22.84	22.86	22.96	22.82	1.43	6.68
of which US	14.33	15.37	15.71	15.75	15.70	15.63	1.30	9.09
Europe	3.79	3.80	3.83	3.72	3.91	3.82	0.02	0.61
Asia Pacific	0.40	0.39	0.42	0.43	0.44	0.42	0.02	6.07
Total OECD	25.58	26.81	27.09	27.02	27.32	27.06	1.48	5.77
Other Asia	3.62	3.60	3.59	3.57	3.55	3.58	-0.04	-1.04
Latin America	5.19	5.29	5.28	5.42	5.33	5.33	0.14	2.68
Middle East	1.24	1.25	1.25	1.24	1.24	1.25	0.01	0.92
Africa	1.86	1.89	1.89	1.90	1.90	1.90	0.04	2.03
Total DCs	11.90	12.04	12.01	12.14	12.03	12.05	0.15	1.27
FSU	14.06	13.97	13.94	13.81	13.94	13.92	-0.14	-0.99
of which Russia	11.17	10.98	10.98	10.98	10.98	10.98	-0.19	-1.70
Other Europe	0.12	0.13	0.13	0.13	0.12	0.13	0.00	1.37
China	3.99	3.94	3.85	3.84	3.84	3.87	-0.12	-3.02
Total "Other regions"	18.17	18.04	17.92	17.78	17.90	17.91	-0.26	-1.42
Total non-OPEC								
production	55.65	56.88	57.02	56.93	57.25	57.02	1.37	2.46
Processing gains	2.21	2.23	2.23	2.23	2.23	2.23	0.03	1.32
Total non-OPEC supply	57.86	59.12	59.26	59.17	59.48	59.26	1.40	2.42
Previous estimate	57.79	58.83	58.78	58.80	59.33	58.94	1.15	1.99
Revision	0.07	0.29	0.47	0.36	0.15	0.32	0.25	0.43

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

# Non-OPEC oil supply in 2017 and 2018

### **OECD**

**OECD liquids production** in 2017 was revised up by 69 tb/d to average 25.58 mb/d, indicating growth of 0.74 mb/d y-o-y. OECD Americas saw an upward revision by 68 tb/d to average 21.39 mb/d and y-o-y growth of 0.78 mb/d, while OECD Europe and OECD Asia Pacific's supply estimation remains unchanged. OECD Europe and OECD Asia Pacific are expected to marginally decline by 0.01 mb/d and 0.03 mb/d to average 3.79 mb/d and 0.40 mb/d in 2017, respectively.

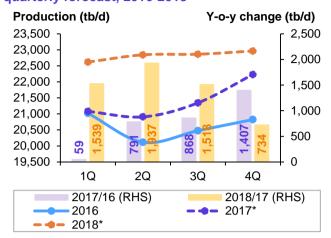
For 2018, OECD supply is forecast to average 27.06 mb/d, revised up by 0.26 mb/d and representing growth of 1.48 mb/d, mainly from OECD Americas at 1.43 mb/d.

### **OECD Americas**

**OECD Americas' oil supply** in **2017** is estimated to average 21.39 mb/d, an increase of 0.78 mb/d y-o-y. The oil supply forecast was revised up by 68 tb/d this month, owing to an upward revision for the US by 0.07 mb/d and a minor downward revision for Mexico's production by 0.01 mb/d in 4Q17, to average 14.33 mb/d and 2.23 mb/d, respectively, for the year.

The **2018** supply forecast for OECD Americas was also revised up by 0.24 mb/d to now show growth of 1.43 mb/d and average 22.82 mb/d. The oil supply growth forecast for the US has been revised up and is now projected to grow by 1.30 mb/d, while the annual decline in Mexico is expected lower than in the previous assessment at -0.12 mb/d. Canada's oil supply is forecast to average 5.07 mb/d, unchanged from the previous month.

Graph 5 - 8: OECD Americas liquids supply quarterly forecast, 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 10.04 mb/d in November 2017, an increase of 384 tb/d from a month earlier. In November, crude oil output rose by 1.16 mb/d y-o-y, surpassing the historical high of 10 mb/d seen in the 1970s.

Crude oil production increased m-o-m in North Dakota (+14 tb/d) to average 1,178 tb/d, Oklahoma (+24 tb/d) to average 491 tb/d, Texas (+114 tb/d) to average 3,891 tb/d, Colorado (+13 tb/d) to average 416 tb/d, remained steady in Alaska at an average of 0.49 mb/d. Crude output in the Gulf of Mexico (GoM) recovered following the impact of the hurricanes, adding 209 tb/d m-o-m to average 1,666 tb/d.

The US tight crude oil production estimate for 2017, following impressive output growth of 0.97 mb/d since December 2016, has already surpassed the 5 mb/d level to reach a historic high of 5.12 mb/d in December 2017, mainly from the Permian Basin.

Based on preliminary data, US tight crude production indicates growth of 0.04 mb/d and 0.09 mb/d in November and December m-o-m to average 5.03 mb/d and 5.12 mb/d, respectively.

Tight crude output from horizontal wells increased in the Permian by 0.05 mb/d and 0.06 mb/d in November and December to average 2.05 mb/d and 2.11 mb/d, respectively. Although production declined in the Bakken in November, it rose by 40 tb/d to average 1.17 mb/d in December. Other regions either saw minor growth – f.ex. the Niobrara – 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.

Following the stronger WTI, average IRR for production in the Permian Basin was reported much above average.

In 2017, 86% 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 rise to 94% owing to higher price levels as well as improved completion metrics: Horizontal drilling activity soared to now hold a share of 80% of total activity as of 4Q17, compared with just 48% in early 2014. Typical lateral length for horizontal wells increased from 1.0 to 1.5 miles and proppant loading rose by 75%. As a result, EUR increased by more than 100%. US Lower 48 states' onshore crude oil output declined from a peak of 7.63 mb/d in March 2015 to 6.51 mb/d in December 2016, but gathered renewed momentum in 2017. In December 2017, preliminary data on tight crude production indicates y-o-y growth of 0.97 mb/d to average 5.12 mb/d.

Oil production in the US GoM in November increased by 209 tb/d m-o-m, to average 1.67 mb/d, the same level as seen in August before the impact of the hurricanes. However, unplanned outages continued in November on the Enchilada, Salsa and Auger platforms. Oil production from the GoM is estimated to grow by 0.06 mb/d in 2017 and is forecast to increase by 0.07 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.

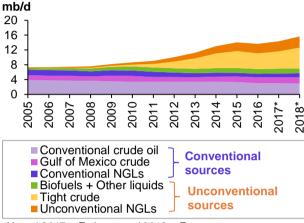
Total US liquids supply, excluding processing gains, rose by a robust 0.53 mb/d to average 15.42 mb/d in November, the highest ever in terms of total liquids supply. US NGLs were up by 0.09 mb/d to average 4.05 mb/d, mainly from unconventional sources.

Graph 5 - 9: US liquids supply quarterly forecast, 2016-2018

Production (tb/d) Y-o-y change (tb/d) 16,300 1800 1600 15.800 1400 15,300 1200 14,800 1000 800 14,300 600 13.800 400 13,300 200 12,800 0 2Q 1Q 3Q 4Q 2017/16 (RHS) 2018/17 (RHS) 2016 2017\* **---** 2018\*

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

**Graph 5 - 10: US liquids production breakdown** 



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

**US liquids supply** in **2017** is estimated to increase by 0.70 mb/d to average 14.33 mb/d and in **2018** is forecast to grow by 1.50 mb/d and average 15.73 mb/d.

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

	<u>2015</u>	<u>2016</u>	Change 2016/15	<u>2017</u> *	Change 2017/16	<u>2018</u> *	Change 2018/17
Tight crude	4.58	4.24	-0.34	4.67	0.43	5.60	0.93
Gulf of Mexico crude	1.52	1.60	0.08	1.66	0.06	1.73	0.07
Conventional crude oil	3.31	3.02	-0.29	2.98	-0.04	2.91	-0.07
Unconventional NGLs	2.35	2.56	0.21	2.73	0.17	3.02	0.29
Conventional NGLs	1.00	0.95	-0.05	1.01	0.06	1.08	0.07
Biofuels + Other liquids	1.28	1.27	-0.02	1.28	0.01	1.29	0.01
US total supply	14.03	13.63	-0.40	14.33	0.70	15.63	1.30

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

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

Tight crude production in 2017 is estimated to grow 0.43 mb/d y-o-y to average 4.67 mb/d. Total crude oil production growth is also estimated to increase by 0.45 mb/d y-o-y to average 9.31 mb/d. US NGLs production is estimated to grow by 0.23 mb/d y-o-y to average 3.74 mb/d, while NGLs coming from unconventional sources rose by 0.17 mb/d to average 2.73 mb/d. NGLs production from conventional gas and oil & gas fields grew by only 0.06 mb/d to average 1.01 mb/d. Total NGLs in 2018 are forecast to grow by 0.42 mb/d to average 4.16 mb/d, with 83% projected to be produced from tight formations. Oil production from the US GoM is estimated to have grown by 0.06 mb/d to average1.66 mb/d in 2017, while some 0.07 mb/d will be added in 2018.

US tight crude production in 2018 is now forecast to show y-o-y growth of 0.93 mb/d to average 5.60 mb/d. Production from shale and tight plays in the Permian Basin (Texas and New Mexico) is projected to grow by 0.61 mb/d to average 2.46 mb/d, following a revision to output in 2017 by 20 tb/d to average 1.85 mb/d. The production forecast for Bakken was revised down by 20 tb/d, now to show y-o-y growth of 0.08 mb/d and average 1.14 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

Shale play	<u>2017</u> *		<u>2018</u>	*
tb/d	Production	Y-o-y change	Production	Y-o-y change
Permian tight	1.85	0.38	2.46	0.61
Bakken shale	1.06	0.03	1.14	0.08
Eagle Ford shale	1.11	-0.06	1.20	0.09
Niobrara shale	0.33	0.03	0.39	0.06
Other tight plays	0.33	0.02	0.41	0.08
Total	4.67	0.38	5.60	0.93

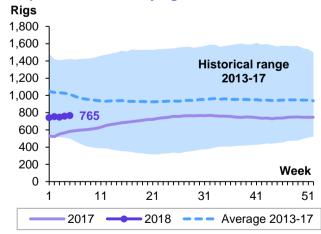
Note: \* 2017 = Estimate and 2018 = Forecast.

Source: OPEC Secretariat.

### **US** oil rig count

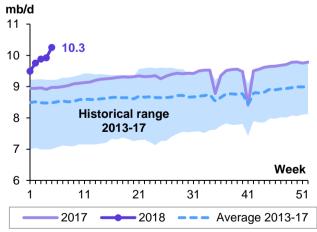
According to the *Baker Hughes* report for the week to 2 February 2018, the US oil rig count increased by 6 units to 765 rigs - represents an increase of 5 oil rigs in January, m-o-m, following added 8 rigs in December 2017.

Graph 5 - 11: US weekly rig count



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

Graph 5 - 12: US weekly crude oil production



Sources: US Energy Information Administration and OPEC Secretariat.

Shale firms are expected to focus more on well completions to raise production rather than drilling new wells, given rising cost pressures. Crude oil production also increased by 332 tb/d w-o-w, to average 10.25 mb/d, according to the EIA weekly production report. The total US rig count has increased by 22 units m-o-m to 946 rigs (81% for oil and 19% for gas). The oil rig count is up by 23 units to 765 rigs m-o-m, while the gas rig count down by 1 unit to 181 rigs. The active offshore rigs drop by 1 m-o-m to 16 rigs, mostly in the GoM, while 23 rigs increased in onshore fields m-o-m to 930 rigs for the week to 2 February 2018, up by 223 rigs y-o-y. Finally, 808 rigs out of 946 land rigs (85%) were active in the drilling of horizontal wells.

Table 5 - 6: US rotary rig count on 2 February 2018

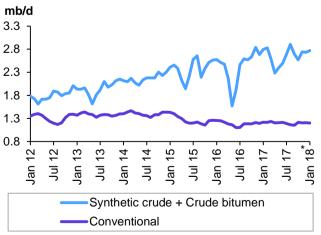
					Change				
		2 Feb 18	Month ago	Year ago	<u>M-o-m</u>	<u>Y-o-y</u>	<u>Y-o-y, %</u>		
Oil and gas split	Oil	765	742	583	23	182	31%		
	Gas	181	182	145	-1	36	25%		
Location	Onshore	930	907	707	23	223	32%		
	Offshore	16	17	22	-1	-6	-27%		
Basin	Williston	46	46	37	0	9	24%		
	Eagle Ford	58	62	51	-4	7	14%		
	Permian	427	400	295	27	132	45%		
Drilling trajectory	Directional	72	64	66	8	6	9%		
	Horizontal	808	798	596	10	212	36%		
	Vertical	66	62	67	4	-1	-1%		
US total rig count		946	924	729	22	217	30%		

Sources: Baker Hughes and OPEC Secretariat.

#### Canada

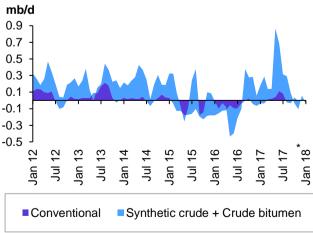
Canadian liquids output in October continued to contract for the second consecutive month by 0.02 mb/d m-o-m, to average 4.81 mb/d. Preliminary production data for November shows that oil output grew by 0.19 mb/d to average 5.0 mb/d, mainly due to an increase in oil sands production by 0.17 mb/d m-o-m to average 2.78 mb/d on the back of a return of the Horizon upgrader following planned maintenance. 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 by 0.01 mb/d m-o-m while offshore production is likely to increase in November from Terra Nova and the new field of Hebron, adding a total of 1.2 mb/d. NGLs output in November rose by 32 tb/d m-o-m to average 1.02 mb/d.

Graph 5 - 13: Canada production by product type



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

**Graph 5 - 14: Canada production by product type,** y-o-y change

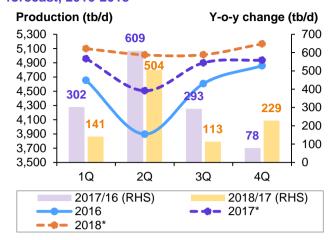


Note: \* December 2017 and January 2018 = Forecast. Source: OPEC Secretariat.

**Total Canadian oil supply in 2017** – based on actual production data and despite disruptions owing to wildfires – is estimated to grow by 0.32 mb/d y-o-y, supported by new volumes coming online, to average 4.82 mb/d, unchanged from the previous month's assessment.

For **2018**, average production of 5.07 mb/d is anticipated, showing growth of 0.25 mb/d, y-o-y. Gains, mainly from the offshore Hebron oil field and the Fort Hills bitumen project, will support the flow. Suncor's Fort Hills project, after delays and commercial disputes, has finally started producing. Production is expected to ramp up to around 90 tb/d by the end of the year and to around 171 tb/d at peak.

Graph 5 - 15: Canada liquids supply quarterly forecast, 2016-2018

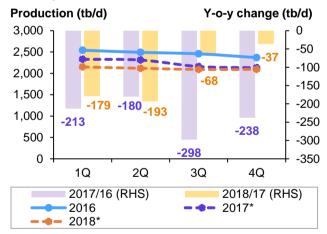


Note: \*2017 = Estimate and 2018 = Forecast. Source: OPEC Secretariat.

### **Mexico**

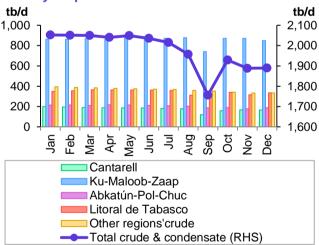
**Mexico's oil production** decreased by a minor 3 tb/d m-o-m in December to average 2.11 mb/d, lower y-o-y by 0.23 mb/d. Mexican liquids output mostly dropped in 2H17 by 0.25 mb/d, due to the impact of hurricanes, an earthquake and heavy maintenance. Crude output was steady at 1.87 mb/d in November and December, both lower y-o-y by 0.18 mb/d. During 2017, a quarter of the total annual decline occurred in two main offshore fields - KMZ complex and Cantarel – while half of the total decline was reported from fields producing light liquids. Under normal conditions, oil production in 2018 is forecast to contract further by 0.12 mb/d, y-o-y to average 2.11 mb/d, on the back of natural decline.

**Graph 5 - 16: Mexico's liquids supply quarterly forecast, 2016-2018** 



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

Graph 5 - 17: Mexico crude and condensate monthly output in 2017



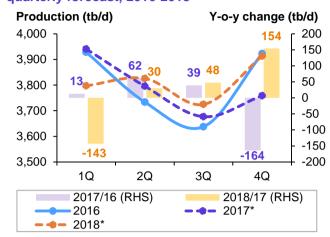
Sources: Pemex and OPEC Secretariat.

# **OECD Europe**

**OECD Europe's oil supply** in December was down by 0.22 mb/d m-o-m, following the shutdown of the Forties Pipeline System in the UK since 11 December, to average 3.63 mb/d, lower by 0.31 mb/d y-o-y. Production in Norway and Other OECD Europe increased in December m-o-m, while oil output in Denmark was steady. Preliminary oil production in the region in January is forecast to be up from a month earlier.

For **2017**, the region is estimated to see a slight contraction of 0.01 mb/d to average 3.79 mb/d, while for **2018**, growth of 0.02 mb/d is forecast. Although production in Norway, Denmark and other OECD Europe is expected to decline in the current year, this will be offset by growth in the output of the UK.

Graph 5 - 18: OECD Europe liquids supply quarterly forecast, 2016-2018



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

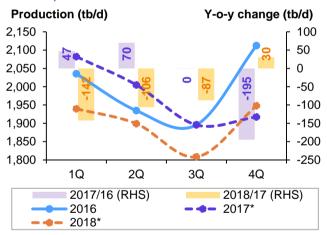
Source: OPEC Secretariat.

### **Norway**

Final production figures from the Norwegian Petroleum Directorate (NPD) for November 2017 show average production of about 1.5 mb/d of oil, 0.4 mb/d of NGLs and condensate to total 1.91 mb/d.

Preliminary production figures for December 2017 show average production of 1.93 mb/d of oil, NGLs and condensate, indicating an increase of 26 tb/d compared to the previous month on the back of the start-up of production from the Maria field in November and the return of production from the Goliat field in mid-month. 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. Oil production in December is approximately 4% lower than the NPD's initial forecast and about 1.7% below the forecast so far this year. The main reasons for production in December to remain below the forecast is the closure of the Goliat field until 17 of December, along with technical problems and maintenance work on some other fields.

Graph 5 - 19: Norway's liquids supply quarterly forecast, 2016-2018



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

Source: OPEC Secretariat.

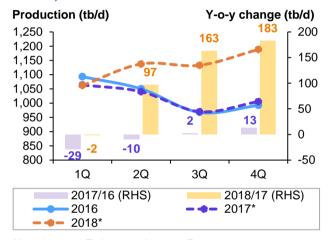
Norway's production in **2017** averaged 1.97 mb/d, lower y-o-y by 0.02 mb/d. At the same time, crude oil output also decreased by 0.03 mb/d y-o-y to average 1.59 mb/d for the year. Oil production in Norway has not reported an annual decline since 2014. Natural declines from brown fields and several outages owing to maintenance in platforms as well as the unexpected outage at the new Goliat field offset growing output from other fields. Oil production in **2018** is expected to drop by 0.07 mb/d y-o-y to average 1.90 mb/d, despite an increase in January by more than 70 tb/d m-o-m owing to higher output from mature fields such as Aasgard and Grane.

#### UK

Following the shutdown of the Forties Pipeline System (FPS) since 11 December – 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 December fell sharply by 270 tb/d m-o-m to average 0.78 mb/d, 0.28 mb/d lower than a year ago. The outage was reported over by the end of December and the transfer of oil through the FPS returned to normal. However, oil supply in January, despite increasing m-o-m, is forecast to be lower than the 1.07 mb/d seen in the same month a year earlier.

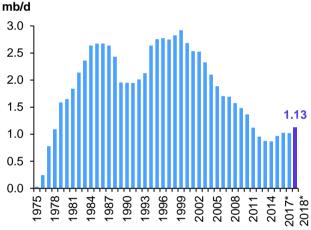
UK liquids production in **2017** averaged 1.02 mb/d, unchanged from a year earlier. UK oil supply in **2018** is nevertheless expected to grow by around 0.09 mb/d due to the ramping up of new fields, such as Kraken, Western Isles and Quad 204 – which will continue to ramp up towards its 120 tb/d capacity – and from the Clair Ridge project – with 110 tb/d production capacity – which is expected to start up in 2Q18. Premier announced that first oil from the Catcher Area was safely achieved on 23 December 2017. Initial stabilised production from the Catcher field will be at an expected rate of around 10 tb/d. This will be ramped up in phases with production from the Varadero field followed by the Burgman field. A first export cargo of 500 tb of oil from the Catcher field was lifted on 23 January 2018 and sold at a premium to Brent. The company said it was on track to increase full production from the Catcher area to 60 tb/d in 2Q18.

Graph 5 - 20: UK's liquids supply quarterly forecast, 2016-2018



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

Graph 5 - 21: UK annual output and oil supply forecast in 2018, mb/d



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

# **Developing Countries**

**Total oil supply of developing countries** (DCs) in 2017 is estimated to grow by only 0.02 mb/d y-o-y, showing an upward revision in growth by 0.01 mb/d, due to the base change, to reach an average of 11.90 mb/d, mainly in the Other Asia region.

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

	40	20	20	40	Vacult	Change
	1Q	2Q	3Q	4Q	Yearly	Ү-о-у
2016	11.79	11.77	11.95	12.01	11.88	-0.16
2017*	11.94	11.89	11.88	11.91	11.90	0.02
2018*	12.04	12.01	12.14	12.03	12.05	0.15

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

Source: OPEC Secretariat.

Preliminary data for developing countries shows oil supply at 11.85 mb/d for December, lower by 0.05 mb/d m-o-m and also down by 0.11 mb/d compared to 4Q16. For 2018, DCs' supply is forecast to grow by 0.15 mb/d y-o-y to average 12.05 mb/d, with growth revised up by 0.01 mb/d from the previous assessment.

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 0.04 mb/d in 2018 to average 3.58 mb/d.

In **Africa**, following an upward revision by 10 tb/d in Congo's oil supply in this month, production growth of 0.06 mb/d – primarily from Ghana and Congo – is expected to average 1.86 mb/d in 2017, while the growth is forecast to slow to 0.04 mb/d in 2018, to average 1.90 mb/d.

Non-OPEC oil production in the **Middle East** region is estimated to contract by 0.04 mb/d in 2017 averaging 1.24 mb/d, but it is likely to grow by minor 0.01 mb/d in 2018.

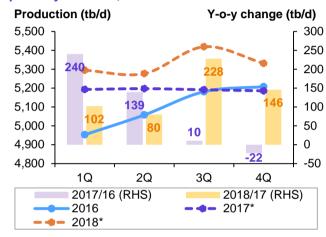
### **Latin America**

Oil production in **Latin America** was revised down by 0.01 mb/d from the previous assessment and is expected to grow by 0.09 mb/d to average 5.19 mb/d in 2017. The main driver will be Brazil, showing growth of 0.16 mb/d. Other countries in the region will witness declines, except for Trinidad and Tobago, which shows steady production levels compared to a year earlier.

**Colombia**'s oil production stood at 0.88 mb/d in December, up by 10 tb/d from the previous month, and higher by 0.02 mb/d from the same month a year earlier. Production in Colombia is expected to contract by 0.03 mb/d and 0.04 mb/d in 2017 and 2018, respectively.

In **Argentina**, oil output is expected to decline by 0.03 mb/d to average 0.65 mb/d in 2017. For 2018, a stagnant production is anticipated.

Graph 5 - 22: Latin America liquids supply quarterly forecast, 2016-2018

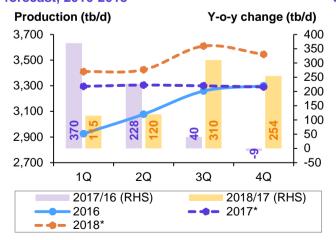


Note: \*2017 = Estimate and 2018 = Forecast. Source: OPEC Secretariat.

#### **Brazil**

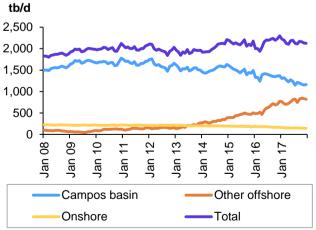
According to national sources, **Brazil's liquids output** declined slightly in December by 0.01 mb/d m-o-m to 3.27 mb/d, down by 0.11 mb/d, y-o-y.

Graph 5 - 23: Brazil's liquids supply quarterly forecast, 2016-2018



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

Graph 5 - 24: Brazil's crude oil production by source, 2008-2017



Sources: Petrobras and OPEC Secretariat.

Crude output dropped by minor 5 tb/d m-o-m in December to average 2.59 mb/d, according to Petrobras. However, Petrobras' oil production in Brazil in 2017 increased by 0.4% compared to the previous year reaching a new high, to average 2.15 mb/d. The company reportedly achieved its production target for the third successive year. The company's pre-salt production was 26% higher in 2017 at 1.29 mb/d, mainly coming from the Lula field in the Santos basin 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.

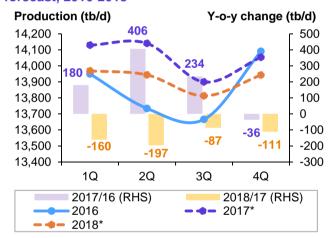
Brazil's 4Q17 average liquids output was revised down by 49 tb/d to average 3.29 mb/d owing to lower crude oil output by 0.02 mb/d q-o-q and also lower by 0.05 mb/d at 2.60 mb/d compared to the same period a year earlier, mainly due to several unexpected maintenance requirements. Following this downward revision in 4Q17, the annual liquids supply in **2017** was revised down by 12 tb/d, representing y-o-y growth of 0.16 mb/d. The supply forecast for **2018** was revised up owing to the base change in 2017, with expected growth of 0.20 mb/d at an average supply of 3.50 mb/d. Petrobras' Tartaruga and Lula (X-Tupi) show the greatest potential in terms of 2018 production. These fields will produce around 40 tb/d and 35 tb/d, respectively.

### **FSU**

FSU's oil supply is estimated to grow by 0.20 mb/d in 2017 to average 14.06 mb/d, unchanged from the previous assessment. Total FSU liquids production in December increased by 0.03 mb/d to average 14.12 mb/d, mainly due to Azerbaijan showing higher crude oil output. Preliminary data for January 2018 indicates marginally higher production at 14.12 mb/d, due to higher output from the Kashagan field in Kazakhstan.

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, output is forecast to decline by 0.14 mb/d, mainly from Russia, to average 13.92 mb/d.

Graph 5 - 25: FSU liquids supply quarterly forecast, 2016-2018



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

#### Russia

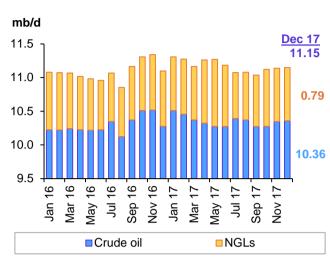
Preliminary **Russian liquids output** in January averaged 11.15 mb/d, unchanged from December 2017, according to the *Ministry of Energy*.

Graph 5 - 26: Russia liquids supply quarterly, 2016-2018



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

Graph 5 - 27: Russia's liquids supply monthly



Sources: Ministry of Energy and OPEC Secretariat.

According to secondary sources; historical crude oil output in November stood at an average of 10.35 mb/d, increasing 11 tb/d in December to average 10.36 mb/d. As a result, average crude oil production in Russia in 2017 is estimated at 10.35 mb/d, higher by 0.06 mb/d y-o-y, according to secondary sources. Meanwhile, NGLs added by 0.03 mb/d y-o-y to average 0.82 mb/d in 2017. By this, Russian average liquids output rose by 0.09 mb/d y-o-y to average 11.17 mb/d. Recently launched projects showed healthy growth, including Gazprom Neft's Novy Port and Prirazlomnoye, Lukoil's Filanovskogo, Rosneft's Suzunskoye, and the East Messoyakha field owned on a parity basis by Rosneft and Gazprom Neft. Rosneft also managed to significantly increase production by its Yuganskneftegas subsidiary. According to Nefte Compass; the only greenfield that saw a dramatic decline was the 1 billion-barrel Trebs and Titov group of fields operated by Bashneft-Polyus, a joint venture between Bashneft, now owned by Rosneft, and Lukoil. The company produced around 40 tb/d in 2017, down some 12% from 46.5 tb/d a year earlier, as the partners failed to agree on investments in the acreage, which has a complicated geology. According to earlier plans, the Trebs and Titov fields were supposed to reach peak output of 92 tb/d by 2019.

For **2018**, Russia's oil supply is expected to contract by 0.19 mb/d and average 10.98 mb/d. This is in line with the production adjustment level within the Declaration of Cooperation between OPEC and non-OPEC participants, which has been extended to the end of 2018.

### Caspian

### **Azerbaijan**

In **Azerbaijan**, crude oil production in December increased by 19 tb/d m-o-m, most probably from Azerbaijan International Operating Company's Azeri-Chirag-Guneshli (ACG) complex, to average 0.74 mb/d, the same level of January 2017, higher by 13 tb/d, y-o-y. 75% of Azeri production comes from the ACG complex. Preliminary data on liquids supply in December shows an increase of 0.02 mb/d m-o-m to average 0.82 mb/d. A contraction of 0.05 mb/d and 0.04 mb/d is forecast for Azeri liquids supply in 2017 and 2018, to average 0.80 mb/d and 0.76 mb/d, respectively. Azerbaijan is estimated to produce an average of 0.73 mb/d of crude oil and 0.07 mb/d of NGLs in 2017.

Graph 5 - 28: Azerbaijan liquids supply quarterly 2016-2017, and forecast for 2018



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

Source: OPEC Secretariat.

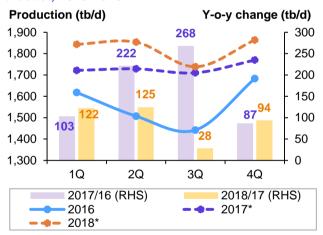
#### Kazakhstan

**Kazakhstan's liquids production** was flat at 1.81 mb/d in December compared to November, leading to average production at 1.77 mb/d in 4Q17, 0.06 mb/d higher q-o-q and 0.09 mb/d, y-o-y. While crude oil production was steady at 1.54 mb/d in December, output of NGLs was also stagnant at 0.27 mb/d.

**2017** liquids supply in Kazakhstan rose by 0.17 mb/d y-o-y, following growth of 0.16 mb/d from the Kashagan field in the Caspian region.

For **2018**, following gas re-injection operations in the Kashagan field, production is expected to reach 0.27 mb/d according to the plan of the operator. As a result, Kazakhstan's liquids supply is forecast to grow by 0.09 mb/d to average 1.82 mb/d.

**Graph 5 - 29: Kazakhstan liquids supply quarterly forecast, 2016-2018** 



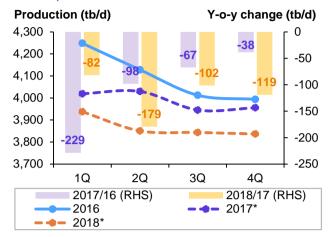
Note: \* 2017 and 2018 = Forecast.

Source: OPEC Secretariat.

#### China

China's oil supply, following an increase by 0.05 mb/d in November, dropped again by 0.05 mb/d in December to average 3.94 mb/d, which includes 3.76 mb/d of crude oil production, 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, much less than the contraction seen in 2016. The decline was largely attributed to the production cut in the Daging and Shengli oilfields, as well as the Bohai and eastern South China seas. In 2017, CNPC, Sinopec and CNOOC resumed the growth in planned upstream investment – at a rate of 10%, 32% and 33%, respectively, indicating that the domestic oil and gas exploration and development industry has started to recover. Chnia's liquids supply estimation for 2017 was revised up by 10 tb/d from last month's assessment and is expected to decline by 0.11 mb/d to average 3.99 mb/d.

**Graph 5 - 30: China liquids supply quarterly forecast, 2016-2018** 



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

Source: OPEC Secretariat.

For **2018**, despite increasing investment resulting from the rise in global oil prices, oil production is likely to decline more-or-less at the same rate of 2017 – at about 0.12 mb/d y-o-y – to average 3.87 mb/d, an upward revision in absolute supply by 50 tb/d m-o-m. China suffers from heavy declines in mature brown fields such as Daqing, where oil output has decelerated in recent years as well as in Changqing and Shengli – all onshore areas – while production in offshore fields is also declining. However, the upstream investment is forecast to continue to grow and additional original oil in place (OOIP) and original gas in place (OGIP) are expected to maintain a high level of nearly 140 mb of oil and over 500 Billion cubic meters of gas, respectively.

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

**OPEC NGLs and non-conventional liquids** output in January 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, averaging 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

			Change						Change		Change	
	<u>2015</u>	<b>2016</b>	<u>16/15</u>	<u>1Q17</u>	<b>2Q17</b>	3Q17	4Q17	<b>2017</b>	<u>17/16</u>	<b>2018</b>	<u>18/17</u>	
Total OPEC	6.04	6.14	0.10	6.20	6.26	6.35	6.42	6.31	0.17	6.49	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 32.30 mb/d in January, a minor decrease of 8 tb/d over the previous month. While production mainly decreased in Venezuela and Angola, partially offset by Iraq, Saudi Arabia and Libya.

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

	<u>2016</u>	<u>2017</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec
Algeria	1,090	1,043	1,054	1,055	1,014	1,006	1,037	1,029	-8.5
Angola	1,725	1,639	1,648	1,641	1,634	1,590	1,626	1,615	-10.9
Ecuador	545	531	530	536	528	531	523	523	-0.5
<b>Equatorial Guinea</b>	160	135	137	129	132	130	131	134	3.4
Gabon	221	200	203	199	200	198	199	198	-0.9
Iran, I.R.	3,515	3,811	3,793	3,833	3,822	3,820	3,832	3,829	-3.4
Iraq	4,392	4,445	4,455	4,482	4,396	4,393	4,405	4,435	30.2
Kuwait	2,853	2,708	2,709	2,707	2,704	2,704	2,700	2,707	6.8
Libya	390	817	709	932	964	969	957	978	21.0
Nigeria	1,556	1,660	1,594	1,763	1,765	1,772	1,828	1,819	-8.1
Qatar	656	607	613	603	604	608	602	596	-6.7
Saudi Arabia	10,406	9,953	9,960	9,994	9,971	9,925	9,953	9,977	23.3
UAE	2,979	2,915	2,911	2,922	2,892	2,885	2,870	2,864	-6.3
Venezuela	2,154	1,916	1,964	1,929	1,771	1,799	1,647	1,600	-47.3
Total OPEC	32,643	32,380	32,279	32,725	32,399	32,330	32,310	32,302	-8.1

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

	<u>2016</u>	<u>2017</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	Nov 17	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec
Algeria	1,146	1,059	1,072	1,065	1,012	1,002	1,037	1,013	-24.0
Angola	1,722	1,632	1,635	1,668	1,585	1,607	1,548		
Ecuador	549	531	534	535	522	521	520	513	-6.9
<b>Equatorial Guinea</b>		129	126	124	126	124	131	129	-1.8
Gabon									
Iran, I.R.	3,651	3,867	3,878	3,865	3,833	3,878	3,811	3,817	6.0
Iraq	4,648	4,469	4,549	4,380	4,361	4,360	4,362	4,360	-2.0
Kuwait	2,954	2,704	2,710	2,700	2,702	2,705	2,701	2,705	4.0
Libya									
Nigeria	1,427	1,510	1,485	1,592	1,572	1,547	1,569	1,736	166.9
Qatar	652	600	608	589	608	615	612	621	9.0
Saudi Arabia	10,460	9,951	9,965	9,978	9,977	9,891	9,980	9,983	2.9
UAE	3,088	2,967	2,984	2,969	2,904	2,900	2,862	2,850	-12.0
Venezuela	2,373	2,072	2,127	2,102	1,804	1,837	1,621	1,769	148.3
Total OPEC		••							

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 0.35 mb/d to average 97.66 mb/d in January 2018, compared with the previous month. Preliminary January supply data shows an increase in non-OPEC supply (including OPEC NGLs) by 0.36 mb/d to average 65.36 mb/d, higher by 1.63 mb/d, y-o-y. This was mainly driven by Canada, Mexico, Norway, UK, Bahrain, Brazil and Kazakhstan which partially offset m-o-m declines in the US, Malaysia, Oman, Russia and Azerbaijan. OPEC crude oil production was decreased by 8 tb/d in January, leading to an increase in global oil output.

The share of OPEC crude oil in total global production was down by 0.1% at 33.1% in January, compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 31: OPEC and world oil supply mb/d mb/d 34 97.7 99 98 33 97 32 96 31 95 94 30 93 29 92 28 Aug 16 Dec 16 Feb 17 16 16 16 17 17 Dec. Oct Apr Jun Oct OPEC crude production (LHS)

World supply (RHS)

Source: OPEC Secretariat.

# **Product Markets and Refinery Operations**

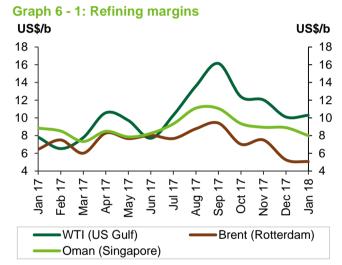
Product markets in the Atlantic Basin had a mixed performance in January, as refining margins in the US rebounded slightly from the declining trend recorded in the previous month. Gains were made on the top of the barrel as a result of cold weather-related refinery outages.

In Europe, product markets lost some ground, with weakening recorded at the bottom of the barrel, primarily due to supply-side pressure.

Product markets weakened in Asia. With the exception of the middle-distillates complex, losses were recorded all across the barrel, as a result of pressure from slower seasonal demand.

# **Refinery margins**

Refinery margins in the US market showed marginal gains. There were seasonal weatherrelated shutdowns at the 603 tb/d Motiva Enterprise and the 335 tb/d Valero refineries in Port Arthur Texas, as well as at the 459 tb/d Marathon Petroleum Corp's fluid catalytic cracking unit in Galveston Bay, Texas. Furthermore, freezing temperatures in Louisiana caused power lines to snap, resulting in outages at the 543 tb/d Marathons' Garyville and the 125 tb/d Valero Meraux refineries. Moreover, additional support emerged from lower refinery run rates due to low crude stock levels as refinery maintenance started at Shell's 235 tb/d Norco refinery in Louisiana. Refinery margins for WTI in the US averaged \$10.3/b in January, up by 19¢/b m-o-m and \$2.5/b у-о-у.



Sources: Argus Media and OPEC Secretariat.

The **European** product market weakened slightly, showing losses in the naphtha and fuel oil complexes, despite gains in gasoline and diesel, amid rising crude prices. Pressure came as result of high supplies from the FSU and the Middle East, and seasonally low regional demand. As considerable scheduled refinery shutdowns announced in late 2017 are set to take place in Europe for refinery upgrades in 1Q18, higher product inventory drawdowns and a bullish product market is expected in the near term on improved fundamentals. In the longer term, lower fuel oil supplies from Europe could diminish the current fuel oil surplus in the market. In January, the refinery margin for Brent crude in NWE averaged \$5.1/b, which is slightly down by 20¢/b m-o-m and lower by \$1.4/b y-o-y.

Asian product markets lost some momentum as margins dipped, pressured by seasonally slower demand amid severe weakening in the naphtha complex. Additional pressure came from the negative performance at the bottom of the barrel, as global fuel oil market balances persistently remain long. Refining margins are expected to receive some support from improved product demand and stronger fundamentals in coming weeks. Furthermore, as gasoline and diesel blending components are subject to new taxation regulations imposed by the Chinese authorities – which seek to discourage mixed aromatics imports – gasoline and diesel product supplies from China may decline slightly, considering that they have been providing support to export figures. Refinery margins for Oman in Asia averaged \$8.0/b, down slightly by 90¢/b m-o-m and lower by 85¢/b y-o-y.

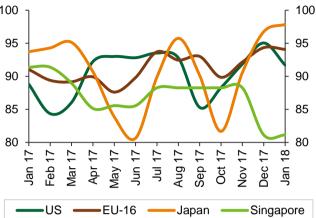
# **Refinery operations**

In the US, refinery utilization rates declined in January, compared to the record high seen in the previous month. The drop in runs is attributed to the multiple refinery shut-downs in early January, caused by the cold weather in the US.

Looking ahead, given favourable crude stock levels, refinery runs are likely to return close to the high levels seen last month, thereby resuming product stock builds ahead of higher domestic transport fuel demand usually seen around April. Refinery utilization averaged 91.7% in January, amounting to 16.7 mb/d, down by 3.4 pp m-o-m, and up by 2.3 pp y-o-y.

European refinery utilization was down from the previous month. A marginal dip was caused by small crude intake cuts at simple refineries and refinery maintenance at.

Graph 6 - 2: Refinery utilization rates % 100



%

Sources: EIA, Euroilstock, PAJ and Argus Media.

Essar UK's Stanlow refinery, which is scheduled to resume operations around mid-March. Upcoming 1Q18 refinery maintenance and upgrades are expected to pressure refinery utilization rates in the near- and midterm future. In January, refinery utilization rates in the European market averaged 94.1% down by 0.3 pp, corresponding to a throughput of 10.9 mb/d around 30 tb/d down from the previous month.

In **Asia**, refinery runs in Japan rose further by 1.1 pp to average a new record high of 97.9% in January. which represents an increase of 4.1% v-o-v. Meanwhile, in China, refinery utilization rates averaged 89.3 %. down by 1.5 pp m-o-m, and up by 1.5 pp y-o-y. In Singapore, utilization rates have remained unchanged compared with the previous month at 81.1%.

## **Product markets**

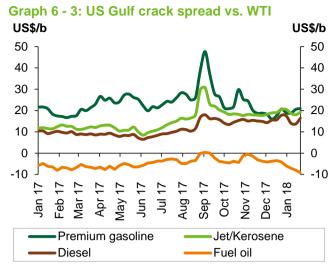
### **US** market

The US gasoline market showed strong gains on the back of supply disruptions caused by freezing cold temperatures. This positive performance offset pressure emerging from stock level improvements. In January, gasoline prices soared and hit \$83.3/b, on the back of rising crude prices, the highest mark seen since last September. Although a need remains to further build stocks ahead of the driving season, the gasoline market will likely continue to receive support as US refiners begin substantial maintenance in the coming months. In January, the US gasoline crack spread against WTI averaged \$20.1/b, up by \$2.1/b m-o-m, and marginally down by 13¢/b y-o-y.

The jet/kerosene crack spread in the US against WTI in January remained broadly unchanged at \$19.0/b, but was up by \$7.3/b y-o-y.

The gasoil crack spread in January weakened slightly due to lower demand and strong stock builds. The counter seasonal diesel stock build pressured diesel crack spreads and reduced the stock level deficit to the 5-year average. The US gasoil crack spread against WTI averaged \$15.2/b, a slight m-o-m drop of 41¢/b and a hefty \$5.2/b gain y-o-y.

The **fuel oil** market in the US deteriorated in January, pressured by lower global demand. Further pressure may have emerged from refinery startups to restore operations after the low temperature-related outages, which tend to an increase in fuel oil supply in the US. The US fuel oil crack spread averaged minus \$7.8/b, down by \$3.9/b m-o-m and \$1.9/b lower y-o-y.



Sources: Argus Media and OPEC Secretariat.

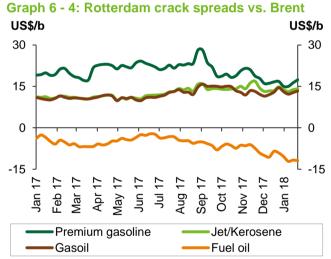
### **European market**

Premium **European gasoline** crack spread strengthened on firm exports to West Africa and strong demand from the Middle East. Gasoline crack spreads averaged \$16.5/b, up by 20¢/b m-o-m, and down by \$2.8/b y-o-y.

The European **jet/kerosene** crack spread strengthened and averaged \$14.0/b, up by 50¢/b m-o-m and \$3.0/b higher y-o-y.

The **gasoil** crack spread against Brent in January increased and showed the strongest performance across the barrel in Europe. Support emerged from simple refinery run cuts and the start of refinery maintenance, which resulted in reduced supplies. Gasoil crack spreads in Europe against Brent averaged \$13.0/b, up by 60¢/b m-o-m and a gain of \$2.5/b y-o-y.

The European **fuel oil 3.5%** crack spread fell, pressured by lower global demand from the power generation sector, despite firm demand from the bunkering sector. High Russian supplies amid lower import requirements further widened the fuel oil discount. Fuel oil cracks averaged minus \$14.7/b, down by \$1.8/b m-o-m and \$3.2/b y-o-y.

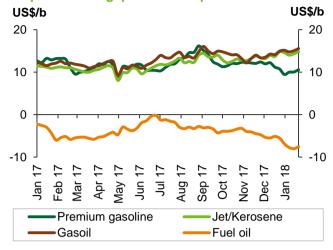


#### **Asian market**

The **Asian gasoline** market in January weakened on lower export opportunities as gasoline cracks strengthened in the US and European markets. The Singapore crack spread against Oman averaged \$10.2/b, down by \$1.4/b m-o-m and \$2.5/b y-o-y. Looking ahead, as new taxation was implemented in China on unfinished oil blend stocks, product exports may remain under pressure; however, this negative impact will likely be offset by the expected higher demand lending some support to cracks in February.

The **light distillate naphtha** crack spread in Singapore against Oman plummeted and entered negative territory. This poor performance was attributed to lower seasonal demand despite a naphtha cracker outage caused by low temperatures in Korea. Moreover, rising competition due to lower LPG prices further pressured cracks as LPG was the preferred choice of petrochemical feedstock. In January, naphtha crack spreads in Singapore against Oman averaged minus 16¢/b, down by a hefty \$3.7/b m-o-m and lower by \$1.9/b y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Oman



Sources: Argus Media and OPEC Secretariat.

The **Jet/kerosene** crack spread in Asia showed a slight improvement over the previous month's estimate, averaging \$14.6/b, up by 76¢/b m-o-m, and \$3.4/b y-o-y. This positive performance was attributed to healthy regional demand, mainly from Japan, due to cold weather.

The **gasoil** crack spread in Asia rose solidly, supported by strong export opportunities and robust regional demand. Moreover, higher diesel prices seen in Europe provided further support. Gasoil crack spreads in Singapore against Oman in January averaged \$15.3/b, up by \$1.2/b m-o-m, and up \$3.4/b y-o-y.

The **fuel oil** cracking spread in Singapore against Oman continued to perform poorly. The power generating sector globally is shifting to gas. Furthermore, electricity reforms introduced on 1 January 2018 in Saudi Arabia aiming to cut power consumption by 40 GWh this year will further exacerbate weakness. Overall, current declining global demand will likely continue to pressure fuel oil cracks, despite expected support from the heavy maintenance season and a reduction in supplies in the short-term. Singapore crack spreads against Oman in January continued the falling trend seen in previous months, averaging at minus \$7.5/b, down by \$2.2/b m-o-m and \$4.3/b y-o-y.

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

Event  Maintenance season (Europe, Asia, Middle East and FSU)	Time frame 1Q18	US  ↑ High impact on refining margins	Europe  ↑ High impact on refining margins	Asia  ↑ High impact on refining margins	Observation Strengthen product markets due to tightening supplies, lower crude consumption
Refinery upgrades	1H 18	-	About 2 mb/d of total throughput expected to go offline	-	Lower product supplies (short term). Lower fuel oil supplies, and higher gasoline/diesel supplies (long term)
Higher US oil production	2018	-	-	Some impact on naphtha crack spread	About 60% of total LPG production is derived from natural gas. Higher LPG supplies (lower LPG prices, risks weaker naphtha cracks)
Higher transport fuel demand	April 2018	↑ High impact on refining margins	↑ High impact on refining margins	↑ High impact on refining margins	Based on 2016 and 2017 trends

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			)
				Change				Change
	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec
US	17.06	17.59	16.65	-0.93	91.86	95.05	91.70	-3.4 pp
Euro-16	10.68	10.93	10.90	-0.03	92.17	94.34	94.08	-0.3 pp
France	1.23	1.18	1.14	-0.04	98.48	94.31	91.51	-2.8 pp
Germany	1.94	1.94	1.92	-0.02	88.44	88.80	87.71	-1.1 pp
Italy	1.44	1.43	1.50	0.07	70.19	69.65	73.07	3.4 pp
UK	1.03	1.10	1.01	-0.08	79.42	84.10	77.80	-6.3 pp
Japan	3.19	3.41	3.44	0.04	90.58	96.76	97.86	1.1 pp

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

#### **Product Markets and Refinery Operations**

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

	<u>2015</u>	<u>2016</u>	<u>4Q16</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18*</u>
Total OECD	37.60	37.41	37.29	37.53	38.01	38.26	38.11	38.28
OECD Americas	19.01	18.78	18.32	18.56	19.80	19.03	19.00	19.26
of which US	16.43	16.51	16.41	16.22	17.42	16.89	17.03	16.65
OECD Europe	12.00	11.85	12.21	11.88	11.78	12.43	12.20	11.87
of which:								
France	1.15	1.12	1.24	1.05	1.11	1.18	1.20	1.14
Germany	1.87	1.88	1.91	1.82	1.74	1.93	1.92	1.92
Italy	1.34	1.30	1.33	1.34	1.28	1.40	1.44	1.50
UK	1.10	1.08	1.10	1.04	1.06	1.06	1.07	1.01
OECD Asia Pacific	6.60	6.78	6.76	7.10	6.43	6.80	6.91	7.14
of which Japan	3.26	3.28	3.23	3.49	2.99	3.24	3.19	3.44
Total Non-OECD	39.93	40.79	41.24	41.15	40.90	41.45	42.50	41.77
of which:								
China	10.44	10.77	11.16	11.22	11.00	11.27	11.92	11.78
Middle East	6.41	6.75	6.60	6.61	6.92	6.96	7.11	7.04
Russia	5.64	5.58	5.78	5.64	5.46	5.62	5.64	5.75
Latin America	6.03	5.59	5.33	5.56	5.41	5.24	5.10	5.01
India	4.56	4.93	4.97	5.01	4.89	4.82	5.21	5.26
Africa	1.60	1.63	1.58	1.67	1.58	1.63	1.61	1.58
Total world	77.53	78.20	78.65	78.69	78.91	79.72	80.61	80.57

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

				Change	Year-to-da	ate
		<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec	<u>2017</u>	<u>2018</u>
US Gulf (Cargoes FOB):						
Naphtha*		63.58	68.15	4.57	55.09	68.15
Premium gasoline	(unleaded 93)	75.92	83.83	7.91	74.42	83.83
Regular gasoline	(unleaded 87)	71.95	78.46	6.51	68.57	78.46
Jet/Kerosene		76.99	82.70	5.71	66.07	82.70
Gasoil	(0.2% S)	73.59	78.94	5.35	62.31	78.94
Fuel oil	(3.0% S)	54.39	56.92	2.53	47.05	56.92
Rotterdam (Barges FoB)	:					
Naphtha		63.79	65.48	1.69	53.66	65.48
Premium gasoline	(unleaded 98)	80.40	85.60	5.20	75.13	85.60
Jet/Kerosene		77.64	83.10	5.46	66.84	83.10
Gasoil/Diesel	(10 ppm)	76.56	82.15	5.59	66.35	82.15
Fuel oil	(1.0% S)	54.46	57.65	3.19	48.71	57.65
Fuel oil	(3.5% S)	51.21	54.41	3.20	44.31	54.41
Mediterranean (Cargoes	s FOB):					
Naphtha		62.72	64.29	1.57	52.81	64.29
Premium gasoline**		71.67	77.12	5.45	66.56	77.12
Jet/Kerosene		75.45	81.03	5.58	65.12	81.03
Diesel		75.92	81.51	5.59	66.92	81.51
Fuel oil	(1.0% S)	55.51	59.24	3.73	49.55	59.24
Fuel oil	(3.5% S)	52.65	55.94	3.29	46.18	55.94
Singapore (Cargoes FO	B):					
Naphtha		65.21	66.26	1.05	54.04	66.26
Premium gasoline	(unleaded 95)	75.32	78.61	3.29	68.01	78.61
Regular gasoline	(unleaded 92)	73.26	76.65	3.39	65.43	76.65
Jet/Kerosene		75.45	81.00	5.55	65.32	81.00
Gasoil/Diesel	(50 ppm)	75.75	81.70	5.95	66.33	81.70
Fuel oil	(180 cst)	56.31	58.89	2.58	49.67	58.89
Fuel oil	(380 cst 3.5% S)	56.20	58.85	2.65	49.24	58.85

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

<sup>\*\*\*</sup> Based on the first three weeks of September.

### **Tanker Market**

Following a drop in tanker market freight rates registered the previous month, average dirty tanker spot freight rates declined further in January, continuing the decline seen in the fourth quarter. Lower rates were seen in all reported dirty classes due to an increase in vessel supply as a result of the continuous fleet expansion in 2017, as well as thin market activity in general. Other factors included port maintenance and weather. Average dirty tanker freight rates showed a drop from the previous month as VLCC, Suezmax and Aframax rates dropped by 17%, 31% and 13%, respectively.

Clean tanker spot freight rates suffered a similar fate in January, as they fell under the influence of a general negative trend affected by the same elements. A lack of activity was seen dominating different classes in the clean tanker market, thus clean tanker spot freight rates were down on average by 13% from the previous month.

### **Spot fixtures**

According to preliminary data, **global fixtures** dropped by 1% in January compared with the previous month. **OPEC spot fixtures** were up by 1.5%, or 0.19 mb/d, to average 13.21 mb/d. Fixtures on the Middle East-to-East route averaged 6.67 mb/d in January, up by 0.35 mb/d from one month ago, while those on the Middle East-to-West route averaged 2.08 mb/d, down by 0.17 mb/d. Outside of the Middle East, fixtures averaged 4.45 mb/d, higher by 0.02 mb/d m-o-m, with most fixtures higher than in the same month of 2017.

Table 7 - 1: Spot fixtures, mb/d

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<i>Change</i> <u>Jan 18/Dec 17</u>
All areas	14.62	18.14	17.96	-0.18
OPEC	11.18	13.01	13.21	0.19
Middle East/East	5.66	6.33	6.67	0.35
Middle East/West	2.04	2.25	2.08	-0.17
Outside Middle East	3.49	4.44	4.45	0.02

Sources: Oil Movements and OPEC Secretariat.

### Sailings and arrivals

Preliminary data shows **OPEC sailings** were 0.8% higher in January, averaging 24.31 mb/d. This was 0.03 mb/d higher than the same month a year ago. **Middle East sailings** also rose by 2.3% from the previous month, while remaining flat from a year ago.

January **arrivals** were mixed, registering a decline of 4.9% from one month ago in European ports, while arrivals at North American, Far Eastern and West Asian ports increased by 7.0%, 1.1% and 1.5%, respectively, to average 10.49 mb/d, 8.74 mb/d and 4.61 mb/d.

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

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Change Jan 18/Dec 17
Sailings				
OPEC	23.98	24.11	24.31	0.20
Middle East	16.93	17.33	17.73	0.40
Arrivals				
North America	9.62	9.80	10.49	0.69
Europe	12.11	12.51	11.90	-0.61
Far East	8.35	8.65	8.74	0.09
West Asia	4.87	4.54	4.61	0.07

Sources: Oil Movements and OPEC Secretariat.

### Dirty tanker freight rates

#### **VLCC**

Following a drop in **VLCC** vessel rates encountered in 4Q17, the softer sentiment continued in January, mainly as cargo-loading requirements have been insufficient to prevent a huge tonnage accumulation, enabling charterers to control the market. Thus freight rates dropped to their lowest levels in some time, despite a temporary rise on the back of a shortage in confirmed itinerary vessels, leading to a minor hike in rates. However, this did not last for long, as each inquiry was met with a large number of offers.

As a result, freight rates registered for tankers operating on the Middle East-to-East route dropped by WS8 points from the previous month to stand at WS44 points. The Middle East-to-West routes declined by WS4 points from the previous month to stand at WS21 points, influenced by downward pressure in the region.

Similarly, the West Africa-to-East market showed slow movement, with freight rates dropping by WS12 points from a month ago to average WS46 points.

On all routes, VLCC freight rates were negatively influenced by fewer cargo loading requirements and an extended tonnage list. VLCC freight rates on all routes in January were below those of the same month a year before.

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

	Size				Change
	1,000 DWT	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan 18/Dec 17
Middle East/East	230-280	67	52	44	-8
Middle East/West	270-285	28	25	21	-4
West Africa/East	260	69	57	46	-12

#### Suezmax

**Suezmax average spot freight rates** experienced a higher drop than those of VLCCs in January. Rates for tankers operating on the West Africa-to-US route decreased by WS34 points to average WS53 points. Rates on the Northwest Europe (NWE)-to-US route fell by WS16 points from the previous month to average WS50 points.

The drop in freight rates came as a result of weak tonnage demand in West Africa in a market best described as lightly active, as limited tonnage demand persisted. High vessel availability in West Africa continued to weigh heavily on market profitability, leading to constant declines in rates. Suezmax rates dropped in other markets as well, on the back of light inquiries in the Black Sea and the Mediterranean.

Suezmax rates dropped on average, despite temporary and relative increases in activity as an oversupply of tonnage dominated freight rate movements. Overall, there has been lack of demand for Suezmax vessels in different areas.

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

	Size				Change
	1,000 DWT	<b>Nov 17</b>	<b>Dec 17</b>	Jan 18	Jan 18/Dec 17
West Africa/US Gulf Coast	130-135	79	87	53	-34
Northwest Europe/US Gulf Coast	130-135	62	66	50	-16

Sources: Argus Media and OPEC Secretariat.

#### **Aframax**

The **Aframax** sector saw a similar decline in freight rates on all routes from the previous month, declining by an average of WS18 points.

In the Mediterranean, weather conditions led to a drop in rates, with those for Aframax operating on both Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe (NWE) routes showing a decline of WS2 points and WS7 points, respectively, to stand at WS98 and WS89 points. In NWE, the Aframax market mostly held at around the low levels of the previous month before rates turned softer towards the end of January. Freight rates were also weak in the Baltics and North Sea, affected by port maintenance. Loading requirements for Aframax in the Baltics remained limited versus a long list of available vessels. On the other hand, weather delays were few for this time of the year, providing no support to freight rates.

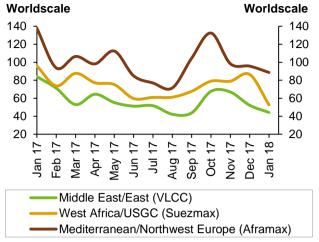
In the Caribbean, Aframax freight rates were also down from the previous month. Rates in January fell due to operational delays at the US Gulf Coast (USGC) as adverse weather conditions and rough seas led to loading delays in the region. Aframax rates on the Caribbean-to-US route reported a drop of WS50 points to stand at WS111 points.

Rates in the East were no exception, with the Indonesia-to-East route falling by WS13 points to average WS88 points in January. Moreover, Suexmax vessels trading in the Aframax market drove Aframax rates down, reducing their share in cargo loading, thus furthering excess vessel supply in the market.

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

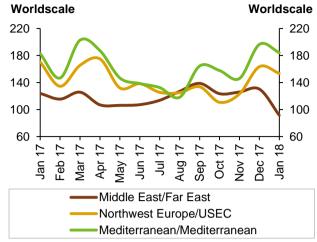
	Size				Change
	1,000 DWT	Nov 17	<b>Dec 17</b>	<u>Jan 18</u>	Jan 18/Dec 17
Indonesia/East	80-85	110	101	88	-13
Caribbean/US East Coast	80-85	117	160	111	-50
Mediterranean/Mediterranean	80-85	102	100	98	-2
Mediterranean/Northwest Europe	80-85	99	96	89	-7

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 spot tanker freight rates** similarly dropped on all reported routes and in different classes. The decline in rates was mainly supported by growing tonnage availability and slow activity in the market affecting tanker trading in both East and West of Suez.

Average clean tanker rates declined by WS23 points as rates in the **East of Suez** dropped by WS41 points from the previous month. Clean tanker earnings – mainly in the medium-range class – dropped to very low levels. A steep drop in freight rates was experienced on different eastern routes.

Spot freight rates in the Far East saw a short upward hike; however, this was corrected down quickly. Rates for tankers trading on the Middle East-to-East and Singapore-to-East routes dropped by WS39 and WS42 points, respectively, to stand at WS92 and WS134 points.

In the **West of Suez**, the clean tanker market was more stable than in the East, however it was still undergoing a general declining trend. Average spot freight rates experienced a drop by WS12 points to average WS177 points from the previous month, as freight rates registered for tankers trading on the NWE-to-USEC route showed a decline in January by WS10 points.

In the Mediterranean, another drop in rates was detected in January, as average freight rates for clean tankers trading on both the Mediterranean-to-Mediterranean and Mediterranean-to-NWE declined by WS12 points and WS13 points, to stand at WS184 and WS194 points, respectively.

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

	<b>Size</b> 1,000 DWT	<u>Nov 17</u>	Dec 17	<u>Jan 18</u>	Change Jan 18/Dec 17
East of Suez					
Middle East/East	30-35	126	130	92	-39
Singapore/East	30-35	183	177	134	-42
West of Suez					
Northwest Europe/US East Coast	33-37	123	164	154	-10
Mediterranean/Mediterranean	30-35	146	197	184	-12
Mediterranean/Northwest Europe	30-35	156	207	194	-13

#### Oil Trade

In January preliminary data shows that US crude oil imports increased to average 8 mb/d, the highest level since May 2017. The figure is up 286 tb/d from the previous month, although it remains 387 tb/d, or 5%, lower compared to the same month a year earlier. US monthly product imports declined slightly by just 9 tb/d, from a month earlier, and were 88 tb/d, or 4%, lower than the same month a year ago.

Japan's crude imports increased by 200 tb/d m-o-m, or 6.0%, to average 3.5 mb/d in December, following a rise in the previous month. Nevertheless, on a y-o-y comparison, crude imports were down by 88 tb/d, or 2.4%, from a year earlier. Japan's product imports increased in December by 55 tb/d to average 666 tb/d. This is 9% higher m-o-m, and 44 tb/d higher compared to the same month in the previous year.

China's crude imports dropped significantly in December from the high level seen in the previous month. In December, China's crude imports fell by 1.1 mb/d, or 12%, from a month earlier to average 8 mb/d, while on an annual basis, crude imports showed a drop of 634 tb/d, or 7%. China's product imports dropped in December to average 1.4 mb/d, a drop of 117 tb/d from a month earlier. However, they were up by 175 tb/d from the same month last year.

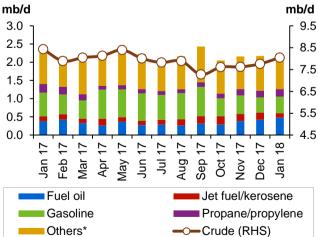
India's crude imports dropped by 11 tb/d in December from the previous month to stand at 4.6 mb/d, while on an annual basis, crude imports reflected a gain of 386 tb/d, or 9%. India's product imports in December dropped on a monthly basis by 33 tb/d, but remained higher by 49 tb/d from a year earlier.

#### US

In January, preliminary data shows that **US crude oil imports** increased to average 8 mb/d, the highest level since May 2017. This figure is up by 286 tb/d from the previous month, although it remains 387 tb/d lower, or 5%, from the same month a year earlier.

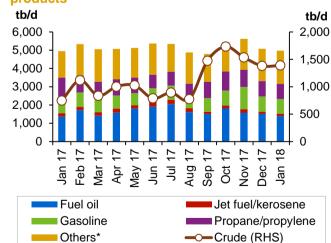
**US products imports** in January declined marginally by 9 tb/d from the previous month, and were 88 tb/d, or 4%, lower than in the same month a year earlier.





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 Secretatiat.

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 Secretatiat.

**US product exports** were 108 tb/d lower in January than in the previous month, to average 5 mb/d. Annually, product exports were higher by 24 tb/d, or 0.5%, compared to a year before.

As a result, **US** total net imports rose in January by 378 tb/d, or 11%, to average 3.9 mb/d. However, they showed a drop of 1.1 mb/d, or 23%, compared to the same month last year.

In November 2017, the **top crude suppliers** to the US maintained the same order as in the previous month. Canada retained its position as the number one crude supplier to the US, accounting for 43% of total US crude imports. Overall, crude imports from Canada were flat compared to the previous month, averaging 3.3 mb/d. Mexico was again the second largest supplier to the US in November. Moreover, it increased the volume of its crude exported to the US by 189 tb/d compared to the previous month. Saudi Arabia came in as the third-largest supplier to the US, accounting for 10% of total US crude imports, increasing its exports to the US by 217 tb/d, or 10%, compared to the previous month.

Total **crude imports from OPEC Member Countries** were lower in November compared to the previous month, down by 98 tb/d, or 3% and accounting for 37% of total US crude imports.

In terms of **US** product imports from **OPEC Member Countries** in November, they were flat compared to the previous month, and 57 tb/d, or 18%, lower than in the same month a year earlier. Canada and Russia maintained their positions as first and second product suppliers to the US, accounting for 31% and 15%, respectively. Canada's product exports to the US rose from the previous month by 72 tb/d, while imports from Russia went down by 13 tb/d from the previous month. Algeria was the third-largest product supplier to the US in November, with a share of 6%, although its exports to the US fell by 24 tb/d compared to the previous month.

Looking into the **import regions** in November, the largest crude imports continue to be sourced from North America, averaging 3.3 mb/d unchanged from a month earlier. Latin America came in second with average imports of 2.2 mb/d and the Middle East came as third region with an average of 1.5 mb/d. Imports from Africa were lower than a month before to average 709 tb/d.

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

	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<i>Chan</i> ge <u>Jan 18/Dec 17</u>
Crude oil	6,089	6,381	6,661	280
Total products	-3,464	-2,906	-2,807	98
Total crude and products	2,625	3,476	3,854	378

Sources: US Energy Information Administration and OPEC Secretariat.

### Japan

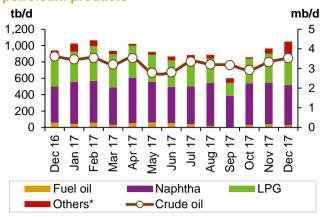
**Japan's crude oil imports** increased in December following a rise in the previous month. Japan's crude imports increased by 200 tb/d, or 6%, m-o-m, to average 3.5 mb/d, nevertheless, crude imports were down by 88 tb/d, or 2.4%, y-o-y. At the same time, Japan's refinery runs increased by 220 tb/d in December from a month earlier.

Looking at **Japan's crude suppliers share**, Saudi Arabia continued being the first crude supplier to Japan in December, holding a share of 40% of the country's total crude imports, up by 195 tb/d from a month before. The UAE came as second-largest supplier to Japan, with a share of 26% or 83 tb/d of total crude imports, and showing a m-o-m increase. Qatar was the third-largest supplier with a share of 7%, albeit with slightly lower exports to Japan than in the previous month.

**Japan's product imports** increased in December by 55 tb/d, or 9% m-o-m to average 666 tb/d, and up by 44 tb/d from last year.

Japan's oil product sales rose in December, up by 11% from a year earlier.

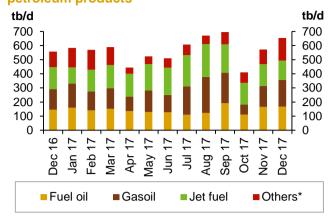
Graph 8 - 3: Japan's imports of crude and petroleum products



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.

Japan's product exports rose by 81 tb/d in December to average 653 tb/d, up by 96 tb/d, or 17%, from the same month a year earlier.

Accordingly, Japan's net imports increased in December by 173 tb/d, to average 3.5 mb/d, the highest since April 2017, however they remain 140 tb/d below the same month a year earlier.

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

	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	Change Dec 17/Nov 17
Crude oil	2,927	3,325	3,525	200
Total products	147	39	12	-27
Total crude and products	3,074	3,364	3,537	173

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

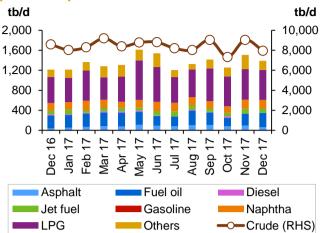
### China

China's crude imports dropped significantly in December from the high level seen in the previous month, plunging by 1.1 mb/d, or 12%, to reach 8 mb/d. At the same time, crude imports show an annual drop of 634 tb/d, or 7%.

China's refinery throughputs declined in December from a month earlier. China's product imports also dropped in December to average 1.4 mb/d, down by 117 tb/d m-o-m from a month earlier, but up by 175 tb/d from the same month in the previous year, mainly on the back of higher imports of naphtha and pet coke.

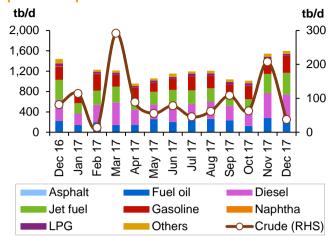
As to the China's crude oil supplier share, Russia, Saudi Arabia and Angola were the top suppliers to China in December, accounting for 15%, 14% and 9%, respectively. Crude imports from Russia and Angola declined from the month before by 61 tb/d and 178 tb/d, respectively, while imports from Saudi Arabia rose by 53 tb/d.





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 stood at 37 tb/d in December, down by 170 tb/d from the high levels seen a month earlier.

China's product exports rose slightly by 53 tb/d in December m-o-m to average 1.6 mb/d.

As a result, China's net oil imports dropped by 1.1 mb/d from the previous month, and by 571 mb/d from the same month a year earlier.

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

Total crude and products	7,504	8,794	7,711	-1,083
Total products	240	-37	-208	-171
Crude oil	7,264	8,831	7,919	-912
	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	Change Dec 17/Nov 17

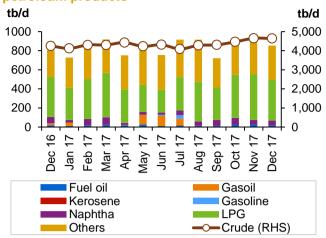
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

### India

In December, **India's crude imports** dropped by 11 tb/d from the previous month to stand at 4.6 mb/d, while crude imports reflected an annual gain of 386 tb/d, or 9%. India's refinery runs increased by almost 50 tb/d in December from the previous month.

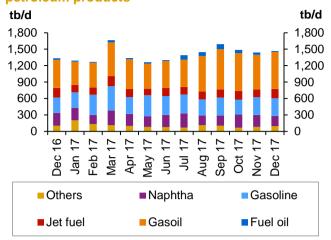
**India's product imports** in December dropped on a monthly basis by 33 tb/d, while remaining higher by 49 tb/d from a year before, partially supported by higher LPG imports in December.

# 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 exports** were up slightly in December by 27 tb/d, or 2% from a month earlier, to average 1.5 mb/d, as they exported higher volumes of diesel.

Consequently, **India's net imports dropped by 71 tb/d to average 4 mb/d**, reflecting a decline of 2% m-o-m, however they remain higher than a year earlier by 302 tb/d.

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

	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	Change Dec 17/Nov 17
Crude oil	4,462	4,648	4,638	-11
Total products	-554	-553	-613	-60
Total crude and products	3,908	4,095	4,024	-71

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 December, total crude oil exports from the Former Soviet Union dropped by 447 tb/d, or 6%, to average 6.7 mb/d. Crude exports through Russian pipelines also declined by 327 tb/d, or 8%, to average 3.8 mb/d.

Total shipments from the **Black Sea** dropped by 221 tb/d, or 30%, to average 508 tb/d, as exports through Novorossiysk port declined. Total **Baltic Sea exports** dipped by 66 tb/d, mainly as shipments from Ust-Luga port terminal dropped by 139 tb/d, however the decline was offset by higher exports through Primorsk terminal. **Druzhba pipeline** total shipment showed almost no change from a month earlier and averaged at 987 tb/d, while shipments from Kozmino dropped by 45 tb/d in December to average 623 tb/d.

Exports through the **Lukoil system** showed a marginal uptick by 2 tb/d in Barents Sea, while they dropped by 7 tb/d in the Baltic Sea. **Russia's Far East total exports** were higher by 34 tb/d, or 11%, from the previous month.

**Black Sea total exports** dipped by 13 tb/d, mainly as supplies from the Supsa port dropped from the previous month. In the **Mediterranean Sea**, BTC supplies decreased by 66 tb/d from a month earlier to average 729 tb/d.

**FSU total products exports** were higher in December than in the previous month by 530 tb/d, or 18%, to average 3.41 mb/d, as all product exports increased, with the exception of gasoline and naphtha.

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

		2017	3Q17	4Q17	Nov 17	Dec 17
Transport system		2011	<u> </u>		<u>110 7 17</u>	<u> </u>
Transneft system Europe	Black sea total	605	573	617	729	508
Europe	Novorossiysk port terminal - total	605	573	617	729	508
	of which: Russian oil	424	403	409	493	329
	Others	181	170	208	235	179
	Baltic sea total	1,516	1,403	1,434	1,371	1,305
	Primorsk port terminal - total	871	801	777	676	748
	of which: Russian oil	871	801	777	676	748
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	645	603	657	695	557
	of which: Russian oil	470	423	478	528	371
	Others	175	180	180	168	185
	Druzhba pipeline total	1,009	1,044	1,018	982	987
	of which: Russian oil	977	1,012	986	950	955
	Others	32	32	32	32	32
Asia	Pacific ocean total	645	638	662	668	623
	Kozmino port terminal - total	645	638	662	668	623
	China (via ESPO pipeline) total	336	339	345	348	348
	China Amur	336	339	345	348	348
Total Russian o	rude exports	4,111	3,997	4,076	4,098	3,771
Lukoil system						
Europe &	Barents sea total	170	159	146	143	145
North America		170	159	146	143	145
Europe	Baltic sea total	13	14	13	19	13
<b>Е</b> шгоро	Kalinigrad port terminal	13	14	13	19	13
	ramigrae port tomma		• •	.0		
Other routes	Describes For Foot total	0.40	005	047	040	044
Asia	Russian Far East total	343	305	317	310	344
	Aniva bay port terminal	127	122	135	148	141
	De Kastri port terminal	216	184	182	162	203
	Central Asia total	<b>262</b> 262	250	285	<b>312</b> 312	<b>242</b> 242
Europo	Kenkiyak-Alashankou  Black sea total		250	285		
Europe	Novorossiysk port terminal (CPC)	<b>1,277</b> 1,194	<b>1,163</b> 1,115	<b>1,374</b> 1,276	<b>1,427</b> 1,317	<b>1,414</b> 1,324
	Supsa port terminal	72	42	90	1,317	82
	Batumi port terminal	11	6	8	9	8
	Kulevi port terminal	0	0	0	0	0
	Mediterranean sea total	707	731	719	795	729
	BTC	707	731	719	795	729
	2.0		701		, 00	, 20
Russian rail		4.0				4.4
	Russian rail	40	36	45	43	41
	of which: Russian oil	40	36	45	43	41
	Others	0	0	0	0	0
Total FSU crud	e exports	6,923	6,655	6,976	7,148	6,701
Products						
	Gasoline	193	184	171	193	184
	Naphtha	549	509	559	611	547
	Jet	35	34	32	26	37
	Gasoil	980	833	881	837	1,058
	Fuel oil	1,025	870	1,012	924	1,234
	VGO	308	286	313	292	353
Total FSU prod	uct exports	3,089	2,715	2,967	2,883	3,413
Total FSU oil exports		10,012	9,370	9,943	10,031	10,114
. J.a Jo on exports		. 0,012	3,370	3,340	. 5,551	. 5,

Sources: Argus Nefte Transport and Argus Global Markets.

### **Stock Movements**

OECD commercial oil stocks fell by 22.9 mb in December to stand at 2,888 mb, which was around 109 mb above the latest five-year average. Crude and products indicated surpluses of 100 mb and 8 mb above the seasonal norm, respectively. In terms of days of forward cover, OECD commercial stocks remained unchanged in December to stand at 61.0 days, which was 1.1 days higher than the latest five-year average.

Preliminary data for January shows that US total commercial oil stocks fell by 20.2 mb, to stand at 1,205 mb. At this level, they were 149 mb lower than the same period a year ago, but 18.5 mb higher than the latest five-year average. Within the components, crude and product stocks fell by 6.1 mb and 14.1 mb m-o-m, respectively.

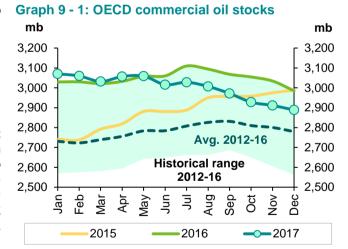
The latest information for China shows that total commercial oil inventories rose sharply by 18.6 mb in December, reversing the fall of the last five consecutive months to settle at 357.7 mb, which was 5.1 mb lower than the previous year. Within components, crude and product stocks rose by 6.4 mb and 12.2 mb m-o-m, respectively.

#### **OECD**

Preliminary data for December shows that **total OECD commercial oil stocks** fell by 22.9 mb for the fifth consecutive month to stand at 2,888 mb, which was around 97 mb lower than the same time a year ago, but 109 mb above the latest five-year average. Within components, crude stocks fell by 23.4 mb, while product stocks rose slightly by 0.5 mb. Within the regions, OECD Americas fell by 15.2 mb, and OECD Europe and OECD Asia Pacific inventories declined m-o-m by 4.0 mb and 3.6 mb, respectively. It should be noted that the overhang has been reduced by 231 mb from January 2017.

OECD commercial **crude stocks** fell by 23.4 mb m-o-m in December for the third consecutive month to stand at 1,448 mb, which was 38 mb lower than the same time a year ago, but 100 mb higher than the latest five-year average. OECD Americas and OECD Europe experienced stock draws m-o-m, while OECD Asia Pacific witnessed a stock build.

In contrast, OECD commercial **product inventories** rose slightly by 0.5 mb m-o-m in December to stand at 1,441 mb, which was 59 mb below the same time a year ago, but 9 mb above the seasonal norm. Within OECD regions, OECD Americas and OECD Europe experienced a stock build m-o-m, while OECD Asia Pacific witnessed a stock draw.



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

In terms of **days of forward cover**, OECD commercial stocks remained almost unchanged in December to stand at 61.0 days, which was 2.5 days below the same period in 2016, but 1.1 days higher than the latest five-year average. Within the regions, OECD Americas had 1.8 more days of forward cover than the historical average to stand at 61.0 days in December. OECD Asia Pacific stood 2.4 days higher than the seasonal average to finish the month at 49.5 days, while OECD Europe indicated a deficit of 1.2 days below the seasonal norm, to stand at 68.0 days in December.

#### **OECD Americas**

**OECD Americas total commercial stocks** fell by 15.2 mb m-o-m in December for the seventh consecutive month to stand at 1,513 mb, which was 85 mb below a year ago, but 74 mb higher than the seasonal norm. Within the components, crude stocks fell by 21.9 mb m-o-m, while product stocks rose by 6.6 mb.

Commercial **crude oil stocks** in OECD Americas fell by 21.9 mb for the seventh consecutive month to stand at 780 mb in December. At this level, they were 43 mb lower than the same period a year ago, but 72 mb higher than the latest five-year average. The fall came on higher refinery crude runs in the US, averaging 17.6 mb/d — 500 tb/d higher than in the previous month. This corresponds to a utilization rate of 95%, 3.2 pp higher than November's rate. Higher US crude imports — reaching 7.8 mb/d in December — limited a further draw in crude oil stocks.

In contrast, commercial **product stocks** in OECD Americas rose by 6.6 mb m-o-m in December, reversing the stock draws of the last two months. At 733 mb, they were 42 mb less than the same time one year ago and 2.0 mb higher than the seasonal norm. Lower demand in OECD Americas, especially in the US, was behind the stock build.

#### **OECD Europe**

**OECD Europe total commercial stocks** fell by 4.0 mb m-o-m in December, ending the month at 949 mb, which was 23 mb lower than the same time a year ago, but 19 mb above the latest five-year average. Crude stocks fell by 5.0 mb m-o-m, while product stocks increased by 1.0 mb.

OECD Europe's commercial **crude stocks** fell in December, ending the month at 412 mb, which was 2.0 mb higher than a year earlier and 16 mb higher than the latest five-year average. This fall in stocks could be attributed to higher refinery throughputs, which increased by around 100 tb/d. Lower OECD Europe supply in December also contributed to the fall in crude oil stocks.

In contrast, OECD Europe's commercial **product stocks** rose by 1.0 mb m-o-m to end December at 537 mb, which is 25 mb below the same time a year ago, but 3.2 mb higher than the seasonal norm. The build in product stocks could be attributed to higher refinery output combined with lower demand in the OECD region.

#### **OECD** Asia Pacific

**OECD Asia Pacific total commercial oil stocks** fell by 3.6 mb m-o-m in December to stand at 426 mb, which was 11.7 mb higher than a year ago, and 15.7 mb higher than the five-year average. Within the components, crude stocks rose by 3.5 mb m-o-m, while product stocks fell by 7.2 mb.

**Crude inventories** ended the month of December at 256 mb, which was 3.0 mb above a year ago and 12.4 mb above the seasonal norm.

OECD Asia Pacific **total product inventories** ended December at 171 mb, standing 8.6 mb higher than the same time a year ago and 3.3 mb higher than the seasonal norm.

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

				Change	
	Oct 17	<b>Nov 17</b>	<u>Dec 17</u>	<b>Dec 17/Nov 17</b>	<b>Dec 16</b>
Crude oil	1,478	1,471	1,448	-23.4	1,486
Products	1,449	1,440	1,441	0.5	1,499
Total	2,928	2,911	2,888	-22.9	2,985
Days of forward cover	61.8	61.0	61.0	0.0	63.5

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 December shows that **total European stocks** fell by 4.0 mb m-o-m, reversing the build of the last two consecutive months to stand at 1,111 mb. At this level, European stocks were 16.7 mb, or 1.5%, lower than the same time a year ago, but 19.9 mb, or 1.8%, higher than the latest five-year average. Within components, crude stocks fell by 5.0 mb m-o-m, while product inventories rose by 1.0 mb.

European **crude inventories** fell in December to stand at 476 mb, which was 3.7 mb, or 0.8%, higher than the same period a year ago. Compared with the seasonal average, they were 5.0 mb, or 1.1%, higher. The fall in crude oil stocks came on the back of higher refinery throughput, which increased by around 250 tb/d in December.

By contrast, European **product stocks** rose by 1.0 mb m-o-m, ending December at 635 mb, which was 20.4 mb, or 3.1%, lower than the same time a year ago, but 14.9 mb, or 2.4%, above the seasonal norm. Within products, the picture was mixed, gasoline and naphtha stocks went up m-o-m, while residual fuel witnessed a stock draw. Distillate stocks remained unchanged.

Graph 9 - 2: EU-15 plus Norway's total oil stocks 1,200 1,200 1,180 1,180 1,160 1,160 1.140 1.140 1,120 1,120 1.100 1.100 1,080 Historical range 1,080 2012-16 1.060 1,060 1,040 1,040 Mar Apr May 8 Dec 2015 2016 2017

Source: Euroilstock.

**Gasoline stocks** rose by 1.0 mb m-o-m in December for the third consecutive month to stand at 115 mb. At this level, stocks were 6.3 mb, or 5.2%, lower than the same time one year ago, but 2.3 mb, or 2.0%, higher than the seasonal norm. This build was driven mainly by lower consumption in the region.

By contrast, **residual fuel oil stocks** fell by 0.9 mb m-o-m in December to stand at 66.4 mb, which is 6.8 mb, or 9.3%, less than the same month a year ago, and 10.9 mb, or 14%, lower than the latest five-year average.

**Distillate stocks** remained unchanged m-o-m to end the month at 427 mb in December, indicating a deficit of 9.0 mb, or 2.1%, with the same time a year ago, but 22.7 mb, or 5.6%, above the latest five-year average. Lower output offset lower domestic demand, leading to flat distillate stocks in November.

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

				Change	
	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	<u>Dec 17/Nov 17</u>	<u>Dec 16</u>
Crude oil	475.5	481.4	476.3	-5.0	472.6
Gasoline	112.5	114.2	115.2	1.0	121.5
Naphtha	25.1	25.1	26.0	0.9	24.2
Middle distillates	429.1	427.2	427.2	0.0	436.2
Fuel oils	66.2	67.3	66.4	-0.9	73.3
Total products	632.9	633.8	634.8	1.0	655.2
Total	1,108.3	1,115.1	1,111.1	-4.0	1,127.8

Sources: Argus and Euroilstock.

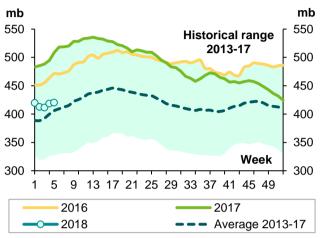
#### US

Preliminary data for January shows that **US total commercial oil stocks** fell by 20.2 mb m-o-m for eight consecutive months to stand at 1,205 mb. At this level, they were 149 mb, or 11%, lower than the same period a year ago, but 18.5 mb, or 1.6%, higher than the latest five-year average. Within the components, crude and product stocks fell by 6.1 mb and 14.1 mb m-o-m, respectively.

US **crude commercial stocks** fell in January, ending the month at 418.4 mb, the lowest level in almost two years. At this level, they are 86 mb, or 17%, below last year at the same time, but 8.2 mb, or 2.0%, above the latest five-year average.

Following 10 consecutive weeks of crude inventory draws that liquidated a cumulative build of around 48 mb, US commercial crude inventories returned to a build at the end of January 2018. This was mainly driven by higher crude oil imports, which increased by 389 tb/d to average 8.4 mb/d the week ending 26 January, combined with a steep decline in refinery crude runs, which fell by 470 tb/d to stand at 16.0 mb/d. However, this build was diminished by a jump in crude exports, which increased by 354 tb/d, to average 1.8 mb/d, the highest level since mid-December. In January, crude inventories in Cushing, Oklahoma, fell sharply by nearly 12.0 mb versus the end of December, ending the month at 37.0 mb.

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



Sources: US Energy Information Administration and OPEC Secretariat.

**Total product stocks** also fell by 14.1 mb m-o-m in January to stand at 786.7 mb. At this level, product stocks were 62.7 mb, or 7.4%, down from the level seen at the same time in 2017, but 10.4 mb, or 1.3%, above the seasonal average. Within products, the picture was mixed; gasoline, residual fuel oil and jet fuel saw a build m-o-m, while distillates and other unfinished products experienced a stock draw.

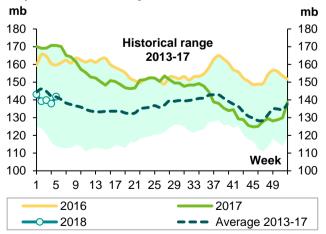
**Gasoline stocks** rose by 8.9 mb m-o-m in January for the third consecutive month to stand at 242 mb. At this level, gasoline stocks were 18 mb, or 6.9%, below a year ago at the same time and 5.1 mb, or 2.1%, below the seasonal norm. This build could be mainly attributed to lower seasonal gasoline demand, which decreased by around 350 tb/d, to average 8.8 mb/d.

**Residual fuel stocks** also increased by 3.3 mb mo-m in January, ending the month at 33.7 mb. At this level, they stood 6.8 mb, or 16.8%, below last year at the same time and 4.6 mb, or 12%, less than the latest five-year average.

**Jet fuel stocks** rose by 1.0 mb m-o-m in January ending the month at 41.6 mb, which is 0.8 mb, or 1.9%, below last year at the same time, but 1.2 mb, or 3.0%, higher than the latest five-year average.

In contrast, **distillate stocks** fell by 0.9 mb m-o-m in January reversing the build of last month. At 137.9 mb, this indicated a deficit of 31.0 mb, or 18.4%, over the same period a year ago, and 3.7 mb, or 2.6%, below the latest five-year average. The drop in distillate stocks came on the back of higher demand, which increased by nearly 120 tb/d in January compared with the previous month. Higher output limited a further drop in distillate stocks.

Graph 9 - 4: US weekly distillate inventories



Sources: US Energy Information Administration and OPEC Secretariat.

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

				Change	
	<u>Nov 17</u>	<u>Dec 17</u>	<u>Jan 18</u>	<u>Jan 18/Dec 17</u>	<u>Jan 17</u>
Crude oil	452.3	424.5	418.4	-6.1	504.5
Gasoline	224.6	233.2	242.1	8.9	260.0
Distillate fuel	132.7	138.8	137.9	-0.9	168.9
Residual fuel oil	31.8	30.4	33.7	3.3	40.5
Jet fuel	41.1	40.6	41.6	1.0	42.4
Total products	808.9	8.008	786.7	-14.1	849.4
Total	1,261.2	1,225.3	1,205.1	-20.2	1,353.9
SPR	661.3	663.7	664.7	0.9	695.1

Sources: US Energy Information Administration and OPEC Secretariat.

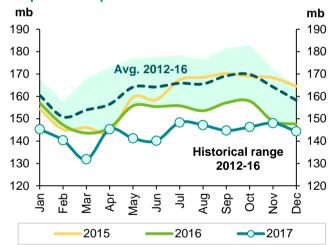
### **Japan**

In **Japan**, **total commercial oil stocks** fell by 3.6 mb m-o-m in December, reversing a build of the last two months to stand at 144.4 mb. At this level, they were 3.2 mb, or 2.1%, less than the same time a year ago and 13.9 mb, or 8.8%, below the five-year average. Within components, crude stocks went up by 3.5 mb m-o-m, while product stocks fell by 7.2 mb.

Japanese commercial **crude oil stocks** rose in December to stand at 87.5 mb, which was 1.2 mb, or 1.4%, below the same period a year ago, and 5.5 mb, or 6.0%, below the seasonal norm. The build was driven by higher crude imports, which increased by nearly 200 tb/d, or 6.0%, to average 3.5 mb/d. However, higher crude throughput limited the build. Indeed, crude throughput rose by around 200 tb/d, or 4.8%, to stand at 3.4 mb/d.

In contrast, Japan's **total product inventories** fell by 7.2 mb m-o-m, ending December at 56.9 mb, which was 1.9 mb, or 3.3%, higher than the same month in the previous year, and 8.4 mb, or 12.8%, lower than the seasonal norm. All products saw a stock draw.

Graph 9 - 5: Japan's commercial oil stocks



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

**Gasoline stocks** fell by 1.5 mb m-o-m in December to stand at 9.4 mb, which was 0.3 mb, or 2.7%, lower than the same time a year ago, and 0.9 mb, or 8.7%, below the latest five-year average. The fall was driven by higher domestic sales, which rose by 9.4% from the previous month. Higher gasoline output limited a further draw in stocks.

**Distillate stocks** also dropped by 3.6 mb in December to stand at 27.1 mb, which was 0.7 mb, or 2.6%, below one year ago at the same time, and 3.5 mb, or 11.6%, below the seasonal average. Within distillate components, jet fuel, kerosene and gasoil stocks fell by 3.6%, 9.8% and 3.8%, respectively. The fall in all components was driven by higher domestic sales.

**Total residual fuel oil stocks** fell by 1.0 mb m-o-m in December to stand at 12.5 mb. At this level, they were 0.9 mb, or 7.0%, below the same period a year ago and 2.5 mb, or 16.6%, less than the latest five-year average. Within fuel oil components, fuel oil A rose by 4.1% on the back of higher output, which increased by nearly 34%, while fuel B.C fell by 12.6% driven by higher domestic sales, which grew by 35%. Higher production limited a further draw in fuel B.C stocks.

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

				Change	
	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	<u>Dec 17/Nov 17</u>	<u>Dec 16</u>
Crude oil	81.4	84.0	87.5	3.5	88.7
Gasoline	10.0	11.0	9.4	-1.5	9.7
Naphtha	8.8	8.9	7.9	-1.0	7.9
Middle distillates	32.8	30.7	27.1	-3.6	27.8
Residual fuel oil	13.3	13.5	12.5	-1.0	13.4
Total products	64.9	64.0	56.9	-7.2	58.8
Total**	146.3	148.0	144.4	-3.6	147.5

Note: \* At the end of the month.

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

#### China

The latest information for **China** shows that **total commercial oil inventories** rose sharply by 18.6 mb m-o-m in December, reversing a fall of the last five consecutive months to reach 357.7 mb, which was 5.1 mb lower than the previous year. Within the components, crude and products stocks rose by 6.4 mb and 12.2 mb, respectively.

In December, commercial **crude stocks** rose to stand at 204.5 mb, which was 17.7 mb below last year at the same time. The build was mainly attributed to higher domestic crude oil output, which increased m-o-m by 1.8% in December. Lower crude oil throughout also supported the build in crude oil commercial stocks. However, lower Chinese crude oil imports limited a further build.

**Total product stocks** in China also rose by 12.2 mb in December to end the month at 153.2 mb, which was 12.6 mb above the same time a year ago. Within products, gasoline and diesel witnessed stock builds, while kerosene remained almost unchanged.

**Gasoline stocks** rose by 3.3 mb m-o-m in December to stand at 74.1 mb, mainly driven by lower gasoline consumption.

**Diesel inventories** increased by 9.0 mb m-o-m, ending December at 60.5 mb. At this level, diesel stocks were 11.5 mb higher than the same time last year. The build could be attributed to lower diesel consumption driven by a cut in infrastructure activities.

**Kerosene stocks** remained almost unchanged in December to stand at 18.5 mb, which was 1.1 mb lower than last year at the same time.

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

				Change	
	Oct 17	<u>Nov 17</u>	<u>Dec 17</u>	<u>Dec 17/Nov 17</u>	<u>Dec 16</u>
Crude oil	204.4	198.1	204.5	6.4	222.3
Gasoline	68.0	70.8	74.1	3.3	71.9
Diesel	58.3	51.6	60.5	9.0	49.1
Jet/Kerosene	18.4	18.6	18.5	-0.1	19.6
Total products	144.6	141.0	153.2	12.2	140.5
Total	349.0	339.1	357.7	18.6	362.8

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

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

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

### **Singapore**

At the end of December, **Singapore product stocks** rose by 0.5 mb m-o-m to stand at 46.6 mb, which was 3.2 mb, or 7.4%, below the same period a year ago. Light distillate and fuel oil stocks experienced builds, while middle distillates witnessed a stock draw in December, compared with November levels.

**Light distillate stocks** and fuel oil stocks rose by 1.8 mb and 0.6 mb m-o-m in December to end the month at 13.5 mb and 23.8 mb, respectively. Light distillate stocks remained 1.1 mb above the same period a year ago, while fuel oil inventories stood 3.2 mb higher than the same period last year. This build could be attributed to more imports in the Singapore hub.

In contrast, **middle distillates** fell in December by 1.8 mb m-o-m, ending the month at 9.3 mb, which was 1.1 mb below a year ago at the same time.

### **Amsterdam-Rotterdam-Antwerp (ARA)**

**ARA product stocks** rose by 1.7 mb m-o-m in December, reversing the drop of the last three months. At 37.8 mb, product stocks were 2.1 mb, or 5.2%, lower than the same time a year ago. Within products, gasoline and fuel oil stocks saw a build, while jet fuel oil and naphtha experienced stock draws. Gasoil stocks remained unchanged.

**Gasoline and fuel oil stocks** rose by 0.9 mb and 1.2 mb m-o-m, to stand at 2.7 mb and 16.6 mb, respectively. Gasoline oil stocks remained 6.2 mb below the same time a year ago, while fuel oil stocks stood at 11.9 mb above last year at the same time. The build in both product stocks could be attributed to lower regional domestic demand.

**Jet oil stocks** fell by 0.3 mb m-o-m in December to stand at 5.9 mb, which was 0.3 mb below last year at the same time.

**Gasoil** stocks remained unchanged m-o-m in December, ending the month at 5.3 mb. At this level, they were 14.1 mb below last year at the same time.

# **Balance of Supply and Demand**

Demand for OPEC crude in 2017 is estimated at 32.8 mb/d, which is 0.6 mb/d higher than the 2016 level.

In 2018, the demand for OPEC crude is projected at 32.9 mb/d, nearly at the same level as in 2017. The fourth quarter is expected to reach almost 34 mb/d.

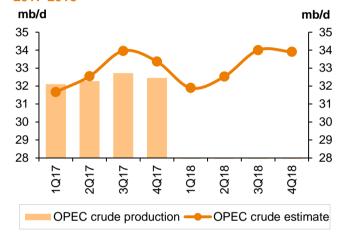
## Balance of supply and demand in 2017

**Demand for OPEC crude for 2017** remained unchanged from the previous month to stand at 32.8 mb/d, representing an increase of 0.6 mb/d from the 2016 level.

Within the quarters, with the exception of 4Q17, 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 are estimated to grow by 0.5 mb/d and 0.3 mb/d, respectively, when compared with the same quarters last year.

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

							Change
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	2017/16
(a) World oil demand	95.42	95.67	96.28	97.79	98.29	97.01	1.60
Non-OPEC supply	57.00	57.83	57.49	57.48	58.63	57.86	0.86
OPEC NGLs and non-conventionals	6.14	6.20	6.26	6.35	6.42	6.31	0.17
(b) Total non-OPEC supply and OPEC NGLs	63.14	64.03	63.74	63.83	65.05	64.16	1.02
Difference (a-b)	32.27	31.64	32.54	33.96	33.24	32.85	0.57
OPEC crude oil production	32.64	32.11	32.28	32.72	32.40	32.38	-0.26
Balance	0.37	0.47	-0.26	-1.24	-0.84	-0.47	-0.84

Note: \* 2017 = Estimate.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

### Balance of supply and demand in 2018

**OPEC crude for 2018** was revised down by 0.2 mb/d from the previous report to stand at 32.9 mb/d, slightly higher than the 2017 level.

Within the quarters, the first and the second quarters were revised down by 0.2 mb/d and 0.4 mb/d, respectively. The third quarter was revised down by 0.3 mb/d, while the fourth quarter remained unchanged from the previous report.

The first quarter is expected to be flat versus the same quarter last year, while the second and the third quarters are expected to fall by 0.4 mb/d and 0.2 mb/d, respectively. The fourth quarter is projected to increase by 0.7 mb/d when compared to the same quarter in 2017.

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

	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	Change 2018/17
(a) World oil demand	97.01	97.23	97.85	99.38	99.92	98.60	1.59
Non-OPEC supply	57.86	59.12	59.26	59.17	59.48	59.26	1.40
OPEC NGLs and non-conventionals	6.31	6.44	6.47	6.50	6.53	6.49	0.18
(b) Total non-OPEC supply and OPEC NGLs	64.16	65.56	65.73	65.67	66.01	65.74	1.58
Difference (a-b)	32.85	31.66	32.12	33.72	33.90	32.86	0.01

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

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>1Q17</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	3Q18	4Q18	<u>2018</u>
World demand													
OECD	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
DCs	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
FSU	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
Other Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	8.0	0.7
China	10.8	11.5	11.8	11.9	12.4	12.3	12.6	12.3	12.3	12.8	12.7	13.0	12.7
(a) Total world demand	92.0	94.0	95.4	95.7	96.3	97.8	98.3	97.0	97.2	97.8	99.4	99.9	98.6
Non-OPEC supply													
OECD	24.3	25.3	24.8	25.4	25.1	25.4	26.4	25.6	26.8	27.1	27.0	27.3	27.1
Americas	20.1	21.1	20.6	21.1	20.9	21.3	22.2	21.4	22.6	22.8	22.9	23.0	22.8
Europe	3.6	3.8	3.8	3.9	3.8	3.7	3.8	3.8	3.8	3.8	3.7	3.9	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
DCs	11.8	12.0	11.9	11.9	11.9	11.9	11.9	11.9	12.0	12.0	12.1	12.0	12.1
FSU	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
Other Europe	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
China	4.3	4.4	4.1	4.0	4.0	3.9	4.0	4.0	3.9	3.9	3.8	3.8	3.9
Processing gains	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
Total non-OPEC supply	56.2	57.7	57.0	57.8	57.5	57.5	58.6	57.9	59.1	59.3	59.2	59.5	59.3
OPEC NGLs +	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
non-conventional oils	5.9	0.0	0.1	0.2	0.3	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5
(b) Total non-OPEC supply and OPEC NGLs	62.1	63.8	63.1	64.0	63.7	63.8	65.0	64.2	65.6	65.7	65.7	66.0	65.7
OPEC crude oil production	<u> </u>				••••		00.0						••••
OPEC crude on production												00.0	
(secondary sources)	30.5	31.7	32.6	32.1	32.3	32.7	32.4	32.4				00.0	
(secondary sources)	30.5	31.7	32.6	32.1	32.3	32.7	32.4	32.4				00.0	
Total supply	30.5 92.6	31.7 95.5	32.6 95.8	32.1 96.1	32.3 96.0	32.7 96.6	32.4 97.4	32.4 96.5				00.0	
Total supply  Balance (stock change and	92.6	95.5	95.8	96.1	96.0	96.6	97.4	96.5				00.0	
Total supply  Balance (stock change and miscellaneous)	92.6											00.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m	92.6 0.6	95.5	95.8	96.1	96.0	96.6	97.4	96.5				00.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m  Commercial	92.6 0.6 <b>b</b> 2,706	95.5 1.5 2,989	95.8 0.4 2,985	96.1 0.5 3,032	96.0 -0.3	96.6 -1.2 2,972	97.4	96.5 -0.5 2,888				30.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m  Commercial  SPR	92.6 0.6 <b>b</b> 2,706 1,582	95.5 1.5 2,989 1,588	95.8 0.4 2,985 1,600	96.1 0.5 3,032 1,600	96.0 -0.3 3,016 1,588	96.6 -1.2 2,972 1,578	97.4 -0.8 2,888 1,566	96.5 -0.5 2,888 1,566				00.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m  Commercial  SPR  Total	92.6 0.6 <b>b</b> 2,706 1,582 <b>4,288</b>	95.5 1.5 2,989 1,588 <b>4,577</b>	95.8 0.4 2,985 1,600 <b>4,585</b>	96.1 0.5 3,032 1,600 <b>4,632</b>	96.0 -0.3 3,016 1,588 <b>4,604</b>	96.6 -1.2 2,972 1,578 <b>4,550</b>	97.4 -0.8 2,888 1,566 <b>4,454</b>	96.5 -0.5 2,888 1,566 <b>4,454</b>				33.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m  Commercial  SPR  Total  Oil-on-water	92.6  0.6  b  2,706 1,582 4,288 924	95.5 1.5 2,989 1,588 <b>4,577</b> 1,017	95.8 0.4 2,985 1,600	96.1 0.5 3,032 1,600	96.0 -0.3 3,016 1,588	96.6 -1.2 2,972 1,578	97.4 -0.8 2,888 1,566	96.5 -0.5 2,888 1,566				33.0	
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m  Commercial  SPR  Total  Oil-on-water  Days of forward consumption	92.6 0.6 b 2,706 1,582 4,288 924 in OEC	95.5  1.5  2,989 1,588 4,577 1,017 D, days	95.8 0.4 2,985 1,600 <b>4,585</b> 1,102	96.1 0.5 3,032 1,600 <b>4,632</b> 1,043	96.0 -0.3 3,016 1,588 <b>4,604</b> 1,052	96.6 -1.2 2,972 1,578 <b>4,550</b> 997	97.4 -0.8 2,888 1,566 <b>4,454</b> 997	96.5 -0.5 2,888 1,566 <b>4,454</b> 997					
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total Oil-on-water  Days of forward consumption Commercial onland stocks	92.6  0.6  2,706 1,582 4,288 924 in OEC 58.3	95.5  1.5  2,989 1,588 4,577 1,017  D, days 63.7	95.8 0.4 2,985 1,600 <b>4,585</b> 1,102 63.0	96.1 0.5 3,032 1,600 <b>4,632</b> 1,043	96.0 -0.3 3,016 1,588 <b>4,604</b> 1,052	96.6  -1.2  2,972 1,578 4,550 997	97.4 -0.8 2,888 1,566 <b>4,454</b> 997	96.5 -0.5 2,888 1,566 <b>4,454</b> 997					
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total Oil-on-water  Days of forward consumption Commercial onland stocks SPR	92.6 0.6 b 2,706 1,582 4,288 924 in OEC 58.3 34.1	95.5  1.5  2,989 1,588 4,577 1,017  D, days 63.7 33.9	95.8 0.4 2,985 1,600 <b>4,585</b> 1,102 63.0 33.8	96.1 0.5 3,032 1,600 <b>4,632</b> 1,043 64.6 34.1	96.0  -0.3  3,016 1,588 4,604 1,052  63.2 33.3	96.6  -1.2  2,972 1,578  4,550 997  62.2 33.0	97.4 -0.8 2,888 1,566 <b>4,454</b> 997 61.0 33.1	96.5 -0.5 2,888 1,566 <b>4,454</b> 997 60.6 32.8					
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total Oil-on-water  Days of forward consumption Commercial onland stocks SPR  Total	92.6  0.6  2,706 1,582 4,288 924 in OEC 58.3	95.5  1.5  2,989 1,588 4,577 1,017  D, days 63.7	95.8 0.4 2,985 1,600 <b>4,585</b> 1,102 63.0	96.1 0.5 3,032 1,600 <b>4,632</b> 1,043	96.0 -0.3 3,016 1,588 <b>4,604</b> 1,052	96.6  -1.2  2,972 1,578 4,550 997	97.4 -0.8 2,888 1,566 <b>4,454</b> 997	96.5 -0.5 2,888 1,566 <b>4,454</b> 997					
Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total Oil-on-water  Days of forward consumption Commercial onland stocks SPR	92.6 0.6 b 2,706 1,582 4,288 924 in OEC 58.3 34.1	95.5  1.5  2,989 1,588 4,577 1,017  D, days 63.7 33.9	95.8 0.4 2,985 1,600 <b>4,585</b> 1,102 63.0 33.8	96.1 0.5 3,032 1,600 <b>4,632</b> 1,043 64.6 34.1	96.0  -0.3  3,016 1,588 4,604 1,052  63.2 33.3	96.6  -1.2  2,972 1,578  4,550 997  62.2 33.0	97.4 -0.8 2,888 1,566 <b>4,454</b> 997 61.0 33.1	96.5 -0.5 2,888 1,566 <b>4,454</b> 997 60.6 32.8	31.7	32.1	33.7	33.9	32.9

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

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

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>1Q17</u>	<u>2Q17</u>	3Q17	<u>4Q17</u>	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	3Q18	<u>4Q18</u>	<u>2018</u>
World demand													
OECD	-	-	-	-	-	-	0.1	-	-	-	-	0.1	0.1
Americas	-	-	-	-	-	-0.1	0.1	-	-	-	-	0.1	-
Europe	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	0.1	-
(a) Total world demand	-	-	_	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1
Non-OPEC supply													
OECD	-	-	-	-	-	-	0.3	0.1	0.2	0.4	0.3	0.1	0.3
Americas	-	-	-	-	-	-	0.3	0.1	0.2	0.4	0.3	0.1	0.2
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	0.2	0.1	0.3	0.5	0.4	0.2	0.3
OPEC NGLs +													
non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	_			_	_	_	0.2	0.1	0.3	0.5	0.4	0.2	0.3
			_				0.2	0.1	0.5	0.5	0.4	0.2	0.5
OPEC crude oil production (secondary sources)							0.1						
Total supply		<u> </u>	_	<u>-</u>		<u>-</u>	<b>-0.1</b> 0.2	0.1					
	-	-	-	-	-	-	0.2	0.1					
Balance (stock change and miscellaneous)	-	-	-	-	-	-	0.1	-					
OECD closing stock levels (mb)	)												
Commercial	-	-	-	-	-	-9	-	-					
SPR	-	-	-		-		-	-					
Total	-	-	_	-	_	-8	-	-					
Oil-on-water	-	-			-								
Days of forward consumption in	n OECD												
Commercial onland stocks	-	-	_	-	-	-	_	_					
SPR	-	-	-		-	-	-	-					
Total	-	-	-	-	-	-	-	-					
Memo items													
(a) - (b)	-	-	-	-	-	-	-0.1	-	-0.2	-0.4	-0.3	_	-0.2

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the January 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>
Closing stock	c levels, mb												
OECD onland	l commercial	2,989	2,985	2,888	2,989	3,021	3,060	3,068	2,985	3,032	3,016	2,972	2,888
	Americas	1,561	1,598	1,513	1,561	1,592	1,611	1,621	1,598	1,608	1,595	1,571	1,513
	Europe	993	972	949	993	1,008	1,011	997	972	1,021	997	967	949
	Asia Pacific	435	414	426	435	421	438	450	414	404	424	433	426
OECD SPR		1,588	1,600	1,566	1,588	1,595	1,592	1,596	1,600	1,600	1,588	1,578	1,566
	Americas	697	697	666	697	697	697	697	697	694	681	676	666
	Europe	475	481	477	475	478	474	477	481	484	484	479	477
	Asia Pacific	416	421	424	416	419	421	421	421	422	423	423	424
OECD total		4,577	4,585	4,454	4,577	4,616	4,652	4,664	4,585	4,632	4,604	4,550	4,454
0_0_ 10111		-,	.,	.,	1,011	.,0.0	.,00_	.,	.,	.,	.,	-,	
Oil-on-water		1,017	1,102	997	1,017	1,055	1,094	1,068	1,102	1,043	1,052	997	997
Oil-on-water	ard consumptio	1,017	1,102	997			<u> </u>					,	
Oil-on-water		1,017	1,102	997			<u> </u>					,	
Oil-on-water  Days of forwa		1,017 n in OEC	1,102 D, days	997	1,017	1,055	1,094	1,068	1,102	1,043	1,052	997	997
Oil-on-water  Days of forwa	l commercial	1,017 n in OEC 64	1,102 D, days 63	997	1,017	1,055	1,094	1,068	1,102	1,043	1,052	997	997
Oil-on-water  Days of forwa	I commercial Americas	1,017 n in OEC 64 63	1,102 D, days 63 65	997 61 61	1,017 64 63	<b>1,055 66</b> 65	<b>1,094 65</b> 64	<b>1,068 65</b> 65	<b>1,102 63</b> 65	<b>65</b>	<b>63</b> 63	<b>997 62</b> 63	<b>997 61</b> 61
Oil-on-water  Days of forwa	Americas Europe	1,017 n in OEC 64 63 73	1,102 D, days 63 65 70	997 61 61 68	1,017 64 63 73	<b>66</b> 65 72	<b>65</b> 64 70	<b>65</b> 65 70	<b>63</b> 65 70	<b>65</b> 64 72	<b>63</b> 63 68	997 62 63 68	<b>997 61</b> 61 68
Oil-on-water  Days of forwa  OECD onland	Americas Europe	1,017 n in OEC 64 63 73 51	1,102 D, days 63 65 70 48	997 61 61 68 50	1,017 64 63 73 51	<b>66</b> 65 72 55	<b>65</b> 64 70 56	<b>65</b> 65 70 54	<b>63</b> 65 70 48	<b>65</b> 64 72 52	<b>63</b> 63 68 54	997 62 63 68 52	997 61 61 68 50
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific	1,017 n in OEC 64 63 73 51 34	1,102 D, days 63 65 70 48 34	997 61 61 68 50 33	1,017 64 63 73 51 34	1,055 66 65 72 55 35	1,094 65 64 70 56 34	1,068 65 65 70 54 34	<b>63</b> 65 70 48 <b>34</b>	1,043 65 64 72 52 34	1,052 63 63 68 54 33	997 62 63 68 52 33	997 61 61 68 50 33
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific  Americas	1,017 n in OEC 64 63 73 51 34 28	1,102 D, days 63 65 70 48 34 28	997 61 61 68 50 33 27	1,017 64 63 73 51 34 28	1,055 66 65 72 55 35 28	1,094 65 64 70 56 34 28	1,068 65 65 70 54 34 28	1,102 63 65 70 48 34 28	1,043 65 64 72 52 34 28	1,052 63 63 68 54 33 27	997 62 63 68 52 33 27	997 61 61 68 50 33 27

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	15.7	15.8	15.7	15.6	1.3
Canada	4.3	4.4	4.5	4.9	4.9	4.8	0.3	5.1	5.0	5.0	5.2	5.1	0.2
Mexico	2.8	2.6	2.5	2.2	2.1	2.2	-0.2	2.1	2.1	2.1	2.1	2.1	-0.1
OECD Americas*	20.1	21.1	20.6	21.3	22.2	21.4	0.8	22.6	22.8	22.9	23.0	22.8	1.4
Norway	1.9	1.9	2.0	1.9	1.9	2.0	0.0	1.9	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	0.7	0.7	0.7	0.7	0.0
OECD Europe	3.6	3.8	3.8	3.7	3.8	3.8	0.0	3.8	3.8	3.7	3.9	3.8	0.0
Australia	0.4	0.4	0.3	0.3	0.3	0.3	0.0	0.3	0.4	0.4	0.4	0.4	0.0
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	0.5	0.5	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Total OECD	24.3	25.3	24.8	25.4	26.4	25.6	0.7	26.8	27.1	27.0	27.3	27.1	1.5
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 Indonesia	0.9	0.9	0.9	0.9 0.9	0.8	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	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
Thailand	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
Vietnam	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.5	0.3	0.0
Asia others	0.3	0.3	0.2	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.2	0.3	0.0
Other Asia	3.6	3.7	3.7	3.6	3.6	3.6	-0.1	3.6	3.6	3.6	3.6	3.6	0.0
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	3.5	3.5	0.2
Colombia	1.0	1.0	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.8	0.8	0.8	0.0
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
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
Latin America	5.0	5.2	5.1	5.2	5.2	5.2	0.1	5.3	5.3	5.4	5.3	5.3	0.1
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
Middle East	1.3	1.3	1.3	1.2	1.2	1.2	0.0	1.3	1.2	1.2	1.2	1.2	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
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	0.6	0.6	0.6	0.6	0.6	0.0
Ghana South Africa	0.1	0.1	0.1	0.2	0.2	0.2	0.1 0.0	0.2	0.2	0.2	0.2	0.2	0.0
Sudans	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa other	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.3	0.2	0.2	0.2	0.2	0.0
Africa	1.8	1.8	1.8	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0
Total DCs	11.8	12.0	11.9	11.9	11.9	11.9	0.0	12.0	12.0	12.1	12.0	12.1	0.2
FSU	13.5	13.7	13.9	13.9	14.1	14.1	0.2	14.0	13.9	13.8	13.9	13.9	<b>-0.1</b>
Russia Kazakhstan	10.7	10.8	11.1 1.6	11.1 1.7	11.1	11.2 1.7	0.1 0.2	11.0	11.0	11.0	11.0	11.0 1.8	-0.2 0.1
Azerbaijan	0.9	0.9	0.8	0.8	0.8	0.8	0.2	0.8	0.8	0.7	0.8	0.8	0.1
FSU others	0.9	0.9	0.4	0.3	0.3	0.4	0.0	0.4	0.4	0.7	0.3	0.4	0.0
	0.1	0.1	0.4	0.1	0.1	0.4		0.1	0.1	0.1	0.1	0.1	0.0
Other Europe							0.0						
China	4.3	4.4	4.1	3.9	4.0	4.0	-0.1	3.9	3.9	3.8	3.8	3.9	-0.1
Non-OPEC production	54.0	55.6	54.8	55.3	56.4	55.7	8.0	56.9	57.0	56.9	57.2	57.0	1.4
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
Non-OPEC supply	56.2	57.7	57.0	57.5	58.6	57.9	0.9	59.1	59.3	59.2	59.5	59.3	1.4
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 (NOL - NOE)	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
OPEC (NGL+NCF)	5.9	6.0	6.1	6.3	6.4	6.3	0.2	6.4	6.5	6.5	6.5	6.5	0.2
Non-OPEC & OPEC (NGL+NCF)	62.4	62.0	62.4	62.0	GE O	64.0	4.0	GE C	6E 7	65.7	66.0	6E 7	4.0
OI LO (NGLTNOF)	62.1	63.8	63.1	63.8	65.0	64.2	1.0	65.6	65.7	65.7	66.0	65.7	1.6

Note: \* OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

				Change							Change
	<u>2015</u>	<u>2016</u>	2017	2017/16	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>Dec 17</u>	<u>Jan 18</u>	Jan/Dec
US	977	509	875	366	739	892	947	921	930	937	7
Canada	192	131	207	76	299	115	208	204	205	279	74
Mexico	52	26	17	-8	17	23	18	12	15	18	3
OECD Americas	1,221	665	1,099	434	1,054	1,030	1,174	1,137	1,150	1,234	84
Norway	17	17	15	-2	14	17	13	15	16	14	-2
UK	14	9	9	0	9	9	11	6	5	5	0
OECD Europe	117	96	92	-4	100	92	88	88	87	84	-3
OECD Asia Pacific	17	7	15	9	14	17	15	16	15	15	0
Total OECD	1,355	768	1,206	438	1,168	1,139	1,277	1,240	1,252	1,333	81
Other Asia*	202	180	186	6	184	182	178	199	202	207	5
Latin America	145	68	70	2	61	62	75	82	83	79	-4
Middle East	102	88	74	-14	74	76	75	70	70	70	0
Africa	29	17	16	-1	15	17	17	15	14	14	0
Total DCs	478	353	346	-7	334	337	346	365	369	370	1
Non-OPEC rig count	1,833	1,121	1,552	431	1,502	1,477	1,622	1,606	1,621	1,703	82
Algeria	51	54	54	0	51	56	54	53	50	50	0
Angola	11	6	3	-4	3	3	2	2	2	1	-1
Ecuador	12	4	6	2	7	8	5	6	5	4	-1
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	2	1
Gabon	4	1	1	0	0	1	1	2	2	2	0
Iran**	54	59	61	2	61	61	61	61	61	61	0
lraq**	52	43	49	6	41	49	54	52	54	56	2
Kuwait**	47	44	54	9	55	55	53	52	53	53	0
Libya**	3	1	1	0	1	1	1	1	1	1	0
Nigeria	30	25	28	3	27	28	27	28	28	31	3
Qatar	8	8	10	2	11	11	10	7	6	6	0
Saudi Arabia	155	156	149	-7	152	150	148	147	142	143	1
UAE	42	51	52	1	50	51	53	53	53	54	1
Venezuela	110	100	91	-9	95	95	89	85	92	90	-2
OPEC rig count	579	552	558	6	554	568	561	550	550	554	4
World rig count***	2,412	1,673	2,110	437	2,056	2,045	2,183	2,156	2,171	2,257	86
of which:											
Oil	1,750	1,189	1,541	352	1,464	1,503	1,608	1,591	1,607	1,685	78
Gas	563	370	466	96	477	441	478	466	468	478	10
Others	100	113	103	-10	115	101	98	98	96	94	-2

Note: \* Other Asia includes Indonesia.

Totals may not add up due to independent rounding.

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

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

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

# **Glossary of Terms**

### **Abbreviations**

b barrels

b/d barrels per day
bp basis points
bb billion barrels
bcf billion cubic feet

cu m cubic metres

mb million barrels

mb/d million barrels per day mmbtu million British thermal units

mn million

m-o-m month-on-month mt metric tonnes

q-o-q quarter-on-quarter

pp percentage points

tb/d thousand barrels per day

tcf trillion cubic feet

y-o-y year-on-year y-t-d year-to-date

### **Acronyms**

ARA Amsterdam-Rotterdam-Antwerp

BoE Bank of England
BoJ Bank of Japan
BOP Balance of payments

BRIC Brazil, Russia, India and China

CAPEX capital expenditures

CCI Consumer Confidence Index

CFTC Commodity Futures Trading Commission

CIF cost, insurance and freight CPI consumer price index

DCs developing countries

DUC drilled, but uncompleted (oil well)

ECB European Central Bank

EIA US Energy Information Administration Emirates NBD Emirates National Bank of Dubai

EMs emerging markets EV electric vehicle

FAI fixed asset investment
FCC fluid catalytic cracking
FDI foreign direct investment
Fed US Federal Reserve
FID final investment decision

FOB free on board

FPSO floating production storage and offloading

FSU Former Soviet Union FX Foreign Exchange

FY fiscal year

GDP gross domestic product GFCF gross fixed capital formation

GoM Gulf of Mexico GTLs gas-to-liquids

HH Henry Hub

HSFO high-sulphur fuel oil

ICE Intercontinental Exchange
IEA International Energy Agency
IMF International Monetary Fund
IOCs international oil companies

IP industrial production

ISM Institute of Supply Management

LIBOR London inter-bank offered rate

LLS Light Louisiana Sweet
LNG liquefied natural gas
LPG liquefied petroleum gas
LR long-range (vessel)
LSFO low-sulphur fuel oil

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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**up 4.79 in January**January 2018 66.85

December 2017 62.06

Year-to-date 66.85

### **January OPEC crude production**

mb/d, according to secondary sources



down 0.08 in January

January 2018

32.30

December 2017

32.31

Economic growth rate								
	World	OECD	US	Japan	Euro-zone	China	India	
2017	3.8	2.5	2.3	1.8	2.5	6.9	6.5	
2018	3.8	2.4	2.7	1.6	2.2	6.5	7.2	

Supply and dema	and				mb/d
2017		17/16	2018		18/17
World demand	97.0	1.6	World demand	98.6	1.6
Non-OPEC supply	57.9	0.9	Non-OPEC supply	59.3	1.4
OPEC NGLs	6.3	0.2	OPEC NGLs	6.5	0.2
Difference	32.8	0.6	Difference	32.9	0.0

OECD commercial stocks							
	Oct 17	Nov 17	Dec 17	Dec 17/ Nov 17	Dec 16		
Crude oil	1,478	1,471	1,448	-23.4	1,486		
Products	1,449	1,440	1,441	0.5	1,499		
Total	2,928	2,911	2,888	-22.9	2,985		
Days of forward cover	61.8	61.0	61.0	0.0	63.5		