OPEC

Monthly Oil Market Report

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Feature article:

Review of global oil demand trend

Organization of the Petroleum Exporting Countries

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket averaged $52.40/b in January, representing a gain of 73¢ over the previous month. NYMEX WTI and ICE Brent also saw gains, increasing by 44¢ and 53¢ to average $52.61/b and $55.45/b, respectively. Production adjustments by OPEC and some non-OPEC producers supported the market, although gains were capped by increased drilling activity in the US. The Brent-WTI spread widened slightly to average $2.84/b in January.

World Economy

Global economic growth expectations remain at 3.0% in 2016 and 3.2% in 2017. OECD growth in 2017 was revised up to 1.9%, following upward adjustments in the Euro-zone and UK. US economic growth remains unchanged at 2.2%. Forecasts for China and India in 2017 also remain unchanged at 6.2% and 7.1%, respectively. Russia's 2017 growth was revised up to 1.0%, while Brazil's growth forecast remains unchanged at 0.4%.

World Oil Demand

World oil demand growth in 2016 is expected to increase by 1.32 mb/d, following an upward adjustment of 70 tb/d to reflect continued better-than-expected consumption in OECD Europe and Asia Pacific. Total oil demand is now estimated to average 94.62 mb/d, taking into account base line adjustments to China of around 0.12 mb/d. In 2017, world oil demand growth is seen to reach 1.19 mb/d, representing an upward revision of 35 tb/d to now average 95.81 mb/d.

World Oil Supply

Non-OPEC oil supply growth in 2016 has been revised up by 50 tb/d to now show a contraction of 0.66 mb/d on higher-than-expected output in 4Q16. In 2017, non-OPEC supply growth has been revised up by 120 tb/d to now show an increase of 240 tb/d, due to a pick up in drilling activities and investment in the US. OPEC NGL production is forecast to grow by 0.15 mb/d in 2017, following growth of 0.15 mb/d in 2016. In January, OPEC production decreased by 890 tb/d, according to secondary sources, to average 32.14 mb/d.

Product Markets and Refining Operations

Product markets in the Atlantic Basin received support in January from the top of the barrel on the back of higher export opportunities in gasoline and naphtha. This, along with the positive performance at the bottom of the barrel, allowed refinery margins to remain healthy. Meanwhile, margins in Asia strengthened on the back of firm regional demand.

Tanker Market

Spot freight rates continued to recover in January, showing general m-o-m improvements across all tanker sectors. Gains were mainly driven by a firmer market in West Africa, the Middle East and the Mediterranean, along with delays due to congestion in the Turkish Straits and severe weather conditions. Freight rates rose in January, despite a general decline in chartering activity.

Stock Movements

Total OECD commercial oil stocks fell in December 2016 to stand at 2,999 mb. At this level, OECD commercial oil stocks are 299 mb above the five-year average. Crude and products showed surpluses of around 216 mb and 83 mb, respectively. In terms of forward cover, OECD commercial stocks stood at 63.9 days, some 5.5 days higher than the five-year average.

Balance of Supply and Demand

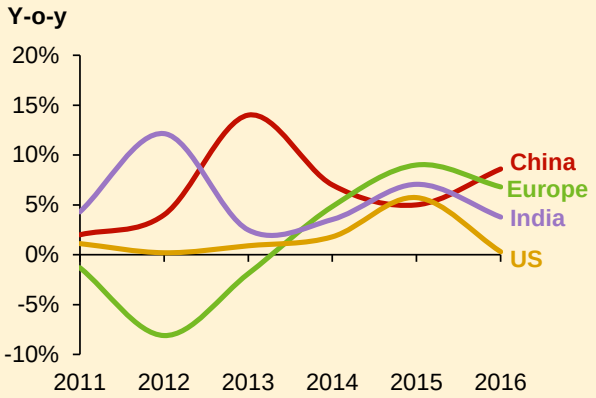
Demand for OPEC crude in 2016 averaged 31.3 mb/d, an increase of 1.8 mb/d over the previous year. In 2017, demand for OPEC crude is projected to average 32.1 mb/d, around 0.8 mb/d higher than last year.

Review of global oil demand trend

World oil demand in 2016 continued its healthy performance for the second year, with growth set to be above 1.3 mb/d. This growth is in line with our initial projection for the year in July 2015. However, revisions were made within the regions with upward adjustment in OECD Europe, OECD Asia Pacific and Other Asia. Oil demand in these regions performed better-than-expected particularly in the petrochemical and transportation sectors. The upward revisions were almost entirely offset by bearish oil consumption momentum in Latin America and Middle East as a result of stagnating economic activities and a high level of fuel substitution with natural gas. In terms of oil products, road transportation fuels – both gasoline and diesel oil – were the largest contributors to 2016 oil demand growth, in line with high vehicle sales in major markets, particularly in Europe and China (***Graph 1***). Petrochemical feedstocks also received an extra push in 2016 as firm petrochemical margins globally as well as start-ups of propane dehydrogenation (PDH) plants in China lent support to the industry.

Graph 1

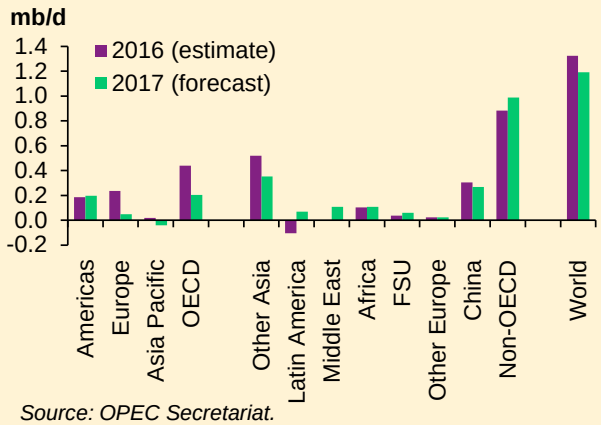
Growth in vehicle sales for selected regions



Source: OPEC Secretariat.

Graph 2

Oil demand growth



Source: OPEC Secretariat.

In 2017, oil demand growth is assumed to remain healthy with potential growth estimated at 1.2 mb/d, well above the ten-year average of 1.0 mb/d (***Graph 2***). Several assumptions have been considered in 2017 projections. Firstly, global economic activities are anticipated to rise by around 3.2% with economic development in the OECD region rising solidly above 2016 levels. Secondly, road transportation is anticipated to continue to be the driving factor for oil demand growth in 2017, primarily as a result of anticipated high vehicle sales in the US, Europe, China and India. Thirdly, the expanding petrochemical sectors in US and China are projected to lend support to petrochemical feedstocks. On the other hand, efficiencies, supported by technological advancements, are forecast to partly hinder increases in transportation sector fuel requirements and to a lesser extent in the residential sector. Potential reductions in subsidies are expected to have a negative impact on oil consumption. Additionally, substitution by other fuels is also accounted for in the 2017 oil demand projections.

In terms of products, transportation fuels are anticipated to lead global growth in 2017 with the bulk of volumes being in the non-OECD. Gasoline consumption is seen contributing 0.51 mb/d to the increase followed by jet/kerosene with 0.15 mb/d and on-road diesel with 0.08 mb/d. However, the projected growth in transportation fuels is expected to be smaller than in 2016, especially in India, where transportation fuels are projected to ease in the second half of the year, primarily as a result of the impact of the government's demonetisation policy and the higher baseline of comparison. Petrochemical feedstock, which includes NGL, LPG and naphtha are projected to rise in both OECD and non-OECD countries with most of growth in non-OECD coming from China and India.

As a result, OECD oil demand is anticipated to increase by around 0.2 mb/d, with OECD Americas and Europe being firmly in the positive, while Asia Pacific is expected to continue to decline. The non-OECD, growth is expected to be around 1.0 mb/d, with Other Asia being the major contributor. Oil demand growth is anticipated to be led by Other Asia followed by China and OECD Americas, while Asia Pacific is the only region expected to be in the negative territory in 2017.

Any better-than-anticipated performance of the global economy together with less crude price volatility will support oil demand helping to accelerate the rebalancing in the oil market to the benefit of both consumers and producers.

Crude Oil Price Movements

The OPEC Reference Basket (ORB) averaged $52.40/b in January, representing of 1.4% and its highest level in more than a year and a half. This compares with a monthly average of $25/b seen in the same month last year.

Crude oil futures prices edged up in January to mark their highest levels since July 2015. A mixture of diverse factors kept oil prices range-bound. Crude futures drew some support from a weaker US dollar and early signs of tightening supplies. In January, ICE Brent averaged 59¢ or 1.1% higher at $55.51/b, while NYMEX WTI increased by 44¢ or 0.8% to average $52.61/b. Compared to the same month last year ICE Brent was a hefty $23.58 or 74% higher at $55.51/b, while NYMEX WTI was $20.83 or 66% higher at $52.61/b.

The ICE Brent/NYMEX WTI spread widened again in January, as further oil stock builds and pipeline disruptions weighed on the US benchmark. Also, increasing US shale oil production had a negative impact on the WTI. The spread widened to average $2.85/b in January.

Net long positions held by hedge funds and other institutional investors hit fresh all-time highs for the second month in a row in January, providing additional fuel to the ongoing steady gains in prices. Speculators increased net long positions significantly in January as indicated by the traders' commitment data from both the ICE and NYMEX exchanges.

All three marker crudes – Brent, WTI and Dubai – reduced their contango structure in January. Further down the curve, the backwardation remained noticeable from 2017 summer onward on expectations for a balanced market.

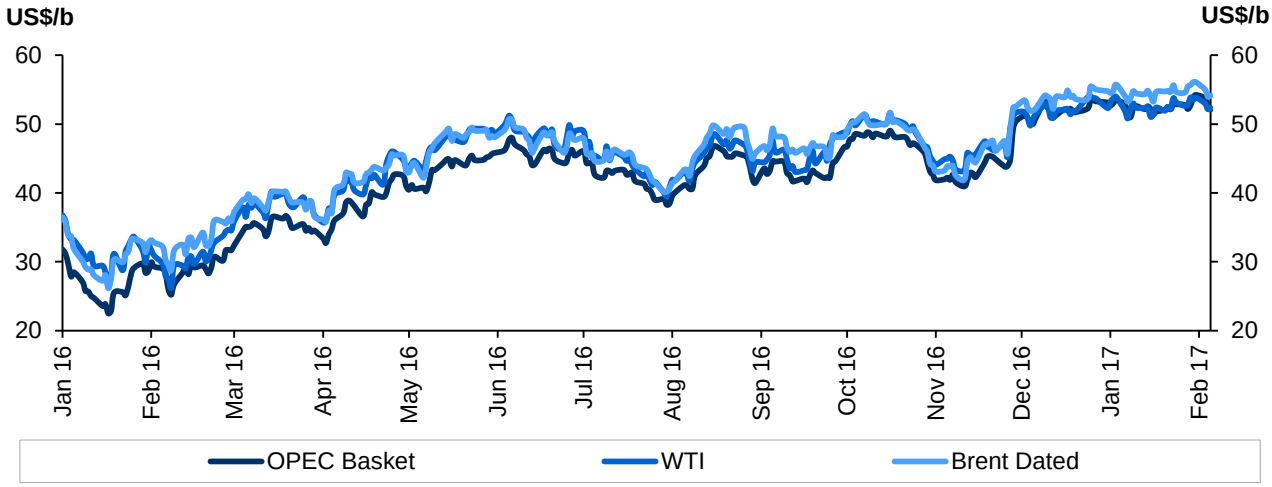
Although sweet/sour differentials were relatively stable in January, sour crudes continued to gain ground. The spread narrowed in Europe and Asia, but remained unchanged in the US Gulf Coast.

OPEC Reference Basket

The ORB started the year twofold higher than in the same month last year, averaging more than $52/b compared to a little above $25/b in January 2016. M-o-m, the ORB ended January less than 1% higher following a significant gain in December.

For most of January, global oil prices were range-bound, buoyed by expected OPEC production adjustments, while pressured by US output growth and crude oil stock builds. Prices throughout the month were supported by production adjustments as well as positive US economic data, a rally in equities, speculative activities, and a softening US dollar. Nevertheless, weak Chinese trade data, concerns about rising US crude production, and ample supply availability in the Atlantic Basin capped the ongoing rebound in oil prices.

Graph 1.1
Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

On a monthly basis, the **ORB value** improved 73¢ or 1.4% in January to average $52.40/b. Year-on-year, the ORB was significantly higher in January, up 98% or $25.90.

Table 1.1
OPEC Reference Basket and selected crudes, *US$/b*

			Change		*Year-to-date*	
	Dec 16	Jan 17	Jan/Dec	%	2016	2017
Basket	**51.67**	**52.40**	**0.73**	**1.4**	**26.50**	**52.40**
Arab Light	51.92	52.29	0.37	0.7	26.35	52.29
Basrah Light	50.87	51.66	0.79	1.6	24.73	51.66
Bonny Light	53.91	54.98	1.07	2.0	30.40	54.98
Es Sider	52.12	53.08	0.96	1.8	29.75	53.08
Girassol	53.41	54.41	1.00	1.9	29.95	54.41
Iran Heavy	51.41	51.90	0.49	1.0	24.07	51.90
Kuwait Export	50.93	51.48	0.55	1.1	23.92	51.48
Qatar Marine	52.08	53.44	1.36	2.6	26.95	53.44
Merey	45.86	46.81	0.95	2.1	20.80	46.81
Murban	54.93	55.97	1.04	1.9	31.57	55.97
Oriente	48.67	48.64	-0.03	-0.1	24.03	48.64
Rabi Light	52.22	53.13	0.91	1.7	29.30	53.13
Sahara Blend	53.82	54.84	1.02	1.9	31.28	54.84
Other Crudes						
Brent	53.57	54.58	1.01	1.9	30.75	54.58
Dubai	52.08	53.71	1.63	3.1	26.81	53.71
Isthmus	53.81	54.98	1.17	2.2	30.03	54.98
LLS	53.53	54.05	0.52	1.0	32.72	54.05
Mars	49.39	49.91	0.52	1.1	27.51	49.91
Minas	49.68	50.63	0.95	1.9	30.80	50.63
Urals	52.28	53.42	1.14	2.2	29.15	53.42
WTI	52.02	52.50	0.48	0.9	31.46	52.50
Differentials						
Brent/WTI	1.55	2.08	0.53	-	-0.71	2.08
Brent/LLS	0.04	0.53	0.49	-	-1.97	0.53
Brent/Dubai	1.49	0.87	-0.62	-	3.94	0.88

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

All ORB component values, except Ecuador's Oriente, improved slightly over the month, in line with their related marker grades. Spot prices for Dated Brent, WTI and Dubai increased in January by $1.01, 48¢ and $1.63, respectively.

Values for the multiple region destination grades – Arab Light, Basrah Light, Iran Heavy and Kuwait Export – increased 55¢ or 1.1% to average $51.83/b in January. The Middle Eastern spot components – Murban and Qatar Marine – saw their values lifted by $1.20/b or 2.3% to $54.71/b. These grades continued to be supported further by the healthy sour crude oil market in Asia and Europe. As for the Latin American ORB components, Venezuelan Merey increased by 95¢ or 2.1% to average $46.81/b, while Ecuador's Oriente was almost unchanged at $48.64/b, down just 3¢ or 0.1%. Combined, the light sweet crudes from West and North Africa – Saharan Blend, Es Sider, Girassol, Bonny Light and Gabon's Rabi – gained 99¢ or 1.9% to $54.09/b.

On 10 February, the ORB stood at $53.23/b, 83¢ above the January average.

The oil futures market

Crude oil futures edged up in January to their highest levels since July 2015. A mixture of diverse factors kept oil prices range-bound in January. Crude futures drew some support from a weaker US dollar and early signs of tightening supplies, supported by the latest OPEC production data which showed a sizable decline in output in December and early January. Yet, gains remained capped on worries over continued excess supply due to a potential rebound in US shale drilling in response to higher prices. The EIA forecasted that US tight oil output in February from major shale basins will rise to 4.75 mb/d, up 41 tb/d from January.

ICE Brent rose by 53¢ or 1.0% in January to average $55.45/b, while **NYMEX WTI** increased 44¢ or 0.8% to average $52.61/b. Compared to January 2016, ICE Brent was a hefty $23.52, or 74%, higher at $55.45/b for the year 2017, while NYMEX WTI surged by $20.83 or 66% to $52.61/b. These are the highest starts of the year since January 2014.

Crude oil futures prices improved in the second week of February. On 10 February, ICE Brent stood at $56.70/b and NYMEX WTI at $53.86/b.

Table 1.2
Crude oil futures, *US$/b*

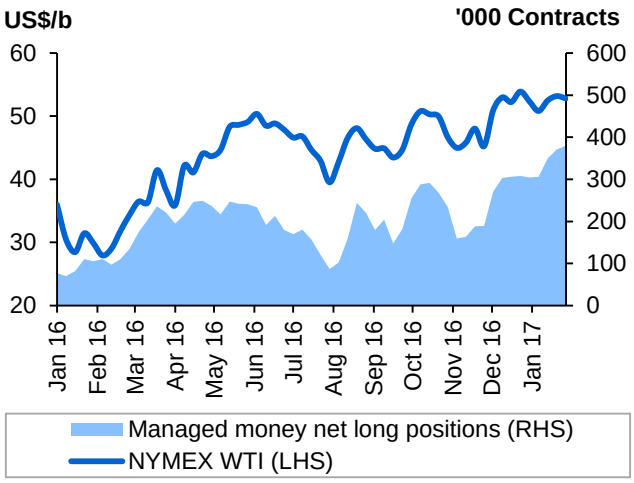
			Change		*Year-to-date*	
	Dec 16	Jan 17	Jan/Dec	%	2016	2017
NYMEX WTI	52.17	52.61	0.44	0.85	31.78	52.61
ICE Brent	54.92	55.45	0.53	0.97	31.93	55.45
Transatlantic spread	**2.75**	**2.84**	**0.09**	**0.12**	**0.15**	**2.84**

Note: Totals may not add up due to independent rounding.
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

Hedge funds and other institutional investors' bets on crude oil prices rising have hit fresh all-time highs for the second month in a row, providing additional fuel to ongoing steady gains in prices. **Speculators** net long positions increased significantly in January as indicated by traders' commitment data from both the ICE and NYMEX exchanges.

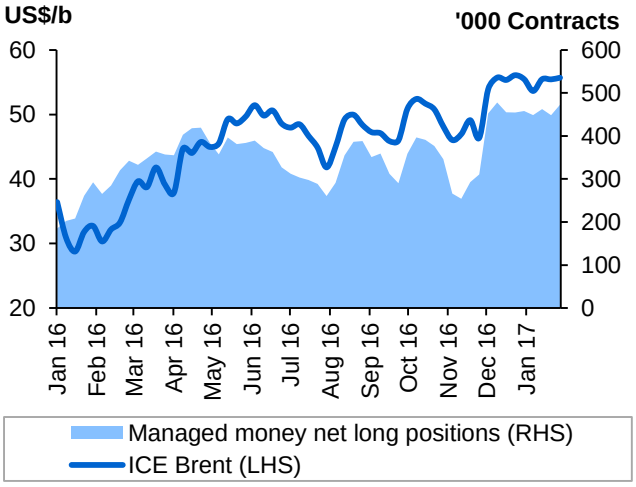
Money managers' net length in NYMEX WTI futures and options crude surged by 72,018 contracts or 23% to 379,927 contracts in the period from end of December to the end of January. In ICE Brent futures and options, speculators increased net long positions by 18,282 contracts, or 4%, to 472,867 lots. The total futures and options open interest volume in the two exchanges also increased by 5.3%, or about 290,000 contracts, to 5.75 million contracts.

Graph 1.2
NYMEX WTI vs. Speculative activity



Sources: CFTC and CME Group.

Graph 1.3
ICE Brent vs. Speculative activity



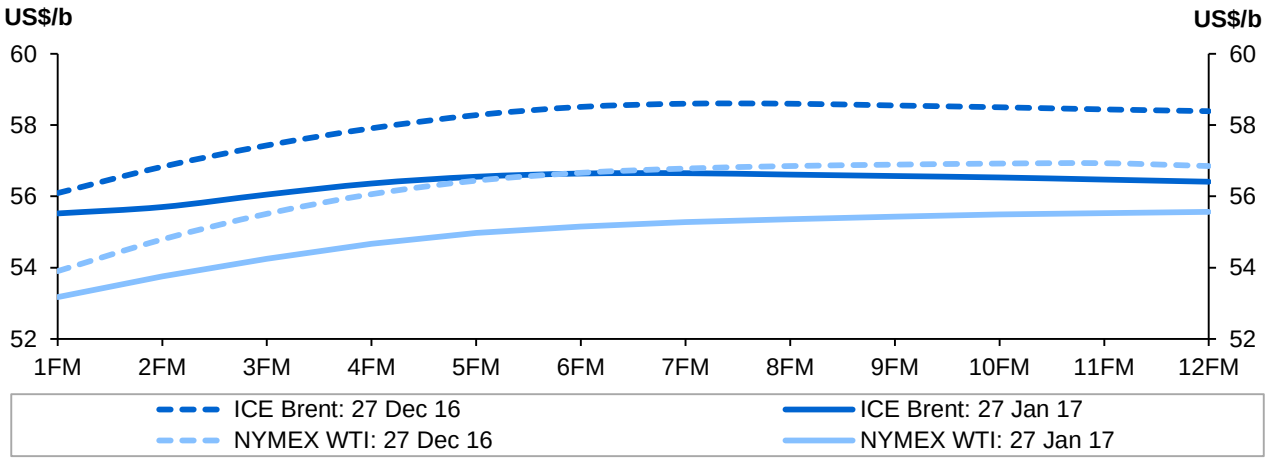
Source: IntercontinentalExchange.

In January the **daily average traded volume** for NYMEX WTI contracts dropped 22,308 lots or 2% to 1,119,643 contracts, while that of ICE Brent was 115,945 contracts or 15% higher at 889,741 lots. The daily aggregate traded volume for both crude oil futures markets increased 93,636 contracts to about 2 million futures contracts, or 2 billion b/d of crude oil. The total traded volume in NYMEX WTI futures in January was lower at 22.39 million contracts, partially due to a holiday, while that of ICE Bent futures increased to 18.68 million contracts.

The futures market structure

In the near-term, the contango structure seen in the Brent, WTI and Dubai futures markets is expected to continue to narrow due the reduced crude oversupply. All three benchmarks reduced their contango by about 35¢/b in January. Meanwhile, further down the futures curve, the backwardation remained noticeable as of summer 2017 onward, when the market is expected to start balancing or when oil inventories might begin to be drawn.

Graph 1.4
NYMEX WTI and ICE Brent forward curves



Note: FM = future month.
Sources: CME Group and Intercontinental Exchange.

In January, the **Dubai** contango eased further on a monthly average basis amid strong Asian demand and lesser sour crude supplies. The Dubai M1 63¢/b discount to M3 decreased to 30¢/b, and was cut in half. The **North Sea Brent** contango also narrowed more amid firm demand and lower supplies. The M1/M3 discount moved in to around 86¢/b on average in January, from $1.22/b in December. In the US, the **WTI** contango eased 37¢/b over the month. The WTI contango (M1-M3) narrowed to $1.51/b.

The **ICE Brent/NYMEX WTI spread** widened again in January as further oil stock builds and pipeline disruptions weighed on the US benchmark. Also, increasing US shale oil production had a negative impact on WTI. In contrast, ICE Brent was affected positively by the expected decline in excess oil supply. The first-month ICE Brent/NYMEX WTI spread widened to $2.85/b in January, up 10¢. This is theoretically in favour of US crude exports, and crude-by-rail in the US could move higher, while it would be against the arbitrage economics of Brent-related crudes such as WAF crudes.

Table 1.3
NYMEX WTI and ICE Brent forward curves, *US$/b*

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	27 Dec 16	53.90	54.79	55.51	56.66	56.85	2.95
	27 Jan 17	53.17	53.75	54.25	55.15	55.56	2.39
	Change	**-0.73**	**-1.04**	**-1.26**	**-1.51**	**-1.29**	**-0.56**
ICE Brent	27 Dec 16	56.09	56.83	57.43	58.51	58.39	2.30
	27 Jan 17	55.52	55.70	56.05	56.64	56.41	0.89
	Change	**-0.57**	**-1.13**	**-1.38**	**-1.87**	**-1.98**	**-1.41**

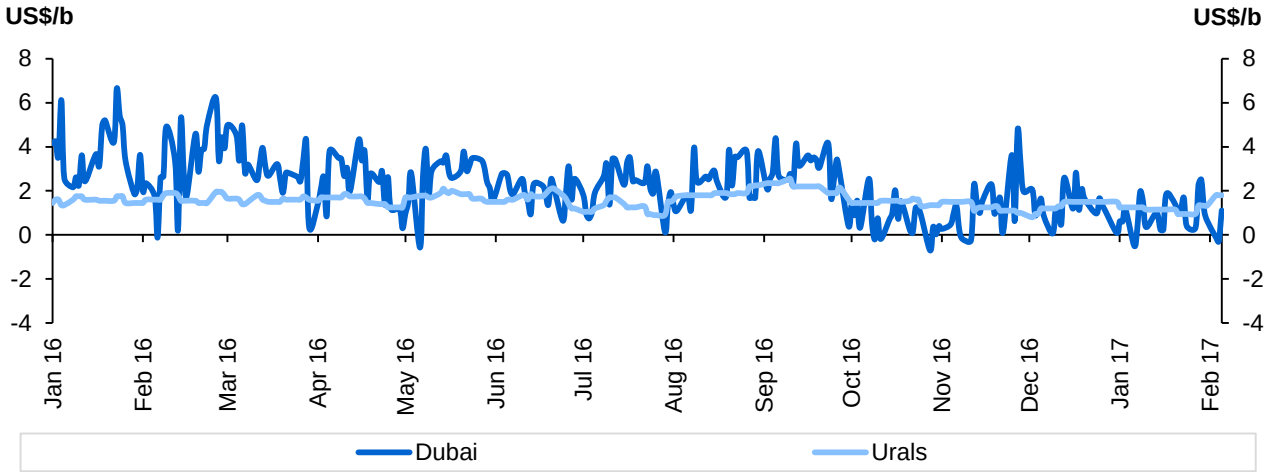
Note: FM = future month.
Sources: CME Group and Intercontinental Exchange.

The light sweet/medium sour crude spread

Although the sweet/sour differentials were relatively stable in January, sour crudes continued to gain ground. In Europe and Asia, the spread narrowed, while in the USGC, it was unchanged.

In **Europe**, the Urals medium sour crude discount to light sweet North Sea Brent narrowed 15¢ at $1.15/b in January. Sour grades in Europe gained support from the decline in availability of light to medium sour grades.

Graph 1.5
Brent Dated vs. sour grades (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, the previous month's widening trend of Tapis/Dubai spread reversed course amid healthy demand for sour crudes. The light sweet crudes are being pressured by the narrowing Brent-Dubai spread, which encourages the arbitrage flow of Bent-related light sweet crudes to the Asia Pacific region. This is despite support for light sweet crudes from healthy regional gasoline and naphtha margins. The Tapis/Dubai spread eased by 65¢ to average $3/b in January. The Dated Brent/Dubai spread also narrowed 62¢ to 87¢/b.

Crude Oil Price Movements

In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars was flat in January at $4.15/b. Furthermore, both grades were supported by the widening of WTI/Brent over the month as it made local crude more attractive compared to imported volumes.

Commodity Markets

Energy commodity prices advanced in January, as oil prices rose while coal and natural gas prices generally declined. In the category of non-energy commodities, agriculture commodities showed a broad-based advance, while base metal increases were led by increases in aluminum and copper. Precious metals prices advanced on lower real interest rates.

Trends in selected commodity markets

Global manufacturing as shown by the JPM global manufacturing PMI, expanded, remaining at a 34-month high of 52.7, supporting the metals group. Meanwhile, real interest rate expectations in the US declined over the month, as market participants waited for further clarity regarding the plans of the new US administration on infrastructure spending and tax reform. The decline in real interest rates weakened the US dollar and supported precious metal and commodity prices in general.

Agricultural prices saw their best performance in the past seven months, with average price increases among the groups of food, beverages and raw materials. The increase in food prices was led by higher grain prices. The US Department of Agriculture assessment of wheat planted for the current crop was around 10% below the previous year's figures – "the second lowest acreage on record" according to the USDA, which together with dry conditions in the main producing areas at the beginning of the month translated into higher prices. Sugar prices jumped, supported by lower estimations of India's sugar output by the country's industry body, India Sugar Mills Association, which were due to effects of the previous year's drought. Natural rubber increased by 12.3% and has advanced to around 40% over the last three months due to increasing demand for tire production in China as well as flooding in some regions of country which is world largest producer.

Base metal price increases were led by aluminium and copper. On the demand side, metals were supported by continuing strength in global manufacturing. China's manufacturing PMI reading of 51.0 also pointed to expansion, although at a lower rate than in the previous month. On the supply side, aluminium prices were supported by reports of potential output restrictions in China. At the same time, copper prices were also supported at the end of the month due to a potential strike at the world's largest mine in Chile. However, a slowdown in Chinese real estate prices is likely to limit the upside potential of metal prices. The price of newly constructed residential buildings advanced in 46 of the 70 largest cities over a m-o-m basis in December, versus 55 of 70 the previous month. Meanwhile, nickel prices declined steeply as Indonesia signalled some relaxation of the ore's export ban.

Energy prices were mixed, with advances in crude oil supported by production adjustments and the lower US dollar. Meanwhile, natural gas declined in the US, as temperatures were warmer than average in the second half of the month, which translated in smaller-than-average withdrawals from underground storage. In Europe, prices declined due to much lower-than-average temperatures. Inventories declined to 41.2% at the end of January versus 64.9% at the end of December. Last year's inventories were at 54.8% of capacity at the end of January. Coal prices declined, as December output in China was the highest for the year following government relaxation of working restrictions for mining operations.

Table 2.1
Commodity price data

Commodity	Unit	Monthly averages			% Change	Year-to-date	
		Nov 16	Dec 16	Jan 17	Jan 17/Dec 16	2016	2017
Energy*		**59.4**	**68.4**	**68.9**	**0.7**	**40.5**	**68.9**
Coal, Australia	US$/mt	100.0	86.3	84.1	-2.6	49.8	84.1
Crude oil, average	US$/b	45.3	52.6	53.6	1.8	29.8	53.6
Natural gas, US	US$/mbtu	2.5	3.6	3.3	-9.0	2.3	3.3
Non-energy*		**83.5**	**83.8**	**85.5**	**2.0**	**74.7**	**85.5**
Agriculture*		**89.9**	**89.4**	**91.4**	**2.2**	**83.5**	**91.4**
Food*		**93.2**	**93.1**	**95.1**	**2.2**	**85.1**	**95.1**
Soybean meal	US$/mt	369.0	365.0	380.3	4.2	333.0	380.3
Soybean oil	US$/mt	880.0	907.0	878.5	-3.1	727.0	878.5
Soybeans	US$/mt	412.0	420.0	425.3	1.3	367.0	425.3
Grains*		**76.0**	**75.9**	**79.0**	**4.1**	**84.3**	**79.0**
Maize	US$/mt	151.8	152.4	160.0	4.9	161.0	160.0
Wheat, US, HRW	US$/mt	150.5	142.0	153.3	8.0	193.3	153.3
Sugar, world	US$/kg	0.4	0.4	0.4	10.0	0.3	0.4
Base metal*		**76.5**	**77.9**	**78.9**	**1.4**	**61.4**	**78.9**
Aluminum	US$/mt	1,737.1	1,727.7	1,790.1	3.6	1,481.1	1,790.1
Copper	US$/mt	5,450.9	5,660.4	5,742.6	1.5	4,471.8	5,742.6
Iron ore, cfr spot	US$/dmtu	73.0	80.0	80.0	0.0	42.0	80.0
Lead	US$/mt	2,180.6	2,209.8	2,236.2	1.2	1,646.2	2,236.2
Nickel	US$/mt	11,128.9	10,972.3	9,975.1	-9.1	8,507.3	9,975.1
Tin	US$/mt	21,126.1	21,204.4	20,737.2	-2.2	13,808.1	20,737.2
Zinc	US$/mt	2,566.2	2,664.8	2,707.9	1.6	1,520.4	2,707.9
Precious metals*		**97.0**	**90.8**	**93.6**	**3.0**	**84.7**	**93.6**
Gold	US$/toz	1,238.4	1,157.4	1,192.1	3.0	1,097.9	1,192.1
Silver	US$/toz	17.4	16.4	16.9	2.9	14.1	16.9

*Note: * World Bank commodity price indices (2010 = 100).*
Source: World Bank, Commodity price data.

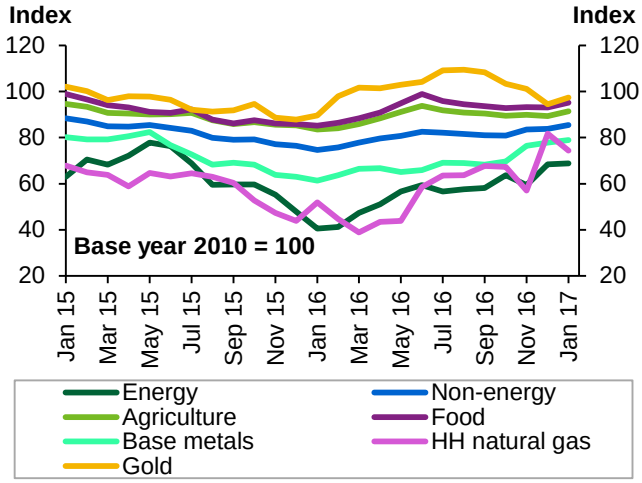
Average energy prices in January increased by 0.7% m-o-m, due to a 1.8% increase in average crude oil prices, while natural gas prices in the US declined by 9.0% m-o-m, and were also down in Europe by 0.7%. Meanwhile, Australian benchmark thermal coal prices decreased by 2.6%.

Agricultural prices advanced by 2.2%, with increases in average food, beverages and raw material prices by 2.2%, 1.6% and 2.5%, respectively. Leading the advances, wheat, sugar and natural rubber prices increased by 8.0%, 10.0% and 12.2%, respectively.

Average base metal prices increased by 1.4%, led by a 3.6% monthly increase in aluminium prices. Average iron ore prices were stable for the month.

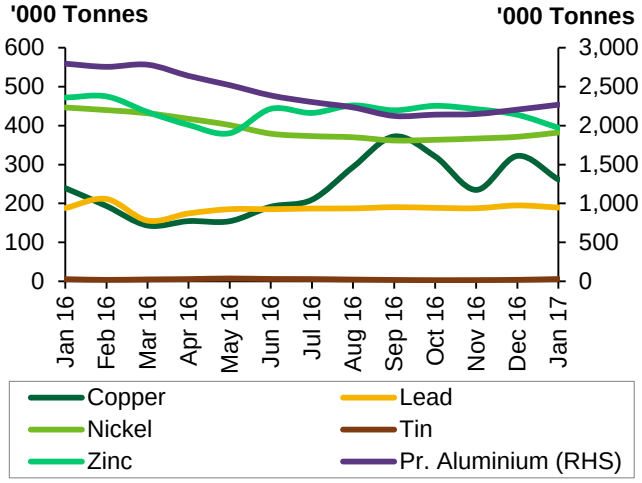
In the group of **precious metals**, gold prices increased by 3.0% on average due to lower interest rate expectations in the US than in the previous month.

Graph 2.1
Major commodity price indices



Source: World Bank, Commodity price data.

Graph 2.2
Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In January, the **Henry Hub natural gas index** declined. The average price was down by 32¢ or 9.0% to $3.26 per million British thermal units (mmbtu) after trading at an average of $3.58/mmbtu in the previous month.

According to the US Energy Information Administration (EIA), utilities withdrew 87 billion cubic feet (bcf) of **working gas in underground storage** during the week ending 27 January. Total working gas in underground storage stood at 2,711 bcf, or 8.9% lower than at the same time in the previous year and 2.2% higher than the previous five-year average. The agency notes that temperatures were warmer than normal during the reported week.

Investment flows into commodities

Open interest volume (OIV) increased in January for selected US commodity markets such as agriculture, crude oil, copper, precious metals, agriculture and livestock, while it decreased for natural gas. Meanwhile, in monthly terms, speculative net length positions increased for agriculture, crude oil, copper and livestock, but declined for natural gas and precious metals.

Table 2.2
CFTC data on non-commercial positions, *'000 contracts*

	Open interest		*Net length*			
	Dec 16	Jan 17	Dec 16	% OIV	Jan 17	% OIV
Crude oil	2,068	2,143	272	13	329	15
Natural gas	1,218	1,194	149	12	147	12
Agriculture	4,905	4,984	292	6	379	8
Precious metals	559	617	104	19	108	18
Copper	233	255	80	34	82	32
Livestock	544	597	128	23	161	27
Total	**9,527**	**9,789**	**1,024**	**108**	**1,208**	**112**

Source: US Commodity Futures Trading Commission.

Agriculture's OIV increased by 1.6% to 4,984,012 contracts in January. Meanwhile, money managers increased net long positions by 30.1% to 379,341 lots, largely because of increasing net length in corn, wheat and the soy complex.

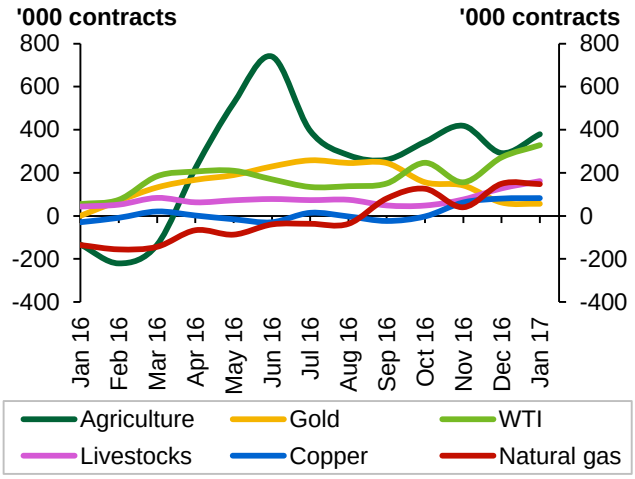
Henry Hub's natural gas OIV decreased by 2.0% m-o-m to 1,193,838 contracts in January. Money managers decreased their net length positions slightly by 1.1% to 147,497 on the impact of warmer-than-average weather.

Copper's OIV increased by 9.2% m-o-m to 254,977 contracts in January. Money managers increased their net long position by 2.6% to 80,303 contracts on the continuing expansion in global manufacturing.

Precious metals' OIV increased by 10.3% m-o-m to 616,554 contracts in January. Money managers increased net long positions by 3.9% to 108,282 lots.

Graph 2.3

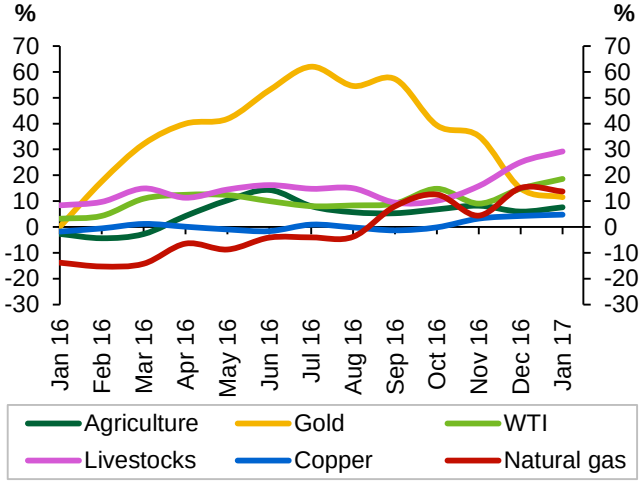
Speculative activity in key commodities, net length



Source: US Commodity Futures Trading Commission.

Graph 2.4

Speculative activity in key commodities, as percentage of open interest



Source: US Commodity Futures Trading Commission.

World Economy

The improving dynamic of the global economy has been confirmed recently and is reflected in the current global economic growth forecast of 3.0% for 2016 and 3.2% for 2017. It is the OECD economies – particularly OECD Europe – that have seen some improvements. Overall, OECD growth in 2017 was revised up from 1.8% to 1.9%. More upside to OECD growth may come from fiscal stimulus in the US, but the magnitude and scope of it remains to be seen. Moreover, a continuation of the rebalancing of the oil market after the historic OPEC/non-OPEC declaration of cooperation in December may support oil producers further and may lead to improvements in economic activity, along with renewed investments.

As for emerging economies, an improving oil sector and sound domestic economic developments have lifted Russian economic growth by 0.1 percentage point (pp) so far in 2017. Russia is now registering growth of 1.0% in the current year. After the removal of large denomination bills in India, which caused some dampening of domestic consumption, growth for 2016 has been revised down again to 7.1%. For the whole of 2017, however, it remains unchanged at 7.1%. The forecasts for Brazil and China also remain unchanged. Brazil is forecast to recover to 0.4% in 2017, after a deep recession of 3.4% in 2016. China continues to enjoy solid growth of 6.2% in 2017, following the 6.7% seen a year earlier.

Among the most important uncertainties for global economic growth, policy issues across the globe bear considerable weight, as do monetary policy decisions, which remain important in the near-term. It is expected that the normalisation of US Federal Reserve (Fed) monetary policy will continue in 2017, given the inflationary support also coming from the ongoing rebalancing of the oil market. This may also apply to other major central banks though a relatively more accommodative stance is expected from some banks, particularly the European Central Bank (ECB) and the Bank of Japan (BoJ).

Table 3.1
Economic growth rate and revision, 2016-2017*, %

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2016	**3.0**	**1.7**	**1.6**	**1.0**	**1.7**	**2.0**	**6.7**	**7.1**	**-3.4**	**-0.5**
Change from previous month	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.0
2017	**3.2**	**1.9**	**2.2**	**1.1**	**1.6**	**1.3**	**6.2**	**7.1**	**0.4**	**1.0**
Change from previous month	0.0	0.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.1

*Note: * 2016 = Estimate and 2017 = Forecast.*
Source: OPEC Secretariat.

OECD

OECD Americas

US

While 4Q16 growth in the US was reported at a lower level than 3Q16, and hence has shown some deceleration, the underlying dynamic in the economy seems to be robust. Industrial production turned positive after many months of decline, mainly due to a considerable decline in oil sector investments. Moreover, the US labour market seems to continue to improve, while consumer sentiment is holding up well. The lead indicators point to a continuation of this trend. With numerous support measures having been announced by the new administration, some upside could be possible, though the details of such initiatives remain to be seen. Moreover, if fiscal stimulus is implemented in the current economic environment, the economy may be faced with some challenges. First, the labour market currently seems to be relatively tight. With a reduction in immigration levels, it could become more expensive for employers to fund additional working hours. This could then have an effect on inflation. In addition, some initiatives like tax adjustments and infrastructure investments will need financing, but it is not yet

entirely clear how this will be achieved. Given the current situation of the economy, it could be likely that such measures lift inflation via various channels. In the end, this may put the Fed under pressure to raise interest rates probably quicker than currently anticipated. At its latest meeting, the Fed pointed out that the path of normalising monetary policies is continuing, though it did not raise interest rates at the meeting. Also, inflation expectations in the meantime have come down somewhat, as it seems that the envisaged implementation of reforms will take longer than expected. This could, in turn, give the Fed more time to raise interest rates in a more gradual manner.

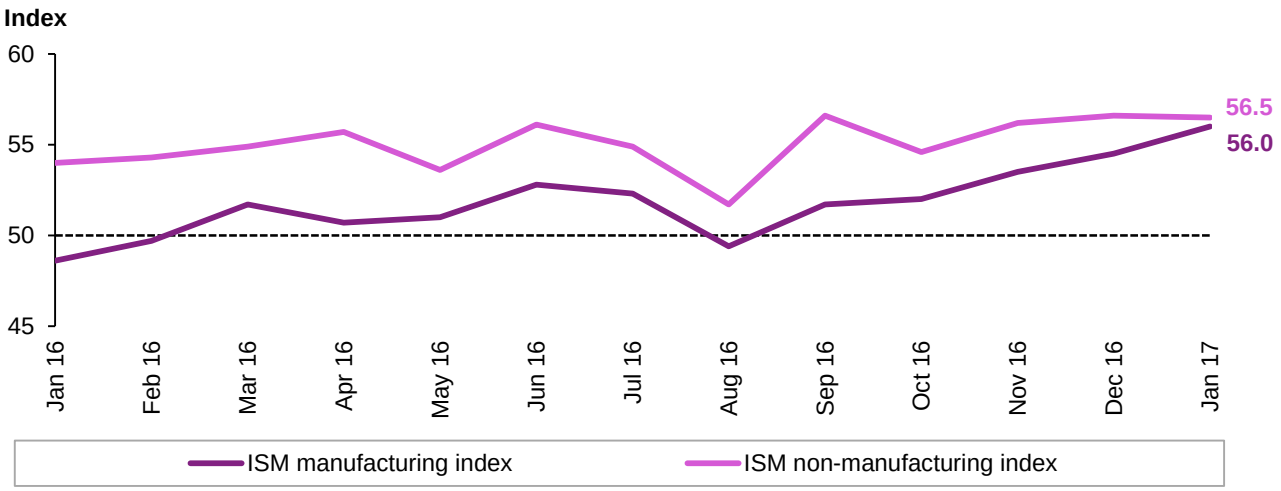
GDP growth in **4Q16** was reported to be slightly lower than 3Q16 GDP. In the first of three estimates, it stood at 1.9% q-o-q on a seasonally adjusted annualised rate (SAAR). While this is lower than in 3Q16, private household consumption held up well, rising by 2.5% in 4Q16, compared to 3.0% q-o-q SAAR in 3Q16. Moreover, private investment also grew by 10.7% q-o-q SAAR. Exports have weakened after significantly expanding by 10.0% q-o-q SAAR in 3Q16, while the 4Q16 number has shown a decline of 4.3% q-o-q SAAR, impacted by the strength of the US dollar. So far, as long productivity does not pick up significantly or structural changes in the economy materialise, this pattern of around 2% growth on an annualised base is not expected to change considerably and it provides a guideline for future growth – particularly when considering an already relatively tight labour market.

The positive momentum of the **labour market** continued in the latest January readings, though improvements materialised at a slightly slower pace. This somewhat slowing pace was also an important reason for the Fed not to raise interest rates in its last meeting. The unemployment rate increased slightly to 4.8% in December, while non-farm payroll additions rose by 227,000 in January, after 157,000 in December. Average hourly earnings did not improve or reach the same level as in previous months, falling back to a lower rise of 2.2% in January, after a significant increase of 2.9% y-o-y in December.

Industrial production improved, supported by a better situation in the energy sector, rising by 0.5% y-o-y in December after contracting for more than a year and compared to a decline of 0.7% y-o-y in October. Mining, which includes oil sector related output, fell by the lowest rate since mid-2016, declining by 2.7% y-o-y, which translates into a monthly increase of 0.1%.

The positive trend in private household consumption was supported considerably by the latest retail sales numbers. **Retail sales** growth in December stood at 4.1% y-o-y, even higher than the already strong November level of 3.9% y-o-y. This positive trend was also visible in the Conference Board's Consumer Confidence Index, which retraced slightly in January to a level of 111.8 but remained at a considerable level. It was slightly lower than the December level of 113.7, which was the highest level since 2007, giving a strong indication that economic conditions have been improving.

Graph 3.1
Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

July's **Purchasing Manager's Index** (PMI) for the manufacturing sector as provided by the Institute of Supply Management (ISM) also indicated improvements in the underlying economy. The manufacturing PMI moved higher to reach 56.0 in January, compared to 54.5 in December. The important services sector index remained almost unchanged at an elevated level of 56.5 compared to 56.6 in December.

After GDP growth of 1.6% in 2016, which was significantly impacted by low growth in 1Q16, the positive growth dynamic of the past months is expected to carry over into 2017. Signs have appeared that the momentum will lead to higher growth in the current year. This was already anticipated in the previous month, so the **GDP growth forecast** remains unchanged at 2.2%. More data over the coming months, as well as better insights into the fiscal stimulus plans of the incoming administration, will provide a sounder overview for a more detailed assessment of the situation of the US economy.

Canada

The economy of Canada continues to improve slightly, supported by improvements in the oil sector and a better situation in the US, its most important trading partner. Industrial production increased by 1.6% y-o-y in November, slightly lower than the October growth of 2.2% y-o-y. Output from the mining, oil and gas sector remained an important driver, with overall sector growth of 3.4% y-o-y, compared to also considerable growth of 4.1% in October. Importantly, the PMI for manufacturing improved, rising rose to 53.5 in January, compared to a December number of 51.9. The GDP growth forecasts for both 2016 and 2017 remain unchanged at 1.3% and 1.7%, respectively.

OECD Asia Pacific

Japan

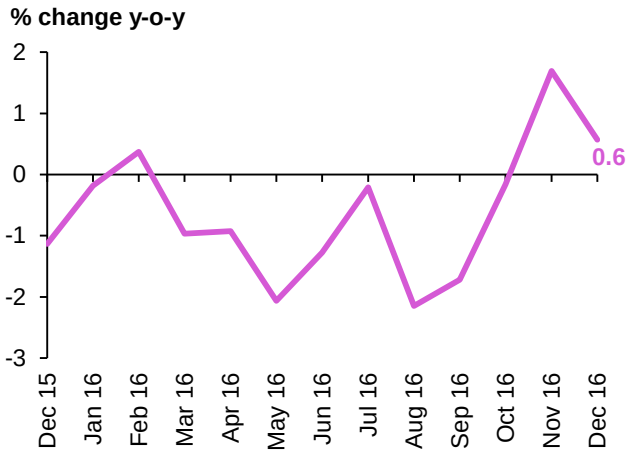
The Japanese economy continues to experience good **growth momentum** after a period of declining indicators in past months. It remains to be seen if the momentum continues and is sustainable. But the combination of a low yen and improving OECD-supported exports, as well as monetary and fiscal stimulus, has lifted the country's domestic consumption. It seems the economy has gained some momentum and the coming months will show if this will be a sustainable trend. Inflation is still low but is likely to increase in the coming months, not only due to rising commodity prices but also supported by a considerable tightness in the labour market, which should lead to rising wages. With the still low inflation rate, the BoJ will also be in a position to continue providing monetary support.

Inflation rose only slightly in December by 0.3%, falling back from its November level when it stood at 0.5%. Given the strengthening of commodity prices in previous months, this trend may continue. However, when excluding the two volatile groups of energy and food, the country's core inflation figure stood at 0% in December compared to 0.1% in November. Positively, real income continued to rise with pay increases in December of 0.8% y-o-y, the same level as in November. The rising income pattern is also the outcome of a very low unemployment rate, which stood at only 3.1% in December, the same level as in November.

Japanese exports rose in December by 5.4% y-o-y, after more than a year of decline. This dynamic has been supported by the fall in the value of the yen and by improvements in the economies of the OECD. The export of industrial goods and capital equipment recovered sharply. Also, **industrial production** continued its recovery and rose for the fifth consecutive month, up by 4.7% y-o-y in November, the strongest rise in almost three years. This was also supported by a strong trend in manufacturing orders, which rose by 16.4% y-o-y in November and 11.3% y-o-y in December, pointing to the likelihood of continued rising industrial output.

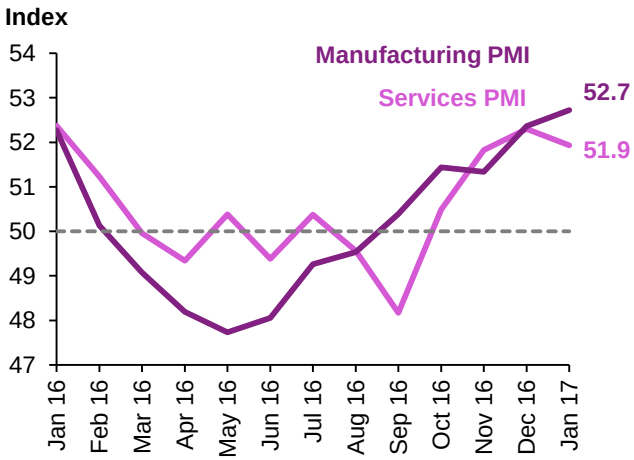
The improving environment has also been reflected in **domestic demand** levels**.** Retail trade had already recovered in November, when it rose by 1.7%, and continued to rise in December at a rate of 0.6% y-o-y after almost a year of decline.

Graph 3.2
Japanese retail trade



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

Graph 3.3
Japanese PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

The **latest PMI numbers** provided by IHS Markit also confirmed ongoing economic improvements. The PMI for manufacturing rose to 52.7 in January from 52.4 in December. The services sector PMI remained at a strong level but retraced slightly to 51.9 from 52.3 in December.

The most recent improvements provide an encouraging sign and point to the upside potential of **Japanese growth**. Numerous challenges persist and it remains to be seen to what extent the current improvements in the global economy, and the ongoing stimulus measures by the BoJ, will be able to lift growth above current forecast levels. For this month, the economic forecast remains unchanged at 1.0% for 2016 and 1.1% for 2017.

South Korea

The South Korean economy seems to have weathered the latest political turbulence relatively well. Exports rose significantly in January by 9.1%, even higher than the already strong y-o-y growth levels seen in November and December of 3.2% and 7.6%, respectively. Industrial production rose by 3.3% y-o-y in December but was lower than the 4.9% y-o-y seen in November. However, the latest PMI number for the manufacturing sector in November still indicates declining momentum in the manufacturing sector. The index fell back to 49.0 in January, after 49.4 in December, indicating a slight contraction. While near-term developments warrant close monitoring, the GDP growth forecast for this month remains unchanged at 2.6% for 2016 and 2.5% for 2017.

OECD Europe

Euro-zone

The Euro-zone's expansion continues to grow at a solid pace. Most recent indicators, including the **4Q16 GDP** growth figures, have pointed to a rising growth trend. Positively, 4Q16 GDP growth was confirmed at a 0.5% q-o-q seasonally adjusted growth rate, up from 3Q16 when it stood at 0.4%. Therefore, GDP growth in 2016 stood at 1.7% and is hence higher than 2016 growth in the US of 1.6%. Growth seems to still be supported by healthy domestic demand, while exports are benefitting from a relatively weak euro. The current growth dynamic seems to be quite broad-based. Some challenges remain but, so far, the Euro-zone has managed to weather those relatively well. Upcoming elections in key economies could add some uncertainty but, so far, even UK's decision to leave the European Union (EU) has not resulted in any significant slow-down, despite the rising uncertainties that it represents for consumers and investors. The most recent momentum, in combination with a weaker euro, has also led to higher inflation. Hence, it remains to be seen how the ECB will proceed with its monetary stimulus, since it seems to carry less weight in the current economic environment. But given the still relatively low core inflation rate, it seems unlikely that the ECB will significantly reduce its monetary stimulus anytime soon, especially since growth could still benefit from more support and given the fact that expectations of sharply rising inflation have somewhat been reduced. Negatively, the

sovereign debt situation of Greece seems to have gained complexity again with differing views between the IMF, the EU and Greece itself about how to proceed.

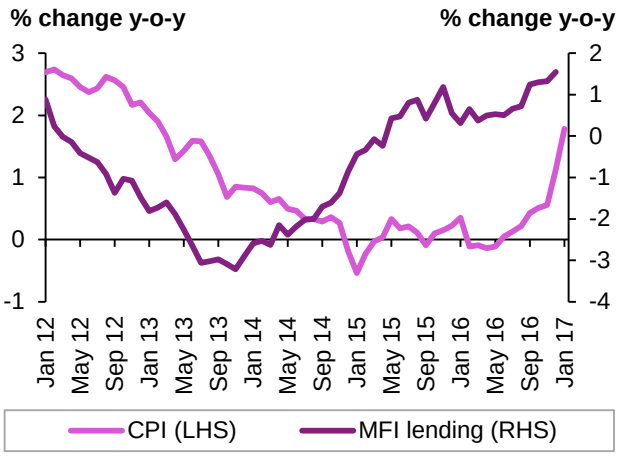
The **unemployment rate** declined again to 9.6% in December and has now remained below 10% for three consecutive months. Additionally, banking sector-related weakness seems to have abated to some extent, while in Italy challenges remain, with capital needs for some of the large institutions. Also, the looming exit of the UK from the EU is again adding some concern. With upcoming elections in the Netherlands, Italy, France and Germany, the overall economic situation will continue to be potentially influenced by political developments.

The latest **industrial production** figures have confirmed that the business environment remains in expansionary territory. After a growth of only 0.8% y-o-y in October, November's appreciation stood at a considerable 3.0% y-o-y. Manufacturing growth stood at a firm 2.7%. Retail sales growth in value terms increased as well, rising by 2.2% y-o-y in December after seeing 2.7% in November. This has signalled ongoing improvements in the underlying economy. Some support may still come from slight improvements in the labour market.

Following the latest rounds of **ECB stimulus,** and supported by an adjustment in oil prices, inflation increased to a healthier level of 1.8% y-o-y in January, after reaching 1.1% y-o-y in the previous month. Core inflation – that is, the **consumer price index** (CPI), excluding energy, tobacco and food − stood at 0.9% y-o-y, the same level as a month earlier. This **inflationary dynamic** will remain an area that the ECB will consider closely during its upcoming monetary policy decision-making meeting. But given a still muted core inflation rate, its current stimulus measures are expected to continue for a while. The effectiveness of monetary stimulus – not only in terms of inflation but also in terms of credit supply – has increased lately. In December, credit supply increased by 1.6% y-o-y, the fourth consecutive month with growth higher than 1%, after recovering from levels below 1% for all of 2016 prior to September.

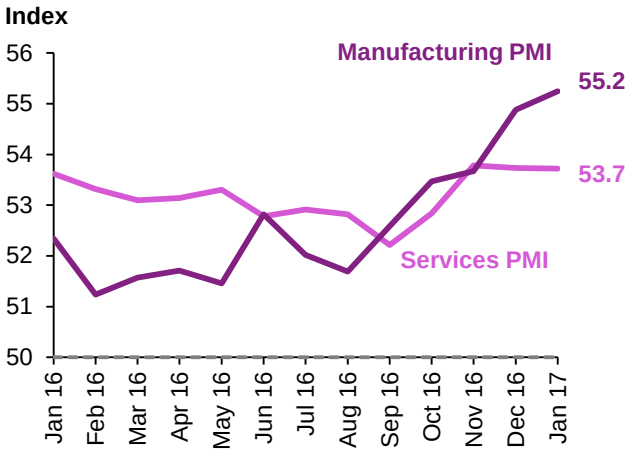
The latest **PMI indicators** point to a continuation in Euro-zone improvements as well. The manufacturing PMI rose to 55.2 in January, compared to 54.9 in December. The important services PMI was unchanged and remained at the high level of 53.7 in January.

Graph 3.4
Euro-zone CPI and lending activity



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

Graph 3.5
Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

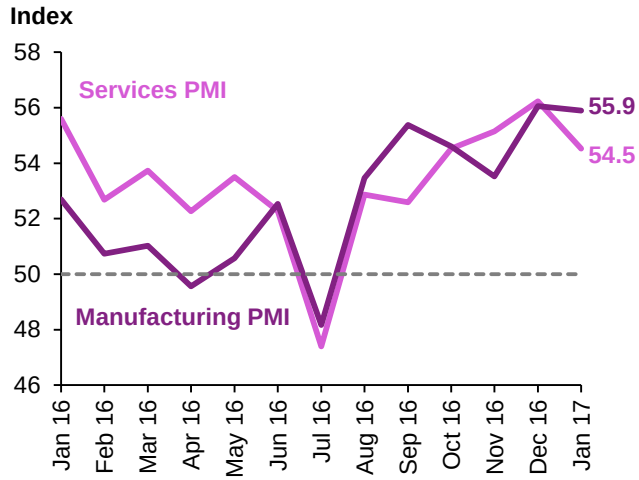
Supported by ongoing improvements, the **2017 GDP growth forecast** for the Euro-zone was revised up slightly to 1.6% from 1.4% last month. This growth level is slightly below 2016 growth, which has now been confirmed at 1.7%, which is higher than last month's estimate of 1.6%. The lower level of growth in the current year anticipates the potential challenges posed by political developments in 2017, given key elections in France and Germany, and probably Italy, as well as the vagueness about Brexit procedures, which may all lead to rising uncertainty. This is to be seen in combination with the likelihood of rising inflation and, hence, a potential reduction in monetary stimulus.

UK

UK's efforts to leave the EU have gained some traction lately. After the Supreme Court in the UK ruled to include the parliament in the debate about how to follow through on exit procedures in March, the situation has become clearer. The House of Commons has now voted in support of the government and it is now likely that formal exit negotiations will start in March. It still remains unclear how such a separation will be processed, given the complex interconnections of the UK with the EU, but the government has made it clear that it intends to pursue a "hard" rather than a "soft" exit. In the meantime, the decision to exit the EU has received support from the country's positive 2016 economic performance, which was better than expected with robust developments during the second half. Not only did exports benefit from a weaker British pound, but domestic consumption also held up well. However, uncertainty will remain for the coming months. This is expected to negatively impact the economic developments of the UK in 2017. Further procedures for Scotland remain unclear. Given the latest developments, a so-called "hard exit" now seems relatively likely, contrary to an initially expected "soft exit", which would have allowed the UK to continue with most of its existing trade agreements with the EU.

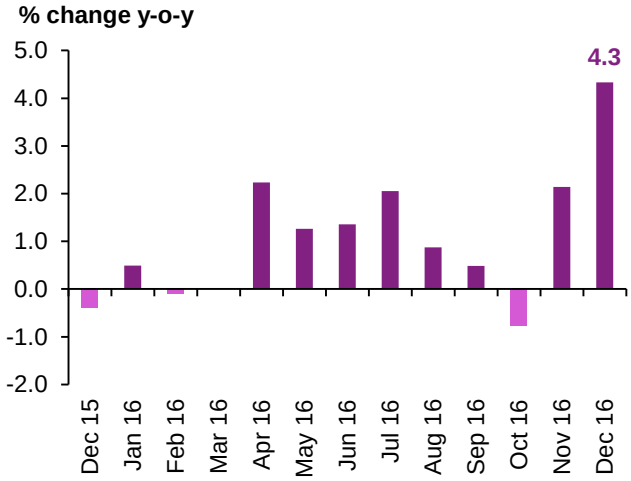
UK's economy has been impacted only slightly by Brexit so far and has remained robust. But early signs of some slow-down have emerged. The **PMI for manufacturing** remained at a considerable level and stood at 55.9, only slightly lower than the 56.1 in December. Positively – and probably even more important for economic growth in the UK – the **services sector PMI** fell back to 54.5 in January, after 56.2 in December. This was the lowest reading in four months. **Domestic consumption** held up very well as retail values increased by 5.4% y-o-y in December, only slightly below the 5.9% y-o-y in November and after an already considerable rise of 6.4% in October. This better-than-expected post-Brexit development led to GDP growth of 2.0% for 2016. The 2017 growth forecast was revised up by 0.3 pp to 1.4% from 1.1% in the previous month. Nevertheless, the underlying assumption of a severe negative impact of the Brexit on the UK economy in the short-term has not changed. But it seems that the fallout will spread over a longer time horizon and may be counterbalanced by governmental support, at least to some extent.

Graph 3.6
UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

Graph 3.7
UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Non-OECD

BRICs

Table 3.2
Summary of macroeconomic performance of BRIC countries, 2016-2017*

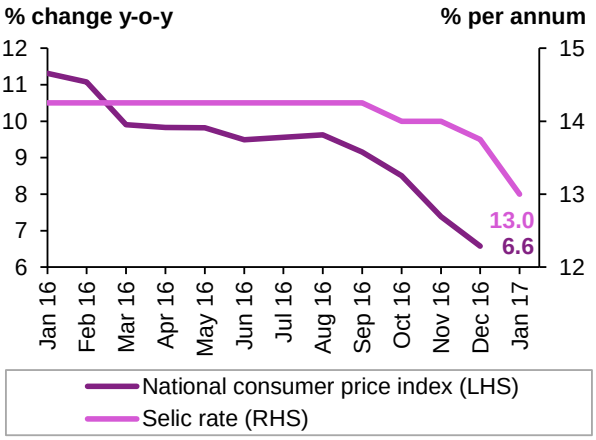
	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Brazil	-3.4	0.4	8.7	5.0	-22.0	-20.0	-6.3	-6.7	71.5	79.2
Russia	-0.5	1.0	7.0	5.4	22.0	58.0	-3.6	-2.6	10.1	12.1
India	7.1	7.1	5.0	5.1	-9.0	-13.0	-3.8	-3.5	51.6	51.3
China	6.7	6.2	2.1	2.0	261.0	203.0	-3.8	-4.3	20.0	24.7

*Note: * 2016 = Estimate and 2017 = Forecast.*
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

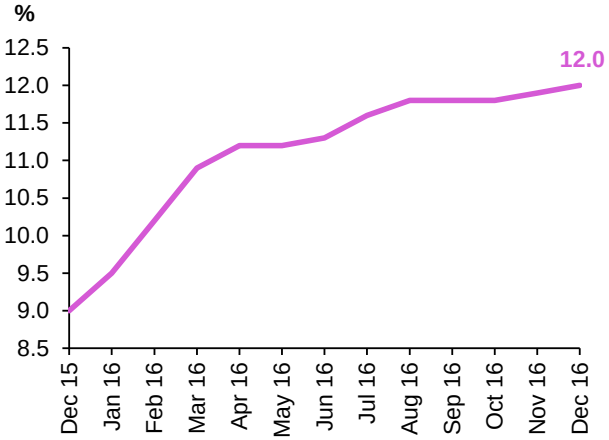
Brazil's trade surplus increased in January 2017 to $2.7 billion, up from $0.9 billion a year earlier. This highlights the biggest trade surplus at the beginning of a year since 2006. While **imports** increased 18% y-o-y in January, **exports** rose by 32.6% as exports to China increased 74.3% y-o-y on higher demand for iron ore and soybeans. The economic activity indicator published by Brazil's central bank showed a decline in **GDP** of 2.1% y-o-y in November 2016. The decline eased during the first three quarters of 2016, contracting by 5.4%, 3.6% and 2.9% in 1Q16, 2Q16 and 3Q16, respectively. The Brazilian **real** appreciated 4.6% m-o-m in January. Consumer price **inflation** dropped to less than 7% in December 2016 for the first time since December 2014. Inflation posted a 6.6% y-o-y increase in December from 7.4% a month earlier. This left some room for the central bank to reduce its high **interest rate** from 13.75% to 13.00%. The **unemployment rate** increased in December to another record-high level of 12.0%.

Graph 3.8
Brazilian inflation vs. interest rate



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

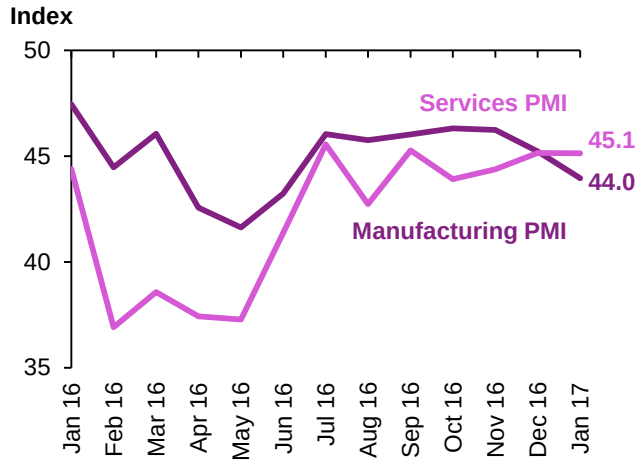
Graph 3.9
Brazilian unemployment rate



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

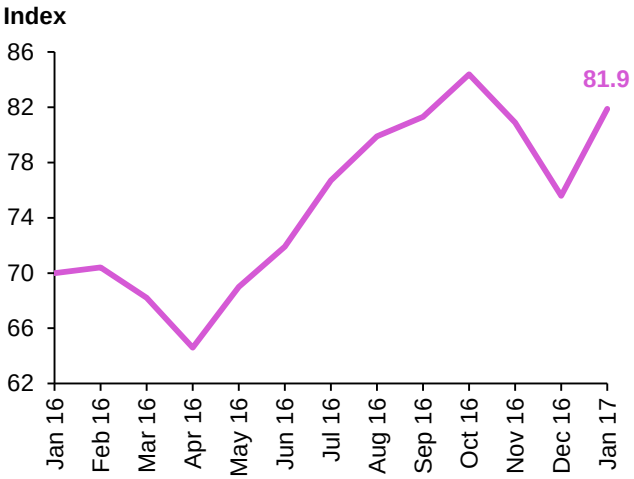
The **services sector** in Brazil continued to remain in recession at the beginning of 2017 as Markit's Brazil Services Business Activity Index suggested another big deceleration in output PMI. The Index posted 45.1 in January, unchanged from the previous month, marking the 23rd month of contraction in services. The **manufacturing sector** also continued to face setbacks, with the respective PMI falling to a seven-month low in January. The survey showed an acute drop in employment, while new business and production also shrank at faster paces. Despite the economic hardship, the **consumer confidence index** was positively impacted by slowing inflation and showed some improvement last month, increasing to 81.9 from 75.6.

Graph 3.10
Brazilian manufacturing and services PMIs



Sources: IHS Markit and Haver Analytics.

Graph 3.11
Brazilian consumer confidence index



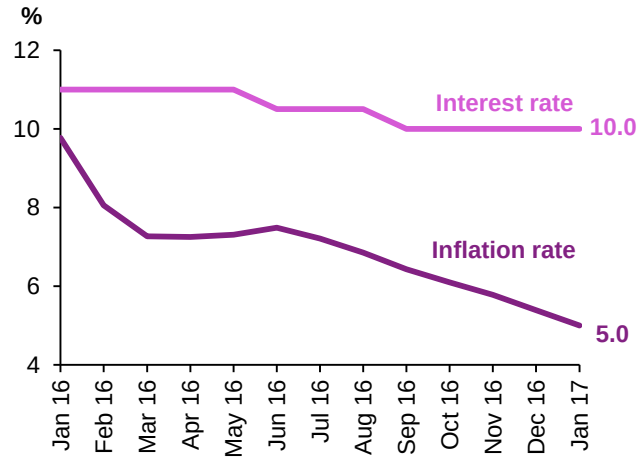
Sources: Fundação Getúlio Vargas and Haver Analytics.

The contraction in GDP during 3Q16 largely confirmed expectations of a deceleration of around 3.4% y-o-y in 2016, while the continued weak performance in services and manufacturing suggest a sluggish return to growth in 2017. GDP is currently anticipated to show cyclical but minor growth of around 0.4% y-o-y in 2017.

Russia

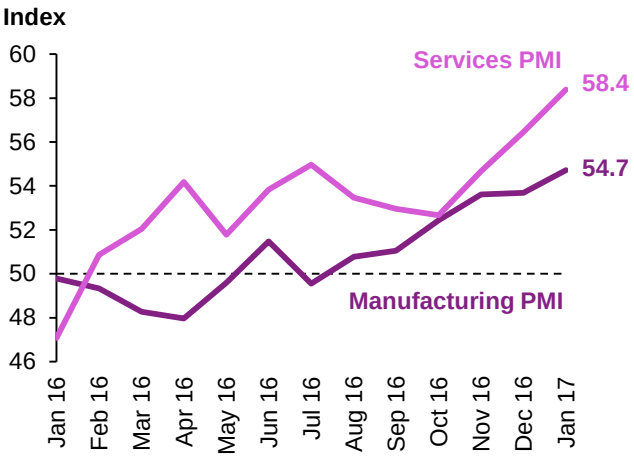
Russia's Ministry of Economic Development announced it is forecasting the country's **GDP** to grow by a rate between 1.5% and 2.0% compared to the previous forecast of 0.6%. GDP contracted by 0.4% y-o-y in 3Q16, the slowest pace since the onset of economic deceleration in 1Q15. A downward **inflationary trend** continued in January posting 5.0%, its slowest rate of increase since June 2012. The **Russian ruble** appreciated 4.0% m-o-m in January and the central bank kept its benchmark **interest rate** unchanged at 10%.

Graph 3.12
Russian inflation vs. Interest rate



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

Graph 3.13
Russian PMIs

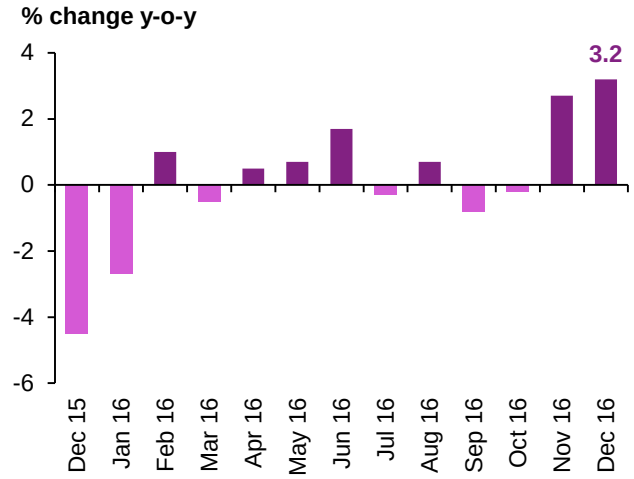


Sources: IHS Markit and Haver Analytics.

The **services sector** started 2017 like it ended 2016: on a positive note. Its PMI saw the highest reading since July 2008, posting 58.4 in January, up from 56.5 a month earlier. The survey showed employment increasing to its highest level in 44 months and demonstrating further accumulation in outstanding orders. Despite this sizable expansion, **retail sales** continued to contract in December. The **manufacturing sector** also showed encouraging signs of improving. The sector's PMI increased in January to a 70-month high of 54.7, up from 53.7 in the previous month, due to quick rates of increase

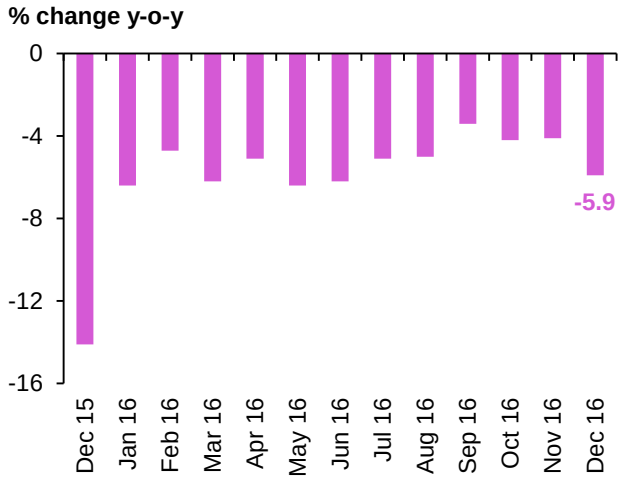
in production, new orders and job creation. **Industrial production** increased for the second month in a row in December 2016, rising by 3.2% y-o-y, its highest rate since December 2014.

Graph 3.14
Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3.15
Russian retail sales



Sources: Federal State Statistics Service and Haver Analytics.

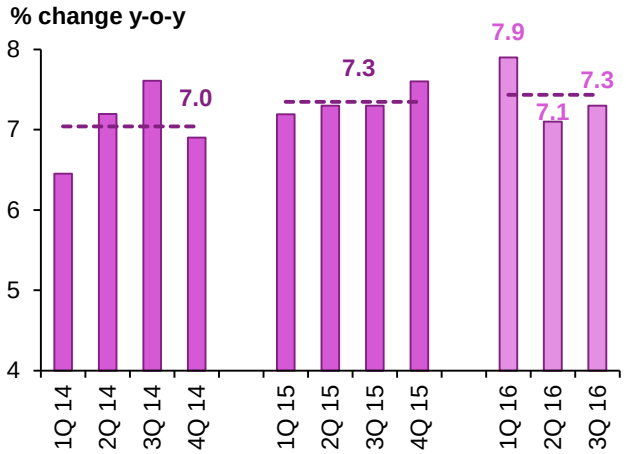
Indications from the past few months have provided reasonable evidence to raise the GDP forecast for 2017. The forecast this month is revised up slightly for the second month in a row. The GDP of Russia is anticipated to grow by 1.0% y-o-y in 2017, up from an estimated contraction of 0.5% in 2016. Further upward revisions are likely in the coming months, given a continuation of the current trend.

India

India's short-term **GDP growth** outlook continues to be weighed down by its unprecedented cash swap exercise (or demonetisation). However, it seems that in both the mid-term and the long-term, such a monetary policy will support India's economy in terms of foreign investment. This underscores India's intent to tackle corruption, which has been a significant concern for foreign investors in recent years. It is also likely to widen the tax base by enabling the government to track more of the country's money. India currently has one of the lowest tax bases in Asia, which increases the chance of easing further monetary policies to support growth. Given the deflationary pressures which have been generated by demonetisation, the Reserve Bank of India (RBI) may adjust the repo rate in March 2017. In addition, the recent US election remains a source of concern adding to downward risks. Much uncertainty persists due to actual US policies and the new US president's campaign proposals (such as ending the offshoring act), which may not be good signals for India's economy. Moreover, it seems US's policy towards trade relations, particularly with China, is likely to turn more restrictive. This may lead to a more evident long-term decline in global trade growth than currently anticipated. At worst, the mentioned effect could decrease India's GDP growth by about 0.4 pp in 2017, though its GDP growth in 4Q16 was just below 7.0%.

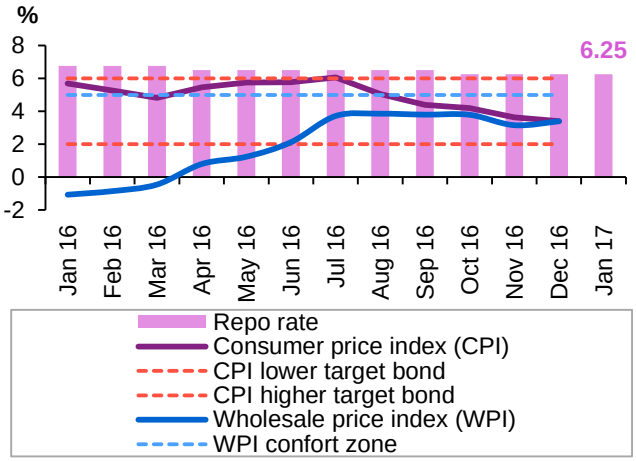
The **CPI** softened further to 3.4% in December, primarily driven by a continued decline in food prices. Core inflation slowed further to 4.86% from 4.89% in the previous month and core CPI, excluding petrol and diesel, moderated to 4.7% from 4.9%. This is the lowest inflation rate since November of 2014. The slowdown in inflation intensified in the last two months of 2016 after the demonetisation campaign drove a slump in the Indian currency, thus hurting consumption, while the wholesale price index (WPI) increased to 3.4% y-o-y in December of 2016, following a 3.15% gain in November. This was the ninth straight month of increase, which was mainly due to the rising cost of manufactured products and petrol, while food prices fell.

Graph 3.16
Indian GDP growth



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

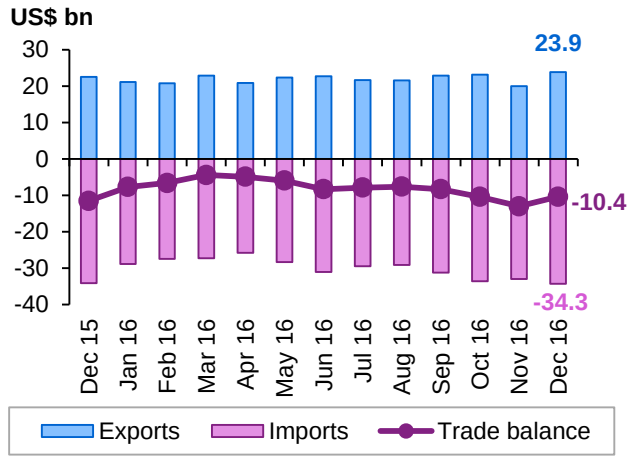
Graph 3.17
Indian inflation vs. Repo rate



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

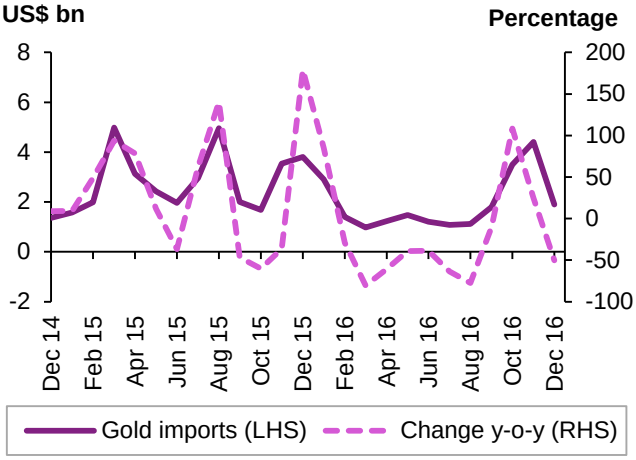
India's **trade deficit** narrowed to $10.37 billion in December 2016 from $11.5 billion a year earlier. Exports jumped 5.7% y-o-y to $23.9 billion, reaching their highest value since March 2015 as non-petroleum sales went up 5.4%. **Imports** increased marginally by 0.5% to $34.3 billion, the highest figure since July 2015. Oil imports rose 14.6% y-o-y mainly due to the expectation of rising oil prices while gold imports fell 48.5% y-o-y. The recovery in global oil prices seems to be providing growing support to both exports and imports, given petroleum's relatively high share in external trade. With non-oil imports likely to remain curbed for some time (given the slowdown in domestic demand following demonetisation), overall imports growth should be sustained, while exports may get additional help from a weakening rupee. All in all, the trade deficit is expected to widen only modestly in 2017 (disregarding any externality factors), keeping India's current account balance about 0.8% of GDP.

Graph 3.18
Indian trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.19
Indian gold imports



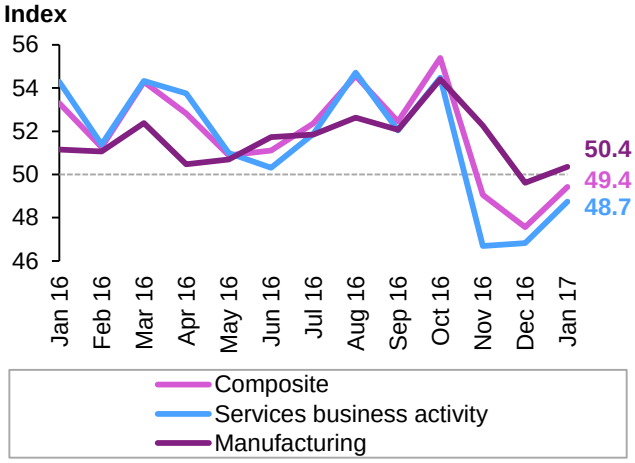
Sources: Ministry of Commerce and Industry and Haver Analytics.

India's **goods and services (GST) "dual control" agreement** – which envisages a division of control over tax assessments between the states and the central government – reflects the growing complexity of the regime, yet it is still likely to be implemented in 2017. The latest compromise on dual control is particularly significant. The tax authorities of each Indian state vary widely in their professionalism and competency. Thus, the state administration of the GST for 90% of small- and medium-sized businesses is likely to result in an uneven application of the GST regime, and could force many businesses to deal with both state and central authorities. For large businesses, a more transparent and rigorous assessment by the central government will generally be preferable to assessments conducted by many state governments.

Industrial production growth rebounded to 5.7% y-o-y in November, confusing analysts and appearing in contrast to the anticipated impact of demonetisation (which was pointed out by the manufacturing PMI dipping below 50 in December 2016 after reaching 54.4 in October).

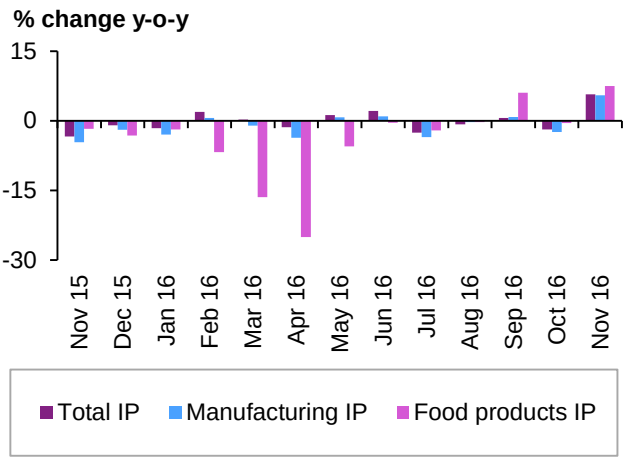
The seasonally adjusted **Nikkei PMI** returned to expansion territory in January, following a drop in manufacturing activity in December. A modest rise in both new orders and output points to a tentative, albeit still fragile, recovery in confidence following the sudden withdrawal of high-value banknotes. This has raised hopes that the impact of demonetisation will not extend into the new financial year beginning April 2017. Indian manufacturing output increased during January on the back of rising order books. The need for greater production encouraged companies to purchase more inputs but failed to generate jobs in the sector. Having deteriorated in December for the first time in a year, the health of India's manufacturing economy improved in the opening month of 2017. The headline PMI was up from 49.6 to 50.4 in January. The main factors contributing to the above-50 PMI reading were growth of both new orders and output.

Graph 3.20
Indian PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3.21
Indian industrial production breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

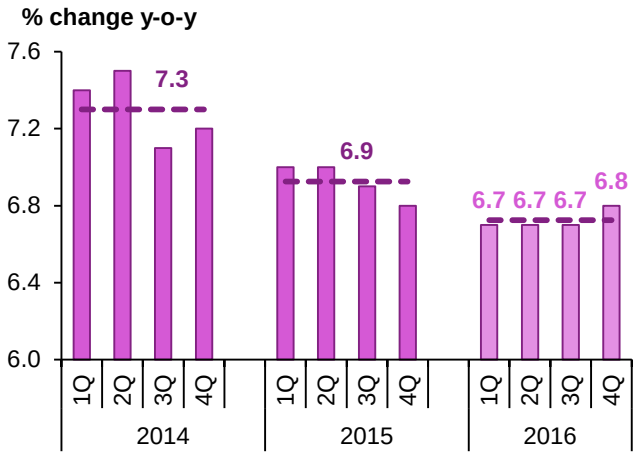
India's **GDP** growth for 2016 was revised down to 7.1% from 7.2%, but for 2017 kept unchanged at 7.1%.

China

Chinese **GDP growth** accelerated to 6.8% y-o-y in 4Q16, slightly higher than expectations of 6.7%. The main reason for China's faster GDP growth was the improved services sector growth, which expanded by 8.3%. Industrial and construction sector growth was unchanged at 6.1%, while agricultural sector growth slowed to 2.9%. Full-year 2016 growth remained at 6.7%. Industrial value-added output slowed to 6.0% growth in December, a five-month low. Household consumption remained robust towards end-2016, with the fourth quarter moving average for real growth picking up to 7.1% y-o-y in 4Q16, slightly faster than the similarly calculated trend in disposable income. The investment momentum eased further towards the end of 2016, with real growth of fixed asset investment slowing to 6.9% y-o-y in 4Q. On the services side, sales grew at a slower pace of 22.5% year-to-date and by 9.7% in December alone. Over 4Q16, sales volumes grew at about half the pace as in 3Q16, indicating one likely area for slower growth in the services components of GDP. Retail sales growth accelerated to 10.9%, a 12-month high. Overall, the improved GDP growth in 4Q16 was not the result of resurgence in traditional industry.

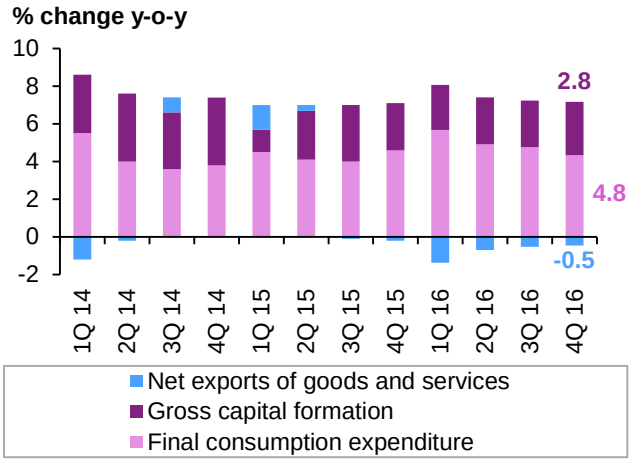
It seems infrastructure investment growth will remain solid in a year when there will be a major leadership reshuffle. Additionally, corporate investment should benefit somewhat from renewed profit growth.

Graph 3.22
Chinese GDP growth rate



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

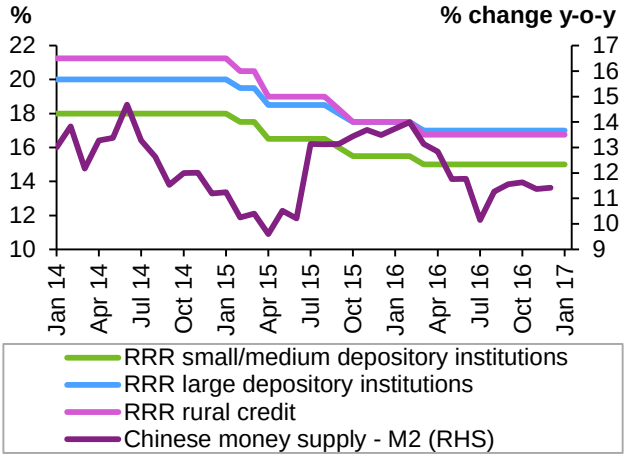
Graph 3.23
Chinese GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

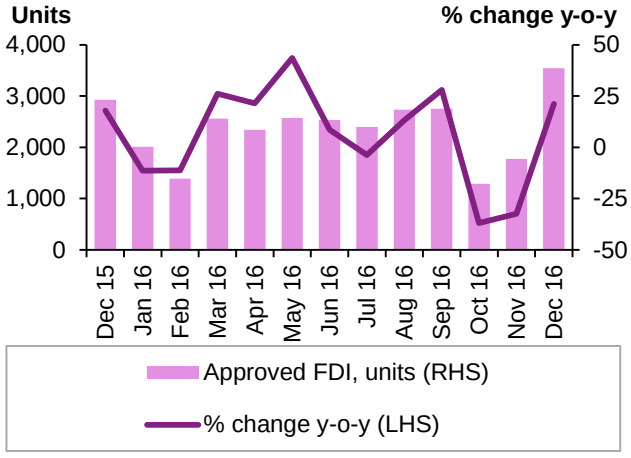
The People's Bank of China (PBoC) adjusted the **reserve requirement ratio** (RRR) to 16%, indicating a possible policy adjustment favouring economic growth. While it seems the RRR reduction would be reversed after the Chinese New Year, the small reduction is unlikely to cause a large-scale credit expansion but would lower the cost of credit extension for banks. If retained, this should prove positive for aggregate credit provision. The PBoC's recent policy focus has been expansionary but in a targeted manner, so that Chinese authorities have issued a number of bank licenses in the last few months with the specific aim of increasing lending to small- and medium-sized enterprises. A lasting reduction in RRR would indicate that priority is being given to increasing credit provision in order to boost the real economy, rather than seeking to reduce debt levels on corporate balance sheets and improve banks' asset quality.

Graph 3.24
Chinese RRR vs. Money supply (M2)



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

Graph 3.25
Chinese approved FDI



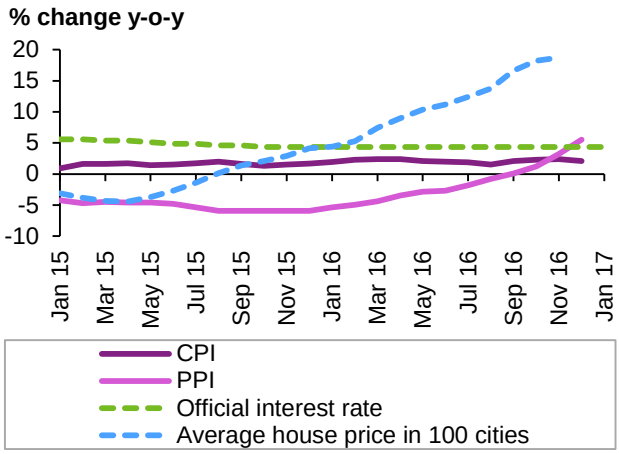
Sources: China National Bureau of Statistics and Haver Analytics.

Policy rates are the most important rates within China's monetary policy. Changing them influences economic growth, inflation, exchange rates and unemployment. Following the RRR adjustments, the PBoC raised interest rates by 10 basis points on 7-day, 14-day and 28-day reverse repurchase agreements to 2.35%, 2.50% and 2.65%, respectively. It is the first such hike since 2013. The PBoC published a separate notice stating that its standing lending facility rates for overnight, 7-day and one-month instruments would rise from 2.75%, 3.25% and 3.6% to 3.1%, 3.35% and 3.7%, respectively. It seems monetary policy tightening over the past two weeks has come as a surprise to the market, which expected no major rate changes in the coming year owing to continued downward pressure on overall growth.

China reported a $40.8 billion **trade surplus** in December of 2016, compared to a $59.6 billion surplus a year earlier. It was the smallest surplus since April, as **exports** fell while imports rose. In November 2016, the country's trade surplus came in at $44.23 billion. Considering all of 2016, total trade in US dollars decreased by 6.8% from a year earlier. Exports dropped by 7.7%, the second straight year of declines, while **imports** fell by 5.5%. For the year, the trade surplus was recorded at $509.96 billion, lower than the surplus of $594.5 billion in 2015. For 2017, trade faces more challenges from rising protectionism and uncertainties in US trade policy.

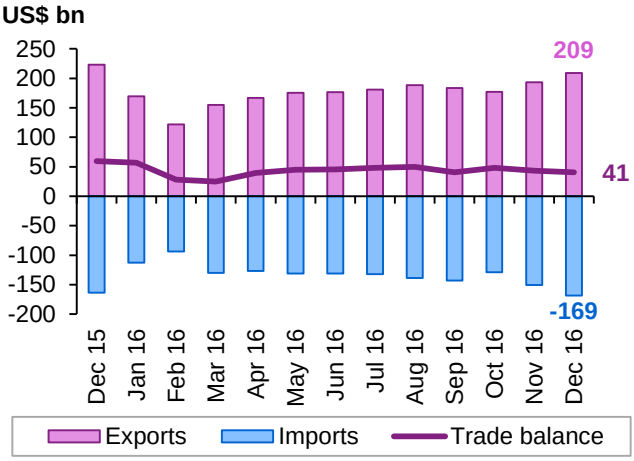
The **PPI** rose 5.5% y-o-y in December, driven by rising prices in coal mining and heavy industry. This spurt is expected to run out of steam in 1H17 and the forecast CPI inflation is expected to remain below the likely target of 3% in 2017, suggesting no major monetary policy implications.

Graph 3.26
Chinese CPI and PPI



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

Graph 3.27
Chinese trade balance

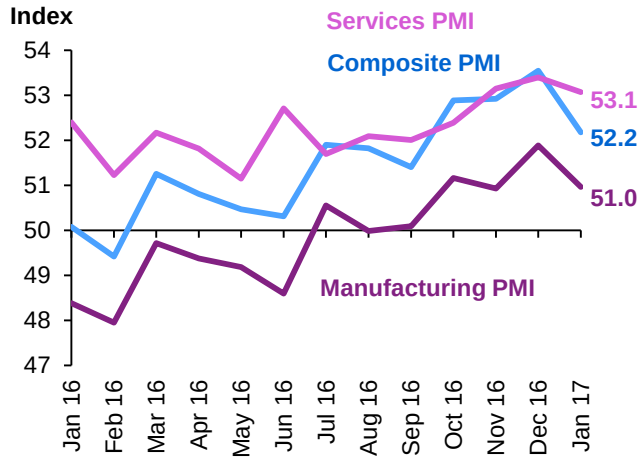


Sources: China Customs and Haver Analytics.

The latest data signalled a further improvement in the health of China's **manufacturing sector** at the start of 2017. However, the rate of improvement slowed since December, as output and new orders increased at weaker rates amid a further reduction in employment. In contrast, new export rose at its fastest pace since September 2014. At the same time, inflationary pressures remained sharp, with both input costs and output charges increasing at rates scarcely seen throughout the past five years. China's official manufacturing PMI expanded at a slower pace of 51.3 in January, according to data from the National Bureau of Statistics.

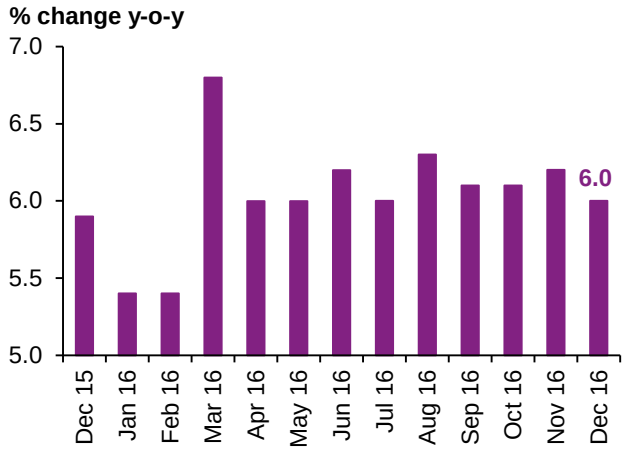
China's official **non-manufacturing PMI** accelerated marginally to 54.6 in January, a two-month high. The acceleration in business activity occurred in spite of slower growth in total new orders and a faster contraction in export orders. Expectations for future activity were at a seven-month low and employment slipped back into contraction.

Graph 3.28
Chinese PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3.29
Chinese industrial production



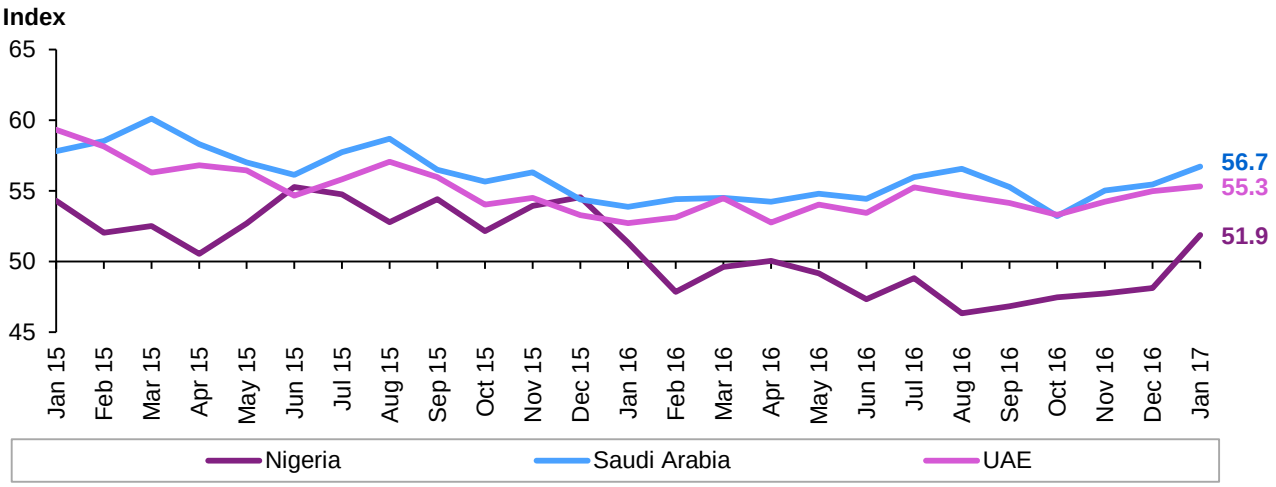
Sources: China National Bureau of Statistics and Haver Analytics.

China's GDP growth expectations have been kept unchanged at 6.7% in 2016 and 6.2% in 2017.

OPEC Member Countries

In **Saudi Arabia**, inflation posted a 1.7% y-o-y increase in the last month of 2016. The non-oil private sector showed strong signs of growth in January as the Emirates NBD Saudi Arabia PMI jumped to a 17-month high. The index posted 56.7 last month, up from 55.5 in December on the highest rate of increase in output since August 2015, alongside an increase in new business to a 14-month high. Employment in the sector also somewhat increased.

Graph 3.30
PMIs of Nigeria, Saudi Arabia and UAE



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

In **Nigeria**, operating conditions in the country's private sector improved in January for the first time in a year, as suggested by the Stanbic IBTC Bank Nigeria PMI. The index was supported by renewed accelerations in output, as well as new orders received that also supported input-buying activities. The index's headline figure posted 51.9 in January, up from 48.1 in December.

In the **United Arab Emirates**, inflation registered 2.6% y-o-y in November 2016, up from 1.9% in the previous month. The non-oil private sector signalled a robust advancement in January, with the respective PMI increasing to its highest level in six months. The Emirates NBD UAE PMI registered 55.3 in January, up from 55.0 a month earlier. Growth in both output and new orders were the main

drivers behind this recent improvement. Employment also increased as a result of an increase in new business.

Other Asia

The GDP of **Indonesia** grew 4.9% y-o-y in 4Q16, down slightly from 5.0% in the previous quarter. Private consumption increased 5.0% y-o-y, while general government consumption expenditure was lower by 4.1% y-o-y in 4Q16. Gross fixed capital formation (GFCF) rose 4.8% y-o-y in 4Q16 vs 4.2% in the previous quarter. Exports of goods and services increased by 4.2% y-o-y in 4Q16 compared to a 5.7% contraction in 3Q16. Imports also reversed direction in 4Q16, dropping by 2.8% vs a 3.7% decline in the previous quarter. For the entire 2016, GDP grew by 5.0% y-o-y, higher than the growth of 4.9% seen in 2015.

The **Philippines**' GDP registered growth of 6.6% y-o-y in 4Q16, which brings growth for the entire year to 6.8% y-o-y. This is the fastest growth rate since 2013. Growth in private consumption, on the other hand, slowed from 7.1% y-o-y in 3Q16 to 6.3% in 4Q16, while government consumption accelerated to 4.0% y-o-y in 4Q16 from 3.1% in 3Q16. GFCF had strong advancement last year, rising by a record 23.8% y-o-y. Imports also increased by a faster pace than exports in 4Q16, rising by 15.0% vs. 10.4% y-o-y.

Africa

In **Egypt**, the pound slightly depreciated by 1.2% m-o-m, after depreciating more than 85% in the previous two months. As a result of the currency depreciation, inflation posted a 24.3% y-o-y increase in December 2016. Operating conditions in the non-oil private sector remained weak in January as suggested by the respective PMI survey. The index stood at 43.3 in January, slightly up from 42.8 a month earlier due to falling output and new orders.

In **South Africa**, the rand appreciated 2% m-o-m in January and consumer price inflation increased 7.0% y-o-y in the last month of 2016. For all of 2016, inflation posted 6.6% y-o-y growth vs 4.5% in 2015. Business conditions in the country's private sector improved in January according to the Standard Bank South Africa PMI which registered 51.3. The survey highlighted a modest rise in output, as well as in new orders received and employment.

Latin America

In **Chile**, the central bank's benchmark interest rate was lowered from 3.5% to 3.25% in January, which aimed at lending some support to spending and investment amid an inflation slowdown. Inflation grew by only 2.7% in 2016. GDP advanced 1.6% in 3Q16, similar to the previous quarter and slower than the 2.3% y-o-y growth in 1Q16. Real retail sales advanced by 4.1% y-o-y in December 2016, slower than November's 5.0%. Industrial sales, however, declined 2.2% y-o-y in December 2016 vs 2.6% a month earlier.

Transition region

The manufacturing sector in the **Czech Republic** started 2017 on a positive note. The Markit Czech Republic manufacturing PMI survey signalled the fastest growth in production since the beginning of 2016 and the index rose to a 12-month high of 55.7, up from December's 53.8. The survey also showed that employment in the manufacturing sector rose in January, with the rate improving as firms reported a need to increase production capacities. The January issue of the survey showed the first public release of a new component question about production expectations. Surveyed firms reported optimistic expectations about the production increase in the next 12 months.

Oil prices, US dollar and inflation

The US dollar generally declined in January against major currencies with the exception of the British pound sterling. On average, the US dollar declined by 1.0% against the Japanese yen, its first decline since August. The dollar lost 0.8% against the Euro and 1.1% against the Swiss franc. In contrast, the dollar advanced by an average of 1.3% against the pound sterling but declined significantly against the pound after the UK prime minister suggested that the Brexit deal would be put to vote in parliament.

Compared with the Chinese yuan, the US dollar dropped by 0.4% m-o-m on average in January, its first decline since August. It increased by 0.3% m-o-m against the Indian rupee. Compared with the currencies of commodity exporters, the US dollar generally fell. It decreased by 4.6% m-o-m against the Brazilian real and by 4.0% against the Russian ruble.

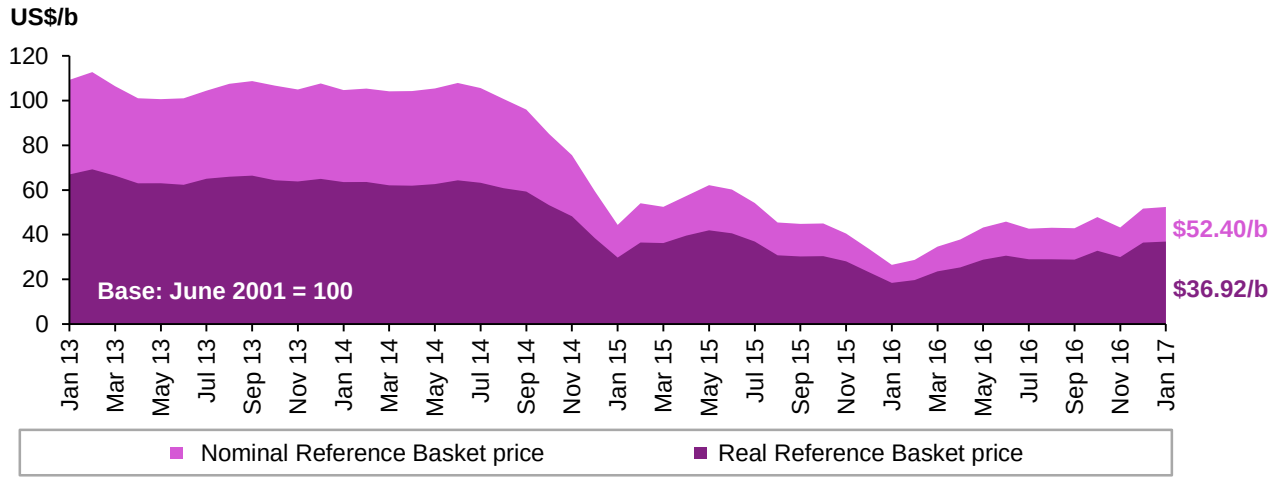
Against the currencies of NAFTA trading partners, on average the US dollar rose by 4.2% against the Mexican peso and has been up by 12.3% since October. The peso has been volatile since the US presidential election due to the uncertainty about trade relations between the two countries. Most recently, the peso strengthened against the US dollar on the anticipation of a 0.5% rate hike by Mexico's central bank that materialised on 9 February. This was the third rate hike since the US election. Meanwhile, the US dollar decreased by 1.2% against the Canadian dollar.

The decline in the value of the US dollar mainly reflects a minor decline in market expectations of the path of interest rate increases by the Fed during the month, as market participants expect further clarification of the policies to be enacted by the new administration. Meanwhile, the central banks of major currency counterparts are expected to remain relatively more accommodative. At the time, concerns expressed by the new US administration about its major trading partners gaining unfair trade advantages from having weaker currencies would require close monitoring, especially in light of the upcoming G20 meeting in March.

In nominal terms, the price of the OPEC Reference Basket (ORB) increased by 73¢, or 1.4%, from $51.67/b in December to $52.40/b in January. In real terms, after accounting for inflation and currency fluctuations, the ORB increased to $36.92/b from $36.47/b (base June 2001=100). Over the same period, the US dollar declined by 0.3% against the import-weighted modified Geneva I + US dollar basket*, while inflation declined by 0.1%.

Graph 3.31

Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price*



Source: OPEC Secretariat.

* *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 the merchandise imports of OPEC Member Countries from the countries in the basket.*

World Oil Demand

World oil demand growth in 2016 was revised higher by around 70 tb/d to now stand at 1.32 mb/d. The upward revision was primarily a reflection of better-than-expected data from OECD Europe and Asia Pacific with support coming from the petrochemical sector and colder-than-anticipated weather. As such, total global consumption in 2016 now stands at 94.62 mb/d.

For 2017, global oil demand growth was revised higher by around 35 tb/d. This was a result of colder weather conditions and healthy vehicle sales in OECD Europe, in addition to improve assumptions for petrochemical feedstock requirements in OECD Asia Pacific. World oil demand is now anticipated to increase by 1.19 mb/d to average 95.81 mb/d.

World Oil Demand for 2016 and 2017

Table 4.1
World oil demand in 2016*, *mb/d*

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	24.59	24.55	24.67	25.12	24.77	24.78	0.18	0.75
of which US	*19.84*	*19.84*	*19.99*	*20.32*	*20.02*	*20.04*	*0.20*	*1.02*
Europe	13.73	13.64	13.94	14.38	13.91	13.97	0.24	1.72
Asia Pacific	8.04	8.57	7.64	7.74	8.28	8.05	0.02	0.23
Total OECD	**46.37**	**46.77**	**46.24**	**47.24**	**46.97**	**46.81**	**0.44**	**0.95**
Other Asia	12.04	12.42	12.63	12.37	12.83	12.56	0.52	4.31
of which India	*4.05*	*4.54*	*4.29*	*4.12*	*4.56*	*4.38*	*0.33*	*8.06*
Latin America	6.56	6.19	6.49	6.76	6.37	6.45	-0.11	-1.60
Middle East	7.97	7.94	7.79	8.37	7.79	7.97	0.00	0.00
Africa	3.99	4.12	4.09	4.03	4.14	4.10	0.10	2.59
Total DCs	**30.57**	**30.68**	**31.00**	**31.53**	**31.12**	**31.09**	**0.52**	**1.69**
FSU	4.62	4.49	4.37	4.73	5.04	4.66	0.04	0.81
Other Europe	0.67	0.68	0.64	0.68	0.77	0.70	0.02	3.57
China	11.07	10.96	11.48	11.36	11.69	11.38	0.30	2.74
Total "Other regions"	**16.37**	**16.14**	**16.50**	**16.77**	**17.50**	**16.73**	**0.37**	**2.23**
Total world	**93.30**	**93.58**	**93.74**	**95.55**	**95.59**	**94.62**	**1.32**	**1.42**
Previous estimate	93.19	93.42	93.55	95.41	95.35	94.44	1.25	1.34
Revision	0.11	0.16	0.19	0.14	0.24	0.18	0.07	0.08

*Note: * 2016 = Estimate.*
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 region was revised higher by more than 70 tb/d in 2016.

This is primarily a reflection of the better-than-expected data in major consuming countries within the OECD during 4Q16. In the US, better-than-expected demand for middle distillates and fuel oil permitted an upward revision for US oil demand growth of 50 tb/d for both 3Q16 and 4Q16.

OECD Europe continued to perform better than the initial projections as a result of a number of factors, including better economic conditions, increased vehicle sales, colder-than-anticipated weather in 4Q16 as well as the historical low baseline of comparison. Oil demand rose higher than expected in countries such as Poland, Spain, Sweden, Turkey and the UK. As a result, upward adjustments were carried out throughout 2016 with 22 tb/d in 1Q16, 44 tb/d in 2Q16 and 0.15 mb/d in the 4Q16. For 2017, oil

demand growth was adjusted upward by 50 tb/d in 1Q17 and 30 tb/d in 2Q17, mainly as a result of colder weather conditions.

Similar to the previous report, positive oil demand data continued to be seen in South Korea. Oil demand grew in November 2016 at a staggering 0.18 mb/d y-o-y. As a result, oil demand growth levels were adjusted higher in 4Q16 by 0.1 mb/d, driven by firm petrochemical feedstock demand and cold weather snaps. For 2017, an upward revision was seen in OECD Asia Pacific (40 tb/d in 1Q17 and 20 tb/d in 2Q17), reflecting positive expectations from the petrochemical sector.

Table 4.2
World oil demand in 2017*, *mb/d*

							Change 2017/16	
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
Americas	24.78	24.77	24.82	25.37	24.93	24.98	0.20	0.79
of which US	*20.04*	*19.98*	*20.09*	*20.54*	*20.17*	*20.19*	*0.15*	*0.75*
Europe	13.97	13.72	14.00	14.40	13.95	14.02	0.05	0.35
Asia Pacific	8.05	8.55	7.58	7.71	8.22	8.01	-0.04	-0.52
Total OECD	**46.81**	**47.04**	**46.40**	**47.49**	**47.10**	**47.01**	**0.20**	**0.43**
Other Asia	12.56	12.73	13.00	12.73	13.20	12.92	0.35	2.80
of which India	*4.38*	*4.67*	*4.42*	*4.30*	*4.69*	*4.52*	*0.14*	*3.25*
Latin America	6.45	6.28	6.53	6.81	6.46	6.52	0.07	1.07
Middle East	7.97	8.07	7.91	8.46	7.90	8.08	0.11	1.36
Africa	4.10	4.23	4.19	4.14	4.26	4.20	0.11	2.64
Total DCs	**31.09**	**31.30**	**31.63**	**32.14**	**31.83**	**31.72**	**0.64**	**2.05**
FSU	4.66	4.56	4.42	4.79	5.10	4.72	0.06	1.30
Other Europe	0.70	0.71	0.66	0.70	0.80	0.72	0.02	3.15
China	11.38	11.24	11.74	11.65	11.93	11.64	0.27	2.35
Total "Other regions"	**16.73**	**16.51**	**16.83**	**17.14**	**17.83**	**17.08**	**0.35**	**2.09**
Total world	**94.62**	**94.84**	**94.85**	**96.77**	**96.76**	**95.81**	**1.19**	**1.26**
Previous estimate	94.44	94.59	94.61	96.63	96.52	95.60	1.16	1.22
Revision	0.18	0.25	0.24	0.14	0.24	0.22	0.03	0.03

*Note: * 2017 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

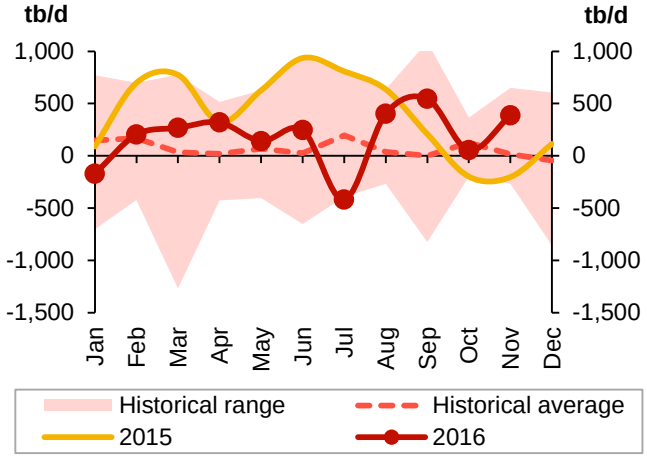
OECD Americas

November 2016 data for the **US** implied an increase in oil requirements of around 0.53 mb/d or 2.7% y-o-y. This monthly gain, which was partially supported by healthy economic growth, colder weather and the existing low oil price environment, was essentially determined by increasing diesel, residual fuel oil, as well as jet fuel and gasoline demand. These increases, however, have been partly offset by slightly shrinking propane/propylene requirements as a result of fuel substitution.

With monthly data available for 11 months in 2016, US oil demand seems to be growing solidly by around 0.2 mb/d y-o-y with road transportation fuels taking the largest bulk of the growth. Preliminary weekly data for December 2016 and January 2017 appears to favour the existing positive overall picture, however, with diverse developments in the main petroleum product categories.

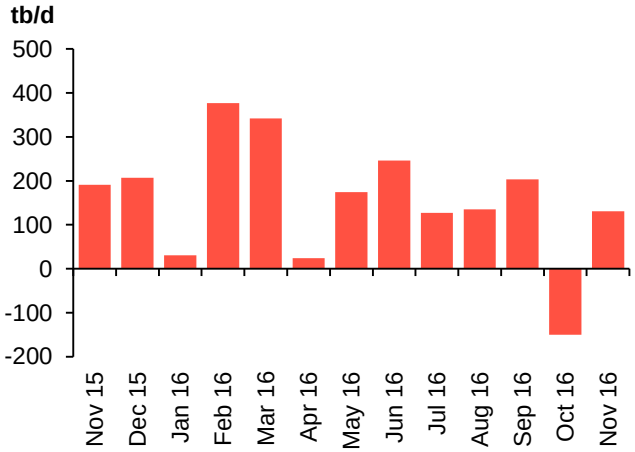
Gasoline's performance is declining, mainly as a result of cold weather. In contrast, colder temperatures have supported gains in residual fuel oil usage. Furthermore, in line with a number of holidays during the months of December and January, jet/kerosene marked significant growth, y-o-y.

Graph 4.1
Yearly oil demand growth in OECD Americas



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

Graph 4.2
US gasoline demand, y-o-y change



Source: US Energy Information Administration.

The outlook for 2017 US oil demand remains dependent on developments in the US economy as well as the oil price level, which may have an immediate impact on the road transportation and industrial sectors, particularly the upstream oil industry. Risks are seen as more balanced compared to last month's projections.

Table 4.3
US oil demand, *tb/d*

	November		*Change 2016/15*	
	2016	2015	tb/d	%
Propane/propylene	1,116	1,169	-53	-4.5
Gasoline	9,243	9,112	131	1.4
Diesel oil	3,961	3,740	221	5.9
Jet/kerosene	1,627	1,524	103	6.8
Fuel oil	375	300	75	25.0
Other products	3,333	3,299	34	1.0
US 50	**19,655**	**19,144**	**511**	**2.7**
US territories	**397**	**374**	**23**	**6.1**
Total	**20,052**	**19,518**	**534**	**2.7**

Sources: US Energy Information Adminstration and OPEC Secretariat.

In **Mexico**, oil demand experienced a continued strong decline in December 2016. 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. With complete monthly data in 2016, Mexican oil demand remained bearish compared to 2015 with gasoline, diesel and jet/kerosene usage increasing, but being more than offset by shrinking demand in all other petroleum product categories. Mexican oil demand is expected to grow only slightly in 2017, with risks being skewed to the downside compared to last month's projections as a result of the country's economy and the degree of fuel substitution with other energy commodities.

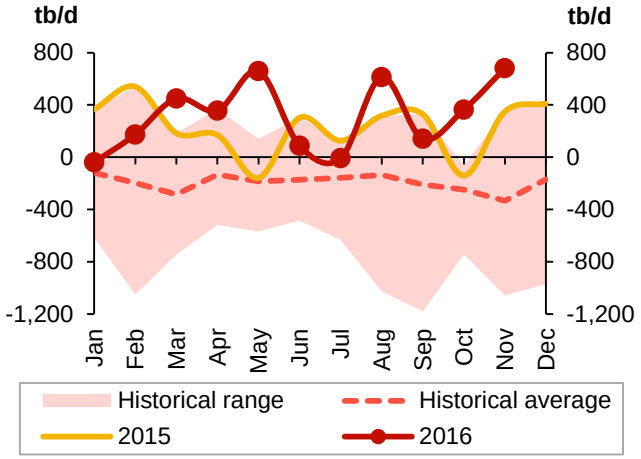
The latest data for **Canada** shows declining oil demand in November 2016 compared to the same month last year. Demand for the majority of the main petroleum product categories fell y-o-y, the only exception being road transportation fuels, with the strongest losses occurring for LPG. Projections for Canadian oil demand in 2017 are unchanged, foreseeing slight y-o-y growth, with the risks being balanced towards the upside and downside, predominantly relating to the country's economic development and, in particular, the industrial sector.

In 2016, **OECD Americas oil demand** grew by 0.18 mb/d compared to the previous year. For 2017, OECD Americas oil demand is projected to increase by 0.20 mb/d.

OECD Europe

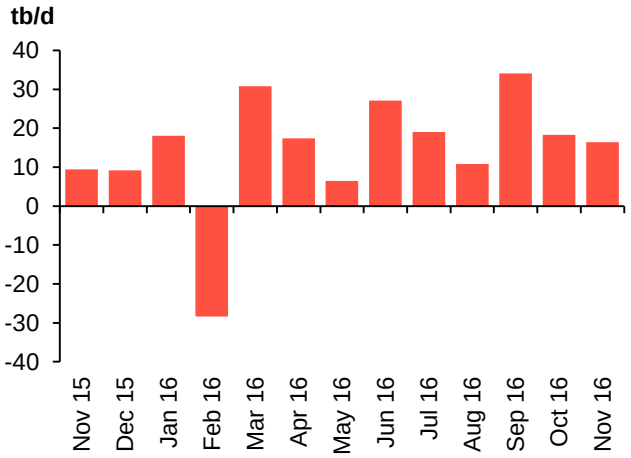
European oil demand is undoubtedly the biggest unexpected positive development during 2016 and caught the majority of oil demand forecasters by surprise. Available data for 11 months in 2016 implies overall growth of 0.24 mb/d, the largest yearly increase seen over the last 20 years. The reasons behind this growth are manifold: The combination of the low oil price environment and the long lasting low baseline, in addition to healthy economic growth in big parts of the region as well as colder weather during the first and fourth quarters of 2016 seem to have stimulated oil demand in the road transportation, residential and industrial sectors. European oil demand growth was particularly strong during November and December 2016 supported by colder weather compared to November 2015 and the historical normal throughout the continent. Oil demand continued to grow in a number of countries such as Poland, Spain, Sweden, Turkey and the UK, particularly in the road transportation sector, with an increase specifically in automotive diesel demand. This was in line with growing auto sales in December 2016 (3.8%, y-o-y) and for the entire year (5.8%, y-o-y).

Graph 4.3
Yearly oil demand growth in OECD Europe



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

Graph 4.4
UK diesel oil demand, y-o-y change



Sources: Joint Organizations Data Initiave, UK Department of Energy Climate and Change and OPEC Secretariat.

The outlook for the region's oil demand in 2017, however, is not expected to be as strong as in 2016, with risks predominantly relate to the structure of oil demand in the region and the uncertainties associated with it continuing to point towards the downside.

Table 4.4
Europe Big 4* oil demand, *tb/d*

	Dec 16	Dec 15	Change tb/d	Change %
LPG	491	474	17	3.6
Naphtha	660	689	-29	-4.3
Gasoline	1,066	1,101	-35	-3.2
Jet/kerosene	724	711	13	1.8
Diesel oil	3,283	3,319	-36	-1.1
Fuel oil	267	287	-20	-6.9
Other products	599	560	39	7.0
Total	**7,090**	**7,141**	**-51**	**-0.7**

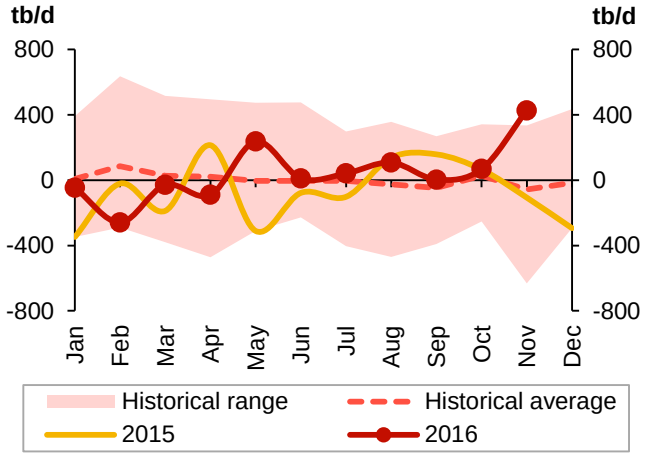
*Note: * Germany, France, Italy and the UK.*
Sources: JODI, OPEC Secretariat, UK Department of Energy and Climate Change and Unione Petrolifera.

OECD Europe oil demand in 2016 grew by a surprising 0.24 mb/d compared to the previous year, while 2017 oil demand is projected to grow slightly above the 2016 levels, up by a mere 50 tb/d.

OECD Asia Pacific

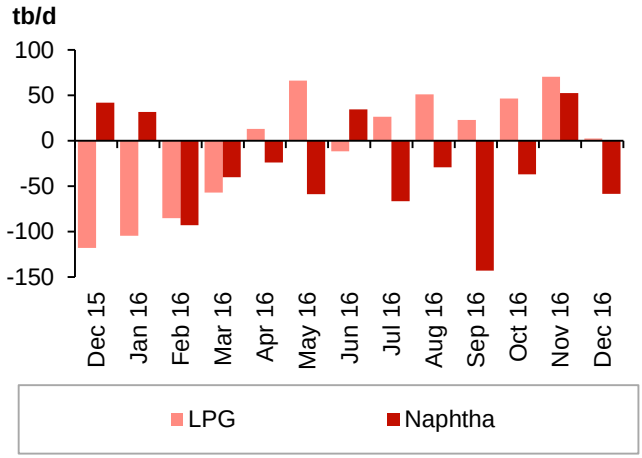
According to preliminary data from the Japanese Ministry of Economy, Trade and Industry (METI), **Japanese** oil demand decreased by 0.07 mb/d in December 2016 y-o-y. This is a result of falling demand for all main petroleum product categories, particularly for naphtha, gasoline, LPG, jet/kerosene as well as direct burning of crude and residual fuel oil for electricity generation. This was despite colder weather compared to the historical normal and to the same month in 2015, and following resumption of operations at a reactor after a routine outage in November 2016.

Graph 4.5
Yearly oil demand growth in OECD Asia Pacific



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

Monthly data for the whole of 2016 implies an approximate 3.6% drop in 2016 Japanese oil demand with requirements for the majority of the main petroleum categories shrinking. Based largely on projections for the country's overall economy in 2017 and the possible restart of some nuclear plants, Japanese oil demand in 2017 is estimated to decline further. Risk to the projection are seen skewed to the downside.

Table 4.5
Japanese domestic sales, *tb/d*

			Change	
	Dec 16	Dec 15	tb/d	%
LPG	511	509	3	0.5
Naphtha	840	898	-58	-6.5
Gasoline	951	962	-11	-1.1
Jet/kerosene	621	609	12	-11.4
Diesel oil	613	610	3	0.5
Fuel oil	520	499	20	4.1
Other products	67	60	7	12.2
Direct crude burning	86	129	-42	-32.9
Total	**4,209**	**4,275**	**-65**	**-1.5**

Source: Ministry of Economy Trade and Industry of Japan.

In **South Korea**, November 2016 data showed bullish oil demand growth, y-o-y. Almost all the main petroleum product categories were on the rise, particularly those related to petrochemical activities, such as LPG and naphtha, as well as those used in the transportation sector, such as gasoline, diesel oil and jet/kerosene. The outlook for South Korean oil demand in 2017 remains promising, mainly as a result of expectations for healthy developments in the country's economy.

In 2016, **OECD Asia Pacific oil demand** grew slightly, by 20 tb/d, contrary to initial forecasts and for the first time since 2012. The downward trend in the region's oil demand is, however, projected to reappear in 2017 with a contraction of 0.04 mb/d.

Non-OECD

Based on the latest available data, oil demand growth in the non-OECD regions was relatively unchanged during 2016 despite some positive upward revisions in India and China, which were entirely offset by downward revisions in Latin America, the Middle East and Africa.

Record oil demand gains were notable in India during 2016 supported by improving GDP per capita, government expansion projects and unusual weather conditions which promoted extra use of oil products. This positive performance persisted in almost every single month in 2016 with the month of March hitting historical levels of growth. As a result, the 1Q16 and 2Q16 forecasts were adjusted higher to account for the most up-to-date data with revisions of 29 tb/d in 1Q16 and 35 tb/d in 2Q16. The positive trend continued well into 4Q16 with an upward revision of 70 tb/d.

Latin America was revised lower by 30 tb/d in 4Q16 due to slower economic momentum which dented oil demand growth.

In the Middle East, oil demand growth was revised lower by 20 tb/d in 4Q16, mainly reflecting the high level of substitution in Saudi Arabia and slower-than-expected economic development in the region.

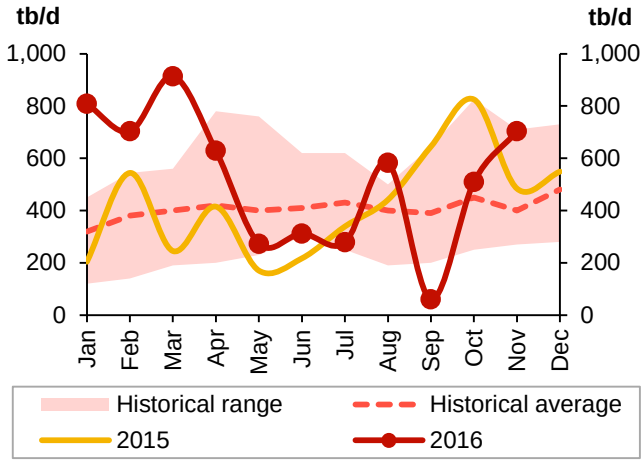
In China, an upward revision of 50 tb/d in 4Q16 accounted for better-than-expected demand from the petrochemical and transportation sectors in the country. The historical baseline for 2015 was also adjusted higher by 0.12 mb/d (0.15 mb/d in 1H15 and 90 tb/d in 2H15) to account for the most up-to-date data and assessments.

Other Asia

In **India**, oil demand for December 2016 grew robustly, increasing by around 0.20 mb/d or 4.3% y-o-y, ending 2016 with a remarkable growth level of 0.33 mb/d, equivalent to a strong 8.1%.

Graph 4.7

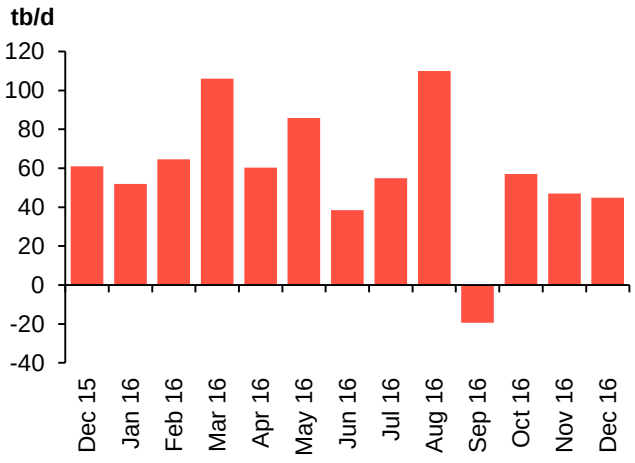
Yearly oil demand growth in Other Asia



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

Graph 4.8

Indian gasoline demand, y-o-y change



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

From a products points of view, all the main product categories showed solid gains apart from jet/kerosene, which declined for the second straight month. Oil demand gains were particularly evident for LPG, gasoline and fuel oil, despite the existence of economic uncertainty resulting from the demonisation policy being implemented in the country.

Fuel oil demand growth was markedly positive as a result of higher-than-anticipated consumption in the power, steel and petrochemical sectors. The product grew by around 37 tb/d, or 14.1%, y-o-y. Indian LPG, which increased by 55 tb/d or around 7.9% compared with the same period in 2015, remains solidly above 0.75 mb/d. Support was mainly led by a pick-up in the residential sector, which consumes more than 85% of Indian LPG. Another development observed was the continuation of growth in Indian gasoline demand, which rose by 45 tb/d or 7.8% y-o-y, with total consumption reaching a historical level of 0.62 mb/d, according to data dating back to early last decade. Support continued to come from the low oil price environment, cheap credits and income per capita, as well as customers' preference to consume gasoline rather than diesel oil due to a price advantage, especially in the small vehicle market. The rise in gasoline consumption came in spite of the sharp decline in two-wheel vehicle sales during the month of December, according to the Ministry of Petroleum and Natural Gas of India. Two-wheeler sales declined by more than 20% y-o-y, selling around 910,000 units, primarily as a result of the cash crunch following the demonetisation of large currency notes. Overall passenger vehicle sales recorded a dip of 1.8% during December 2016, of which passenger cars declined by around 8.7% y-o-y. Sales of utility vehicles and vans dropped by 29.9% and 18.8% y-o-y, respectively.

Finally, December 2016 diesel oil requirements were broadly flat y-o-y as the agriculture and construction sectors were impacted by the government's demonetisation policy which slowed trucking activities in India by around 80%, according to the Delhi Transporters' Association.

Table 4.6
Indian oil demand by main products, *tb/d*

			Change	
	Dec 16	Dec 15	tb/d	%
LPG	753	698	55	7.9
Gasoline	623	578	45	7.8
Jet/kerosene	255	281	-27	-9.5
Diesel oil	1,667	1,651	17	1.0
Fuel oil	298	261	37	14.1
Other products	1,150	1,080	70	6.5
Total	**4,746**	**4,549**	**197**	**4.3**

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

For the remaining countries in the region and with most data available up to November 2016, oil consumption grew solidly in **Hong Kong**, **Indonesia, Taiwan**, **Thailand**, and **Singapore**. The transportation sector led gains followed by consumption in industrial fuels, distillates and residual fuel.

Looking ahead, the risks for 2017 in Other Asian oil demand growth are expected to be balanced towards 2H17 with a projection of slightly negative trend in 1H17 due to the demonetisation policy. For other countries in the region, the picture remained as described in last month's *MOMR*, with assumptions being driven by healthy economic growth coupled with steady retail prices. Indonesia, Thailand, Singapore and the Philippines are projected to contribute positively to oil demand growth in 2017. Light distillates, which include LPG, naphtha and gasoline, will be the products leading oil demand next year.

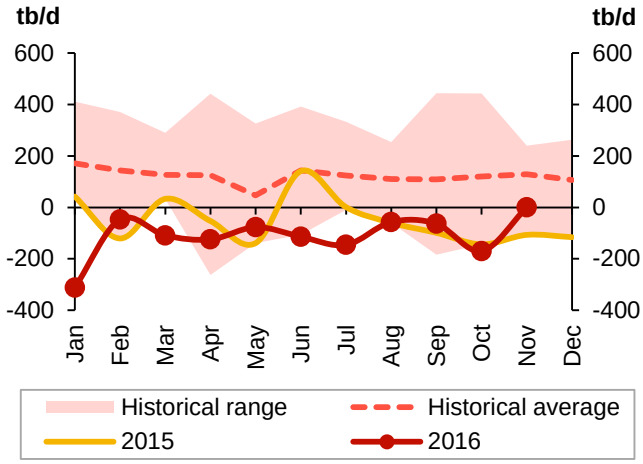
Other Asia's oil demand grew by 0.52 mb/d in 2016. For 2017, oil demand is forecast to increase by 0.35 mb/d.

Latin America

Preliminary indications suggest that **Brazilian** oil demand continued to decline y-o-y in December 2016, shedding around 0.12 mb/d or around 4.7% y-o-y, as weakening economic activity continued to take its toll on oil demand requirements. Looking at the product mixes, all products performed below expectations without exception. Ethanol declined strongly by around 36 tb/d, equivalent to a drop of 11.5% y-o-y. Along the same line, gasoline also declined, however, at a much lower rate than ethanol, dropping by around 15 tb/d or around 2.0% y-o-y. Drivers in the country switch frequently between the two products to take advantage of price differentials. Jet/kerosene also lost momentum during December 2016, decreasing by around 16 tb/d or 12.8% y-o-y. Additionally, diesel oil shed around 36 tb/d or 4.0% y-o-y, in line with slower economic activity in the country. Overall 2016 oil demand growth in Brazil was sharply in the negative, with a decline of 0.13 mb/d or almost 5.2% y-o-y. All products recorded sharp drops with fuel oil declining the most, by 38.44% y-o-y and gasoline dropping the least, by around 6.0%, y-o-y. The overall economic backdrop in the country was the primarily cause behind the sluggish oil demand in 2016.

Graph 4.9

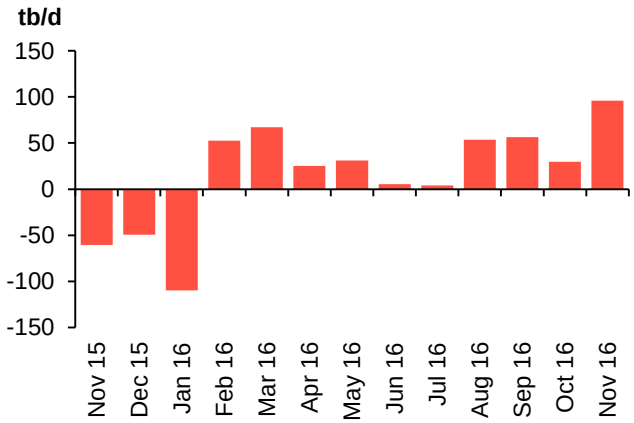
Yearly oil demand growth in Latin America



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

Graph 4.10

Brazilian gasoline demand, y-o-y change



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

In **Ecuador**, oil demand declined in 2016 by as much as 5% y-o-y. All the main petroleum product categories dropped, except naphtha and gasoline, with fuel oil recording the highest declines. Oil demand was similarly sluggish in **Venezuela** during the first nine months of 2016.

Table 4.7

Ecuadorian inland deliveries, *tb/d*

			Change	
	Dec 16	Dec 15	tb/d	%
LPG	31	33	-2	-6.1
Naphtha	14	15	-1	-6.7
Gasoline	48	51	-3	-5.9
Jet/kerosene	7	8	-1	-12.5
Diesel oil	96	100	-4	-4.0
Fuel oil	23	29	-6	-20.7
Other products	21	19	2	10.5
Total	**240**	**255**	**-15**	**-5.9**

Sources: Joint Organisations Data Initiative and direct communication.

With data up to November 2016, oil demand growth levels in **Argentina** were flat, exhibiting marginal gains of around 3 tb/d. LPG, gasoline, and jet/kerosene requirements were on the rise, while diesel oil and fuel oil declined.

In 2017, projections for oil demand growth in **Latin America** are similar to last month's projections, accounting for general improvements in the overall economy of the regions. Brazil is projected to be the main contributor to growth, with transportation fuels leading growth. In terms of products, diesel oil and gasoline will have higher growth potentials and are expected to fuel the industrial and transportation sectors.

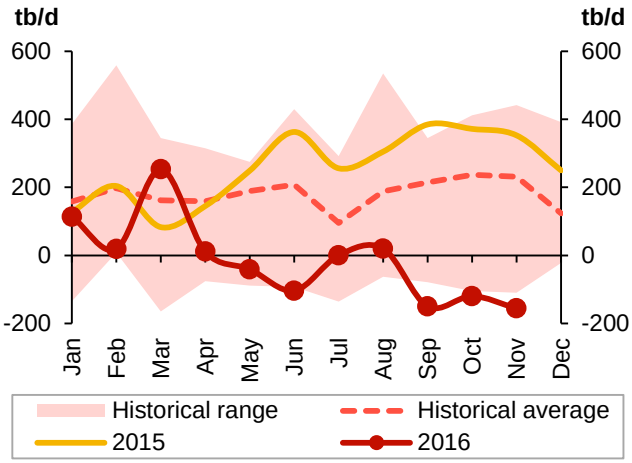
Oil demand growth in **Latin America** declined by 0.11 mb/d during 2016, while the 2017 outlook expects oil demand to grow by 0.07 mb/d.

Middle East

In **Saudi Arabia**, December 2016 oil demand recorded a decline of around 80 tb/d or 3.5% y-o-y. Total consumption in the country stood at 2.21 mb/d, the lowest monthly total consumption for the month of December since 2013. In December 2016, growth in some of the main petroleum categories, notably LPG, jet/kerosene and fuel oil, failed to offset strongly shrinking demand in other product categories, including direct crude burning and diesel oil. Residual fuel oil consumption added more than 0.13 mb/d or around 36.8% to its values compared to December 2015. Low baseline effects, in addition to higher power generation usage, have led to increases in fuel oil consumption. However, transportation fuels registered a mixed performance. Jet/kerosene recorded positive data, increasing by as much as 36.7%, supported by additional air travel activities. Meanwhile, gasoline and diesel oil registered flat and declining results, respectively, with the latter dipping by more than 0.17 mb/d or 22.0% y-o-y as a result of slower trucking and construction activities.

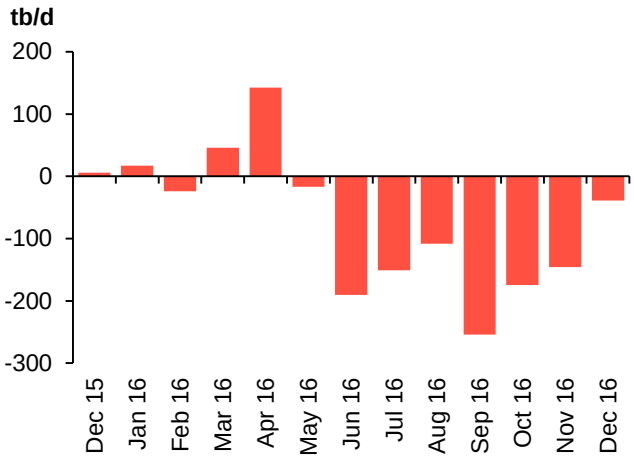
In cumulative terms, oil demand growth declined sharply in 2016 despite some positive momentum in some products, including LPG, fuel oil and diesel oil. Overall 2016 oil demand declined by approximately 0.10 mb/d, or more than 4.0%, y-o-y. Substitution to natural gas has led to dropping demand for direct crude for burning. Additionally, slower construction activities and overall economic momentum compared to recent history has resulted in the Other Products category dropping sharply on an annual basis in 2016. The Other Products category and direct crude burning dropped by 38.8% and 13.1%, respectively, in 2016.

Graph 4.11
Yearly oil demand growth in Middle East



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

Graph 4.12
Saudi Arabian direct crude burning, y-o-y change



Sources: Joint Organisations Data Initiative, Direct Communication and OPEC Secretariat.

Meanwhile, most of the other countries in the region recorded positive oil demand growth in December 2016.

Oil demand in **Iraq** continued to increase for the second consecutive month, rising by a solid 0.11 mb/d y-o-y, while consumption in the **Kuwait, Qatar and UAE**, and were also on the rise.

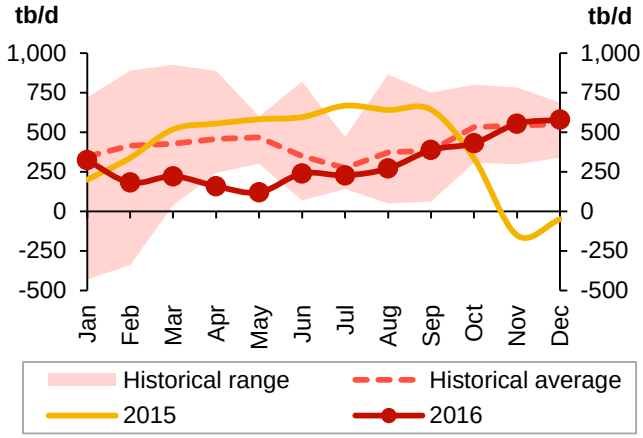
Going forward, oil demand growth is foreseen gaining momentum over the levels experienced in 2016. This will mainly be the result of assumed improvements in the economy. In terms of countries within the region, Saudi Arabia is projected to be the largest contributor to growth. In contrast, geopolitical concerns as well as subsidy reduction policies are assumed to contribute negatively to demand growth in 2017. In terms of products, transportation fuels – particularly gasoline and diesel oil – are expected to lead oil demand growth.

For 2016, **Middle East oil demand** growth hovered around the zero level, while oil demand in 2017 is projected to increase by 0.11 mb/d.

China

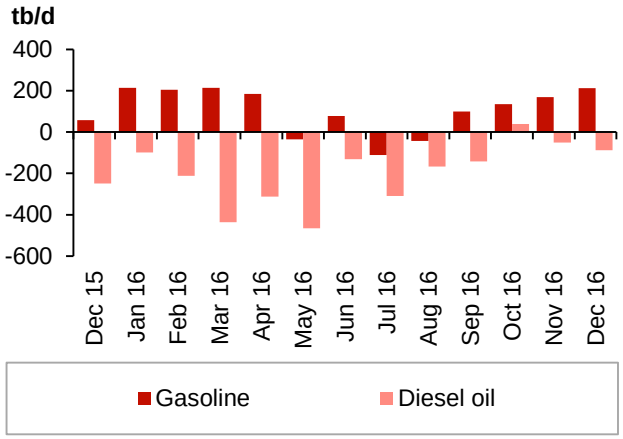
Chinese oil demand continued to rise in December 2016, with an increase of more than 50 mb/d or 4.8% y-o-y. The overall 2016 average growth for China is forecast to stand at around 0.30 mb/d or roughly 3.0% y-o-y. In December 2016, oil demand was determined by rising LPG, jet/kerosene and gasoline usage, while diesel oil demand shrunk marginally, offsetting some of the gains during the month. For LPG, the increase in demand can be attributed to the country's expanding petrochemical industry as LPG grew for another month by around 0.28 mb/d or more than 19% y-o-y. Gasoline demand growth during December 2016 was substantially higher in volume terms, in line with growing vehicle sales.

Graph 4.13
Chinese apparent oil demand, y-o-y change



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

Graph 4.14
Chinese diesel oil and gasoline demand, y-o-y change



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

The initial purchase tax cut and the expectation of a reversal of the policy late in 2016 have obviously supported vehicle sales in the country in 2016. Moreover, stable economic activity in China coupled with a steady stock market were additional elements that caused sales of trucks, buses and passenger cars to increase by close to 14% y-o-y 2016, with the total number of units sold during the year close to 28 million. Sales of individual passenger cars have form the largest share of total vehicle sales in China.

In 2016, sales of passenger cars accounted for more than 24 million of the 28 million vehicles sold, once again in double-digit growth, with an increase of more than 15% y-o-y. Within the passenger car category, sport utility vehicles (SUV) continued their strong performance, rising by as much as 45% y-o-y, after an already very solid year in 2015, with a more than 53% increase.

After years of sales difficulties, China's truck market exhibited positive signs in 2016, rising by close to 9% y-o-y. Only light truck sales fell, declining by 1%. Sales of heavy duty trucks, the most profitable and highest priced segment of the truck industry, showed solid increases during 2016, rising by more than 33% y-o-y, with more than 730,000 units sold. In line with increasing air traffic statistics, jet/kerosene demand grew by 82 tb/d or approximately 14% y-o-y.

Going forward, as economic growth in China is assumed to be at slightly lower levels than in 2016, oil demand growth is expected to record marginally lower levels in 2017. On the other hand, the continuation of the fuel quality programs targeting fewer emissions, as well as ongoing fuel substitution with natural gas and coal, are assumed in the projections for 2017. In terms of products, gasoline and LPG are assumed to lead product growth in 2017 to fulfill the demands arising from ever-growing vehicle sales and ongoing improvements in the petrochemical sector.

For 2016, **Chinese oil demand** grew by 0.30 mb/d, while oil demand in 2017 is projected to increase by 0.27 mb/d.

World Oil Supply

Preliminary data indicates that world oil supply in January 2017 fell by 1.29 mb/d m-o-m to average 95.82 mb/d. The decline was due to lower OPEC and non-OPEC oil production. Year-on-year, world oil supply declined by 0.46 mb/d.

The non-OPEC oil supply estimation for 2016 was revised up by 50 tb/d to average 57.20 mb/d, representing a contraction of 0.66 mb/d. The revision was mainly driven by higher-than-expected growth in 4Q16 in the US, Canada, Norway, Russia and China, which was partially offset by downward revisions in Kazakhstan, Australia and Malaysia. For 2017, the forecast for non-OPEC supply growth was revised up by 120 tb/d to average 57.44 mb/d, representing growth of 0.24 mb/d. The upward adjustments are due to increased drilling activity and investment in the US, leading to higher onshore crude oil and NGLs production.

OPEC NGLs production is forecast to grow by 0.15 mb/d in 2017 to average 6.24 mb/d, following growth of 0.15 mb/d in 2016. In January, OPEC crude oil production decreased by 890 tb/d, according to secondary sources, to average 32.14 mb/d.

Non-OPEC supply

Non-OPEC oil supply in **2016** is estimated to have averaged 57.20 mb/d in 2016, a decline of 0.66 mb/d from the previous year and an upward revision of 0.05 mb/d since the last report. Within the quarters, non-OPEC oil supply revisions were carried out mainly in 4Q16.

Table 5.1
Non-OPEC oil supply in 2016*, *mb/d*

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	21.07	21.00	20.08	20.49	20.73	20.57	-0.49	-2.33
of which US	*14.04*	*13.81*	*13.68*	*13.42*	*13.68*	*13.65*	*-0.39*	*-2.81*
Europe	3.76	3.91	3.73	3.63	3.92	3.80	0.04	0.99
Asia Pacific	0.46	0.44	0.42	0.45	0.43	0.43	-0.03	-6.34
Total OECD	**25.29**	**25.35**	**24.22**	**24.56**	**25.07**	**24.80**	**-0.48**	**-1.91**
Other Asia**	3.60	3.68	3.60	3.58	3.60	3.62	0.02	0.55
Latin America	5.19	4.98	5.06	5.19	5.23	5.12	-0.07	-1.41
Middle East	1.27	1.27	1.28	1.29	1.29	1.28	0.01	0.78
Africa	2.13	2.10	2.05	2.13	2.16	2.11	-0.02	-0.79
Total DCs	**12.19**	**12.03**	**11.99**	**12.19**	**12.28**	**12.13**	**-0.06**	**-0.49**
FSU	13.69	13.95	13.73	13.67	14.16	13.88	0.18	1.33
of which Russia	*10.85*	*11.07*	*10.98*	*11.03*	*11.29*	*11.09*	*0.25*	*2.29*
Other Europe	0.14	0.13	0.13	0.13	0.13	0.13	0.00	-3.51
China	4.38	4.22	4.11	4.00	3.98	4.08	-0.31	-6.99
Total "Other regions"	**18.21**	**18.31**	**17.97**	**17.79**	**18.26**	**18.08**	**-0.13**	**-0.71**
Total non-OPEC production	**55.68**	**55.69**	**54.19**	**54.54**	**55.62**	**55.01**	**-0.67**	**-1.21**
Processing gains	2.17	2.19	2.19	2.19	2.19	2.19	0.01	0.60
Total non-OPEC supply	**57.85**	**57.87**	**56.37**	**56.73**	**57.81**	**57.20**	**-0.66**	**-1.14**
Previous estimate	57.85	57.86	56.37	56.72	57.61	57.14	-0.71	-1.23
Revision	0.00	0.01	0.00	0.01	0.20	0.05	0.05	0.09

*Note: * 2016 = Estimate.*
*** Data includes Indonesia.*
Source: OPEC Secretariat.

Updated production data for 4Q16 led to this adjustment, resulting in upward revisions of 131 tb/d in the OECD, 54 tb/d in the FSU and 29 tb/d in China. A downward revision of 14 tb/d was seen in DCs. According to preliminary and estimated data, total non-OPEC supply in 4Q16 increased by 1.08 mb/d q-o-q while it declined by 0.36 mb/d over the same quarter a year earlier. In 2H16, non-OPEC supply increased by 0.15 mb/d over 1H16 but declined by 0.72 mb/d compared with the same period in the previous year. Non-OPEC supply in 2016 saw strong declines in the OECD and China, and, to a lesser extent, in DCs, while growth was seen in the FSU, driven by robust output from Russia.

On a regional basis, OECD Americas' oil supply declined by 0.49 mb/d in 2016, following growth of 0.93 mb/d in 2015. This drop relates mostly to declines in US onshore crude oil output rather than annual declines in Mexico and outages in Canadian oil sands. The second region was China, with weaker crude oil output than expected according to various sources, due to low production performance in mature oil fields and low investment on behalf of the main domestic companies. In Latin America, total oil supply was disappointing, following a remarkable drop in Brazilian yearly growth compared with that of a year earlier, as well as a higher annual decline in Colombia. Contraction of 30 tb/d in OECD Asia Pacific and also 20 tb/d in Africa were registered in 2016. The only regions with minor growth were OECD Europe, Other Asia and the Middle East, while FSU had robust growth of 0.18 mb/d.

For **2017**, non-OPEC oil supply is now projected to grow by 0.24 mb/d, up by 0.12 mb/d from the previous *MOMR* due mainly to higher expectations for the US on the increase in prices.

Table 5.2
Non-OPEC oil supply in 2017*, *mb/d*

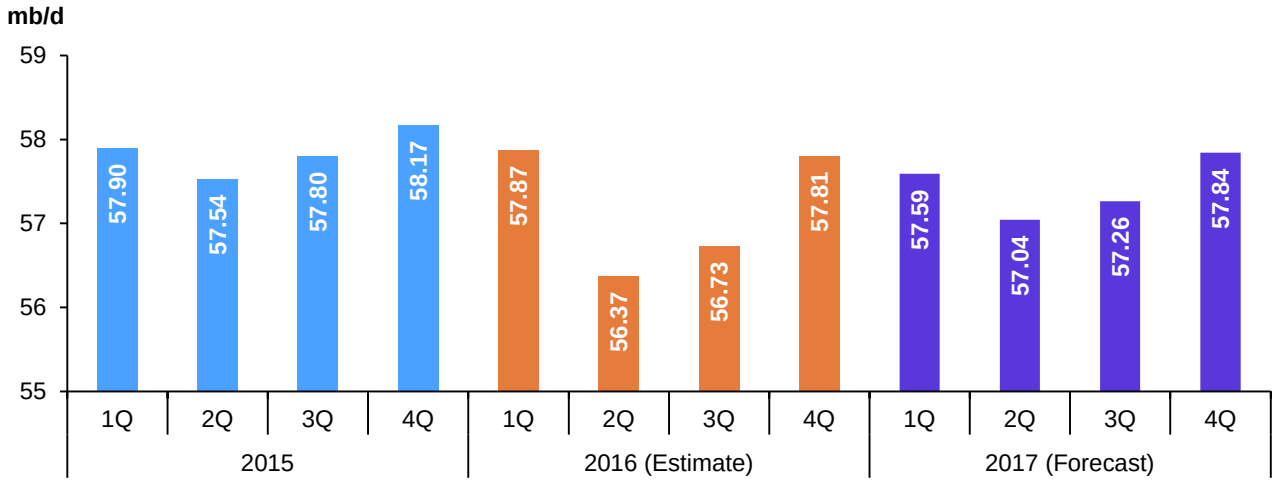
							Change 2017/16	
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
Americas	20.57	20.92	20.57	20.81	20.97	20.82	0.25	1.20
of which US	*13.65*	*13.88*	*13.78*	*13.88*	*13.99*	*13.88*	*0.24*	*1.74*
Europe	3.80	3.84	3.73	3.54	3.82	3.73	-0.07	-1.72
Asia Pacific	0.43	0.45	0.46	0.45	0.42	0.44	0.01	2.50
Total OECD	**24.80**	**25.21**	**24.76**	**24.80**	**25.21**	**24.99**	**0.19**	**0.78**
Other Asia	3.62	3.64	3.59	3.56	3.53	3.58	-0.04	-1.00
Latin America	5.12	5.23	5.25	5.29	5.38	5.29	0.17	3.37
Middle East	1.28	1.24	1.23	1.24	1.24	1.24	-0.05	-3.65
Africa	2.11	2.13	2.15	2.22	2.24	2.18	0.07	3.44
Total DCs	**12.13**	**12.23**	**12.22**	**12.31**	**12.39**	**12.29**	**0.16**	**1.34**
FSU	13.88	13.87	13.83	13.94	14.02	13.92	0.04	0.29
of which Russia	*11.09*	*10.98*	*10.97*	*11.08*	*11.11*	*11.03*	*-0.06*	*-0.54*
Other Europe	0.13	0.14	0.14	0.14	0.15	0.14	0.01	8.54
China	4.08	3.95	3.89	3.87	3.88	3.90	-0.18	-4.33
Total "Other regions"	**18.08**	**17.96**	**17.87**	**17.95**	**18.05**	**17.96**	**-0.13**	**-0.69**
Total non-OPEC production	**55.01**	**55.40**	**54.85**	**55.07**	**55.65**	**55.24**	**0.23**	**0.42**
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01	0.50
Total non-OPEC supply	**57.20**	**57.59**	**57.04**	**57.26**	**57.84**	**57.44**	**0.24**	**0.42**
Previous estimate	57.14	57.34	56.92	57.09	57.67	57.26	0.12	0.20
Revision	0.05	0.25	0.12	0.17	0.17	0.18	0.12	0.22

*Note: * 2017 = Forecast.*
*** Data includes Indonesia.*
Source: OPEC Secretariat.

The expected higher prices are good support for producers with marginal supply, particularly in US tight plays. Hence, the revision to the forecast for 2017 supply was made mainly based on US onshore drilling activities and more announced spending by operators on production for this year.

On a country-by-country basis, the main contributors to growth in 2017 are expected to be Brazil with 0.25 mb/d, the US with 0.24 mb/d, Canada with 0.18 mb/d, Kazakhstan with 0.14 mb/d, Africa Others with 0.04 mb/d and Congo with 0.03 mb/d. China, Mexico, Russia, Colombia, Oman, Azerbaijan, Norway and Indonesia are expected to show the strongest declines.

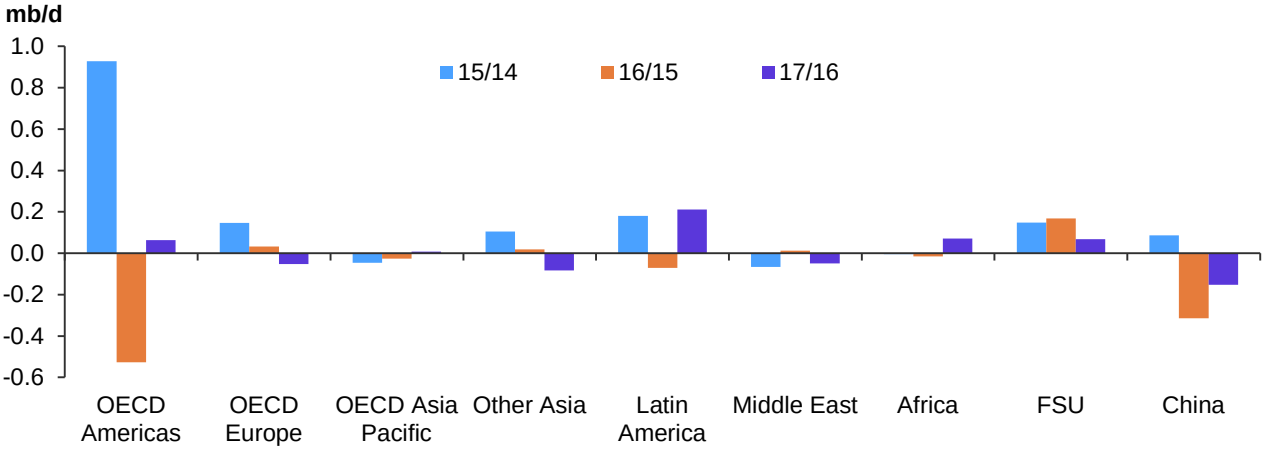
Graph 5.1
Non-OPEC quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

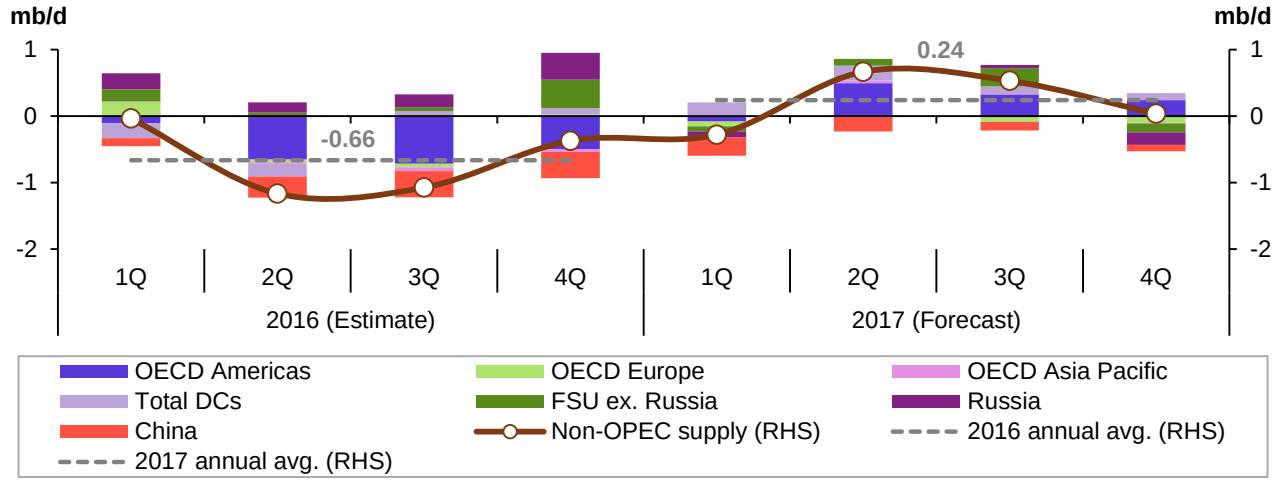
Regarding regional non-OPEC supply changes, the following graph shows that the main rebound in annual growth will be in OECD Americas and, to some extent, in DCs, particularly Latin America.

Graph 5.2
Regional non-OPEC supply growth, 2015-2017, y-o-y change



Note: 2016 = Estimate and 2017 = Forecast.
Source: OPEC Secretariat.

Graph 5.3
Non-OPEC quarterly supply change, 2016-2017, y-o-y change



Source: OPEC Secretariat.

Global oil and gas companies are expected to raise exploration and production (E&P) spending in 2017, marking the first increase in three years. Thus, in addition to the expected increase in prices, spending on new projects and field development are helping stimulate production in North America. In particular, projects with good economic performance and productivity will have the potential to bring more oil online in 2017.

Table 5.3
Non-OPEC supply forecast comparison in 2016* and 2017*, *mb/d*

Region	2016	Change 2016/15	2017	Change 2017/16
OECD Americas	20.57	-0.49	20.82	0.25
OECD Europe	3.80	0.04	3.73	-0.07
OECD Asia Pacific	0.43	-0.03	0.44	0.01
Total OECD	**24.80**	**-0.48**	**24.99**	**0.19**
Other Asia **	3.62	0.02	3.58	-0.04
Latin America	5.12	-0.07	5.29	0.17
Middle East	1.28	0.01	1.24	-0.05
Africa	2.11	-0.02	2.18	0.07
Total DCs	**12.13**	**-0.06**	**12.29**	**0.16**
FSU	13.88	0.18	13.92	0.04
Other Europe	0.13	0.00	0.14	0.01
China	4.08	-0.31	3.90	-0.18
Non-OPEC production	55.01	-0.67	55.24	0.23
Processing gains	2.19	0.01	2.20	0.01
Non-OPEC supply	**57.20**	**-0.66**	**57.44**	**0.24**

*Note: * 2016 = Estimate and 2017 = Forecast.*
*** Data includes Indonesia.*
Source: OPEC Secretariat.

OECD

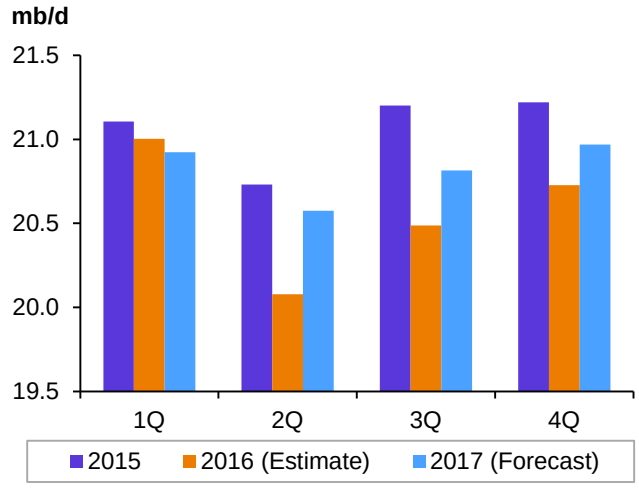
Total OECD liquids production in 2016 is estimated to contract by 0.48 mb/d to average 24.80 mb/d, revised up by 37 tb/d from January's *MOMR*. Following an upward revision in OECD Americas, OECD supply is now forecast to average 24.99 mb/d in 2017, representing growth of 0.19 mb/d.

OECD Americas

OECD Americas' oil supply in 2016 is estimated to average 20.57 mb/d, a decline of 0.49 mb/d and an upward revision of 35 tb/d m-o-m. Supply in the US and Mexico is estimated to decline in 2016, but increase in Canada. In 2017, supply in the region is expected to increase by 0.25 mb/d to average 20.82 mb/d, an upward revision of 0.19 mb/d, mostly due to higher-than-expected growth in US oil production of 0.24 mb/d. Canada is also expected to see robust growth of 0.18 mb/d, while declines of 0.17 mb/d are anticipated in Mexico.

Graph 5.4

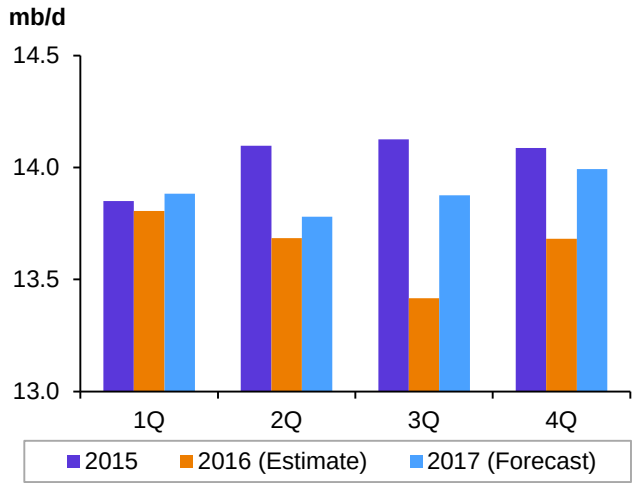
OECD Americas quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.5

US quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

US

Crude oil production in the US averaged 8.90 mb/d in November, which is 0.10 mb/d higher than in October, yet 4.3% lower y-o-y, according to the latest information from the US Energy Information Administration (EIA). Some 90 tb/d of this supply is attributed to growth in the US Gulf of Mexico (GoM), which recovered following two months of low output due to maintenance, tropical storm Hermine and new project ramp-ups. Crude oil production in Texas increased by a minor 0.6% to average 3.19 mb/d in November, lower by 6.3% y-o-y. In North Dakota, production decreased by a minor 0.7% to average 1.03 mb/d that month, lower by 12.4% y-o-y. Crude oil output in all of the Lower 48 States declined in November m-o-m, with the exception of Wyoming, New Mexico and Montana. Oil production in Alaska increased by 18 tb/d or 3.7% to 0.51 mb/d in November. A move towards higher prices may lead to a resurgence in US tight oil production from the most prolific shale regions.

In terms of US tight oil production, the Permian Basin is the major oil producing basin with a large geographic size and remarkable potential. Its multiple stacked plays (Permian Delaware and Permian Midland) are the main sources for growth, allowing companies to drill wells with different trajectories in the Wolfcamp, Bonespring, Spraberry, Yeso & Glorieta and Delaware plays to produce tight oil using hydraulic fracturing. US tight oil production in more than six oil bearing formations increased by 0.21 mb/d or 16% to average 1.53 mb/d in November 2016 y-o-y, estimated by the EIA. However, since the decline rate in the first year is very high after a well is completed and 2016 was a weak year due to the low number of active drilling rigs, the decline from legacy production outpaced the growth from new output.

NGLs production rose by 57 tb/d m-o-m in November 2016 to average 3.6 mb/d, which was an increase of 100 tb/d y-o-y. It is estimated that total US NGL output grew by 150 tb/d to average 3.5 mb/d in 2016. US total liquids supply declined from 14.16 mb/d in November 2015 to an average of 13.77 mb/d in November 2016, representing a total decrease of 0.39 mb/d. On a yearly basis, US liquids supply excluding processing gains is also estimated to have declined by 0.39 mb/d in 2016 to average 13.65 mb/d, representing an upward adjustment of 20 tb/d since the last *MOMR*.

In the **US Gulf of Mexico (GoM)**, oil production increased by 5.6% to average 1.68 mb/d in November, higher by 10.3%, y-o-y. GoM oil output in November increased by 157 tb/d y-o-y, but in comparison with the first eleven months of 2015, it grew by 88 tb/d. In mid-December, Royal Dutch Shell delivered first oil from the Stones project, which is located in GoM ultra-deepwater, and the first phase of production is expected to produce 50 tboe/d. BP also recently started up the Thunder Horse South Expansion deepwater project in the GoM 11 months ahead of schedule and $150 million under budget. According to the operator the project is expected to boost production at the facility by an estimated 50 tboe/d, further increasing output at one of the largest oil fields in the GoM. Planned for 2017, it was brought online on 8 December after being completed more than 15% below budget.

Total US liquids production in 2017 is forecast to grow by 0.24 mb/d to average 13.88 mb/d. This forecast has been revised up by 0.16 mb/d compared to January's *MOMR* due to recent drilling activities, which showed a reverse trend from June compared with a year earlier. This trend was seen in most regions, particularly those regions with prolific tight oil potential. The growth in onshore crude oil production in 2017 depends on rig count developments. When onshore rigs in 2015 dropped by 424 rigs y-o-y, onshore crude oil and condensate output declined by 621 tb/d; when in 2016, US onshore oil rigs dropped by 330 rigs y-o-y, output collapsed by 1,143 tb/d y-o-y. However, there is no constant and calculable relation between rig counts and output. This is because the decline in legacy production which outpaced the increase in new production in all regions except the Permian Basin. It is expected that, by increasing the rig count by around 350 rigs in 2017, US onshore crude and condensate, including tight crude, will remain stagnant at 7.3 mb/d. Indeed, the expected growth of 100 tb/d will be offset by 80 tb/d of declines in conventional crude oil production. Moreover, shale cost inflation could reach around 20% in 2017. As a result, the breakeven in different shale plays will climb with the cost increases, outpacing efficiency gains. NGLs output is also expected to increase by 123 tb/d in 2017, following the increase in natural gas prices.

US oil rig count

According to Baker Hughes' latest weekly report for 3 February 2017, total drilling rigs in the US increased by 17 units w-o-w to 729 rigs. Oil rigs stood at 583 rigs, an increase of 116 units y-o-y.

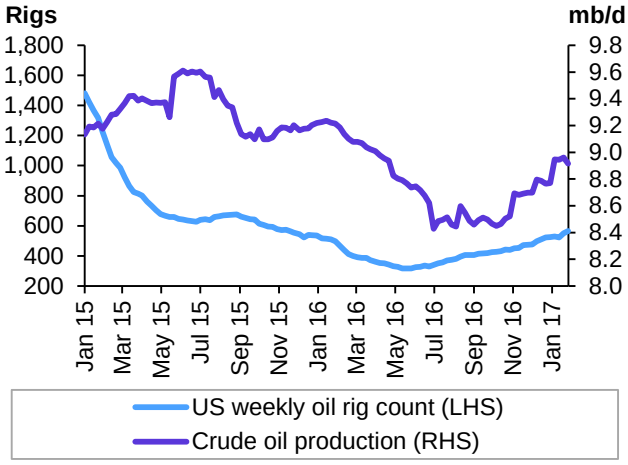
In January, total rig counts increased by 49 units m-o-m to average 692 rigs. On a monthly basis, oil rigs increased by 36 units m-o-m to 550 rigs, while gas rigs increased by 13 units m-o-m to 141 rigs. In terms of well trajectory, the number of horizontal wells increased by 43 units m-o-m to 518 rigs. Moreover, rigs for directional wells increased by 6 units, while vertical wells remained unchanged at 70 rigs. In the basins, the number of oil rigs have increased by 267 units from the beginning of the previous June. In Eagle Ford, the number of rigs increased by 25 units to 51 rigs; in Niobrara, by 8 to 21 rigs; in Willston Basin, by 15 to 37 rigs; and in the Permian Basin, by 158 to 295 rigs. In the same period, the number of gas rigs was also up by 58 to 145 rigs.

Table 5.4
US rotary rig count on 3 February 2017

					Change		
		3 Feb 17	Month ago	Year ago	M-o-m	Y-o-y	Y-o-y, %
Oil and gas split	**Oil**	583	529	467	54	116	25%
	Gas	145	135	104	10	41	39%
Location	**Onshore**	707	641	545	66	162	30%
	Offshore	22	24	26	-2	-4	-15%
Basin	**Williston**	37	33	42	4	-5	-12%
	Eagle Ford	56	47	60	9	-4	-7%
	Permian	295	267	180	28	115	64%
Drilling trajectory	**Directional**	66	57	53	9	13	25%
	Horizontal	596	534	458	62	138	30%
	Vertical	67	74	60	-7	7	12%
US total rig count		**729**	**665**	**571**	**64**	**158**	**28%**

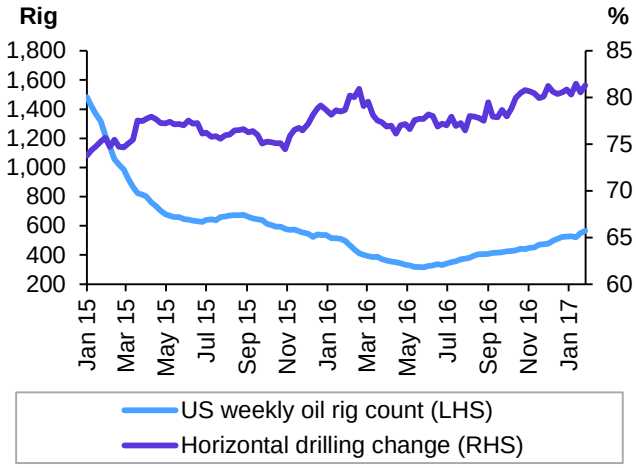
Sources: Baker Hughes and OPEC Secretariat.

Graph 5.6
US weekly oil rig count vs. crude oil production



Sources: Baker Hughes and US Energy Information Administration.

Graph 5.7
US weekly oil right count vs. horizontal drilling change



Source: Baker Hughes.

US oil production development in 2017

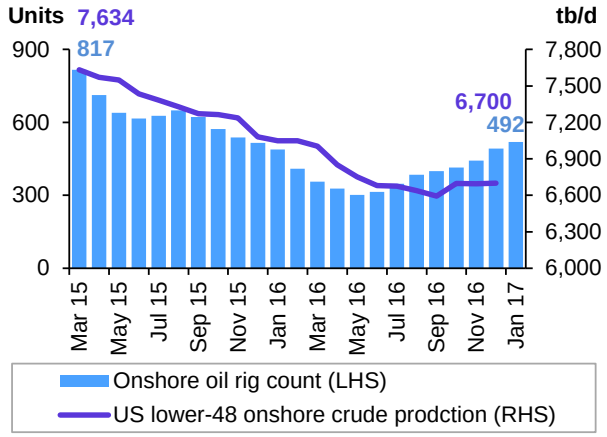
US oil supply, particularly tight oil production, including tight crude and unconventional NGLs produced from the prolific shale and tight plays, has fluctuated during the last two years with remarkable declines in tight crude following the oil price crash that occurred in July 2014. The number of onshore drilling oil rigs has now reached 707 units based on Baker Hughes data reported from 3 February 2017. US drillers have added 267 oil rigs since the last week of May 2016. It seems that US domestic producers, who have a bright short-term overview on oil prices, have begun to add more drilling rigs on their respective plays.

US onshore crude oil and condensate production, including tight crude, since its peak at 7.63 mb/d in March 2015, has declined more or less continuously by 934 tb/d to settle at around 6.70 mb/d at the end of 2016. There is no direct correlation between the number of restarted oil rigs and an increase in crude oil production because of drilled but uncompleted wells (DUCs). During the period 15 March to 16 December 2016, some 653 horizontal DUCs were completed and came online, compensating for part of the output depletion due to lower rig counts.

To predict how much crude oil will be produced in the US and how fast it will be produced is challenging. Physically, rig counts and producing well counts are the main factors for output, while access to the most productive regions where their breakeven matches with the current WTI prices are essential for growth. The decline in onshore oil rigs in the lower 48 states bottomed out at 320 rigs in average in May 2016. In 4Q16, the number of active onshore oil rigs had increased by around 20% q-o-q to 450 rigs on average. The average rig count in 2017 is expected to reach 675 rigs, higher by 73% over the average of 390 rigs in 2016. Some 86% of the total oil rigs are expected to drill horizontal wells. According to the base scenario for rig counts in 2017, the US Lower 48 states' onshore crude and condensate production, including tight crude, is forecast to reach 6.9 mb/d by the end of the year, but on a yearly basis, it will grow by only 24 tb/d to average 6.80 mb/d compared with a year earlier when it was at 6.78 mb/d. The maximum and minimum production, assuming the rig count with +20% and -20%, will be at 7.3 mb/d and 6.8 mb/d, respectively.

Graph 5.8

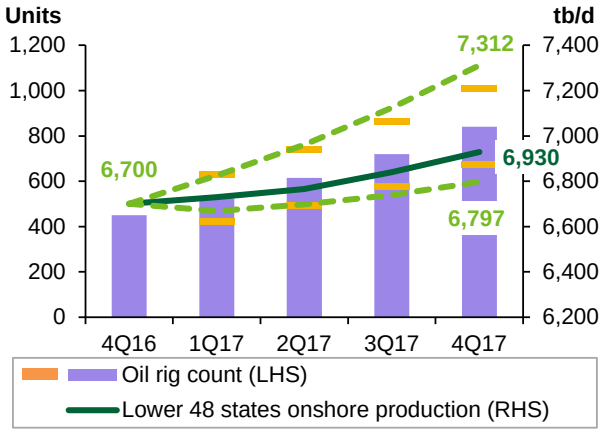
US lower 48 states onshore oil rig counts vs. Crude oil production



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

Graph 5.9

US lower 48 states rig counts forecast vs. Crude oil output

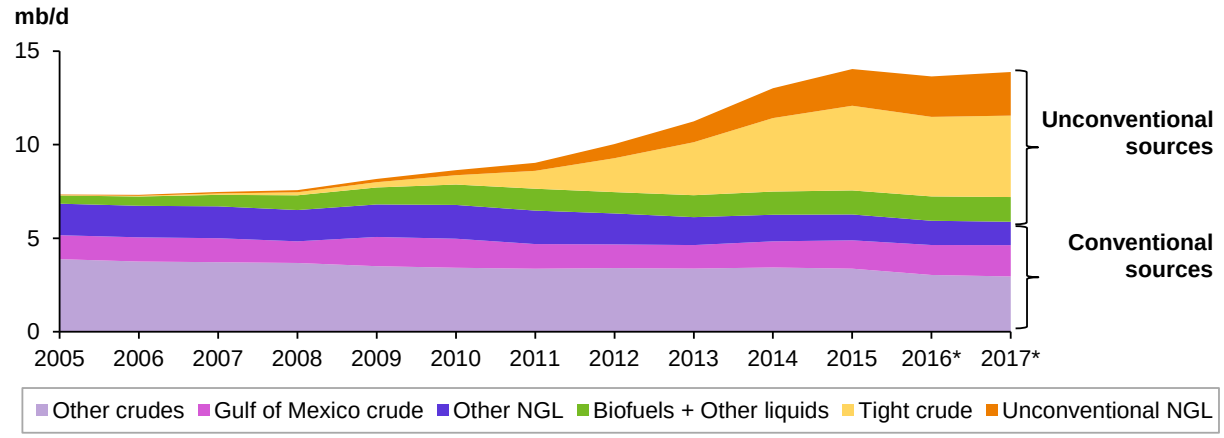


Sources: OPEC Secretariat.

Different survey results on global upstream spending show the recovery in different segments from oilfield services and equipment to drilling and well completions in 2017. According to Barclay, North American upstream spending will increase ~27% based on WTI being at $50/b. According to this survey, upstream spending is forecast to increase as a result of greater activity and oilfield service cost inflation. It seems that based on the assumption of a more stable oil price outlook, increased drilling activity and production is expected. Rystad Energy expects global E&P investments will start to grow for some segments, while other segments are expected to continue declining. Investments in shale are expected to come back in 2017, with projected growth of more than 35%.

Production of US natural gas liquids (NGLs) increased by 0.14 mb/d to average 3.48 mb/d in 2016, following growth of 0.33 mb/d in 2015. The highest monthly output of 3.62 mb/d was recorded in June. Improved US natural gas prices have resulted in more rigs coming back online. The number of active gas rigs was at the low point of 81 rigs in August 2016, but the count increased back up to 132 rigs by the end of the year. Hence, US NGLs are expected to grow by 123 tb/d in 2016. However, unconventional NGLs growth in 2017 will be partially offset by conventional NGL declines.

Graph 5.10
US liquids production breakdown



*Note: * 2016 = Estimate and 2017= Forecast.*
Source: OPEC Secretariat.

Table 5.5
US liquids production breakdown

	2014	2015	Change 2015/14	2016	Change 2016/15	2017	Change 2017/16
Tight crude	3,927	4,524	*597*	4,250	*-274*	4,350	*100*
Gulf of Mexico crude	1,397	1,515	*118*	1,600	*85*	1,673	*73*
Other crudes	3,440	3,376	*-63*	3,040	*-336*	2,960	*-80*
Unconventional NGL	1,594	1,961	*367*	2,161	*200*	2,330	*169*
Other NGL	1,420	1,382	*-39*	1,296	*-86*	1,250	*-46*
Biofuels + Other liquids	1,238	1,283	*45*	1,300	*17*	1,320	*20*
US total supply	**13,016**	**14,041**	***1,025***	**13,646**	***-395***	**13,883**	***237***

*Note: * 2016 = Estimate and 2017 = Forecast.*
Source: OPEC Secretariat.

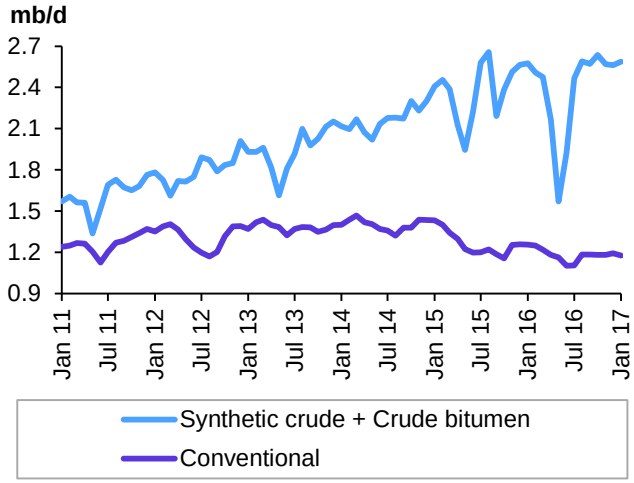
According to the analysis reflected above, US tight crude output, will grow by 100 tb/d to 4.35 mb/d. The expected growth of 340 tb/d from the prolific plays in the Permian Basin will be offset by 240tb/d of declines in the other shale and tight plays. However, total US tight crude oil and condensate growth will be affected by declines of 80 tb/d coming from conventional reservoirs. Hence, a plateau in US onshore crude oil production is expected for 2017 with maximum increases at 20 tb/d to average 7.31 mb/d, consisting of 4.35 mb/d of tight crude and 2.96 mb/d of conventional crude oil and condensate.

Canada and Mexico

Canada's oil supply is expected to increase by 40 tb/d in 2016 to average 4.46 mb/d, adjusted up by 20 tb/d following an upward revision of 67 tb/d in 4Q16. Preliminary estimates place October Canadian oil output at 4.72 mb/d, higher by 70 tb/d compared with September. Oil sands output – bitumen and synthetic crude – increased by 64 tb/d to settle at 2.67 mb/d as the output of synthetic crude hit its highest level in more than a year. Conventional oil and NGLs were steady at 1.18 mb/d with nearly 0.25 mb/d produced from offshore fields in Newfoundland and Labrador, together with the main contributor for the growth of 50 tb/d y-o-y coming from the Hibernia oil field. Some 0.86 mb/d is seen coming from NGLs. For 2017, oil sands output from new projects such as Black Gold Fort Hills and MacKay River, as well as from old project ramp-ups, is expected to produce about 175 tb/d of bitumen and 100 tb/d of synthetic crude. Forecasted oil sands and synthetic crude growth will be partially offset by declines in various types of conventional crude, condensates and NGLs, leading to net growth of

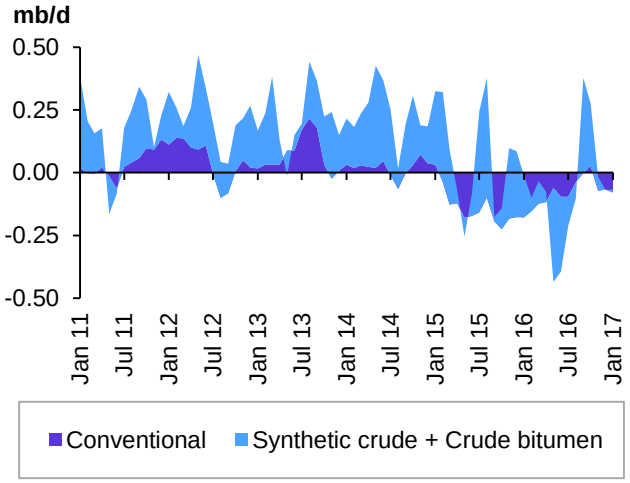
0.18 mb/d in 2017, following an upward revision of 10 tb/d compared to January's *MOMR*, to now average 4.63 mb/d.

Graph 5.11
Canada production by crude type



Source: OPEC Secretariat.

Graph 5.12
Canada production by crude type, y-o-y change

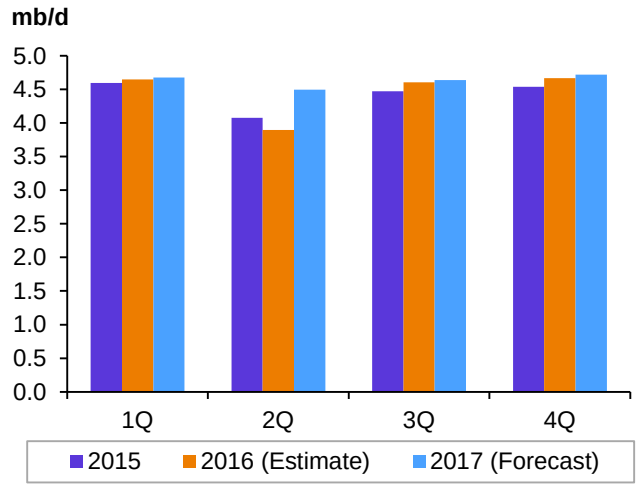


Source: OPEC Secretariat.

Canada's overall rig count for the week ending 3 February 2017 saw two less units w-o-w to total 343 units. On a monthly basis, they increased by 99 rigs – of which 70 rigs are from oil – to average 310 rigs. Y-o-y, the rig count in Canada showed an increase of 101 rigs.

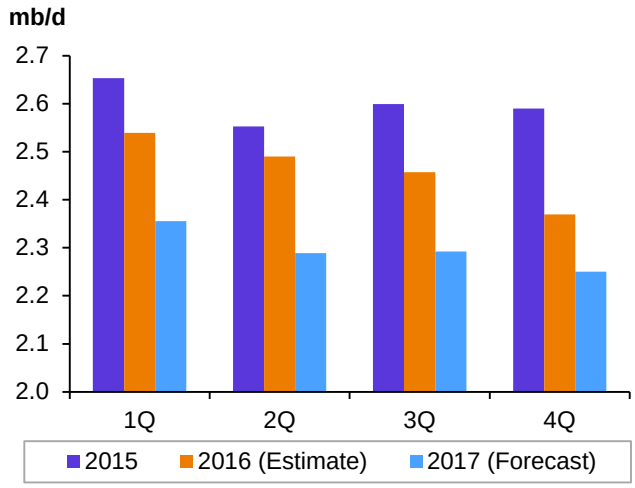
After decreasing to a minimum of 26 rigs during the wildfires in Fort McMurray last May, the number of active rigs in Alberta – the main state for oil sands production – reached an average of 247 rigs. The other main producing provinces are Saskatchewan and British Colombia which registered 54 rigs and 30 rigs, respectively.

Graph 5.13
Canada quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.14
Mexico quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Mexican liquids production in 2016 is estimated to decline by 0.13 mb/d to average 2.46 mb/d, unchanged from the previous *MOMR*. Oil output in December declined by 30 tb/d. Crude oil and condensate declined by 37 tb/d compared to November while NGL output was steady averaging 2.34 mb/d m-o-m. Preliminary oil supply data for 4Q16 shows another 90 tb/d of decline, q-o-q. According to this annual decline rate trend, oil production will fall by 0.17 mb/d – revised up by 10 tb/d compared to January's *MOMR* − to average 2.30 mb/d in 2017.

OECD Europe

Total **OECD Europe's oil supply** is estimated to grow by 40 tb/d to average 3.80 mb/d in 2016, indicating an upward adjustment of 10 tb/d, with the increase coming mainly from the UK's supply revision in 1Q16 and 4Q16. In contrast, the 2017 forecast was revised down by 20 tb/d to now show a contraction of 70 tb/d to average 3.73 mb/d, reflecting a downward revision in 1Q17 for the UK.

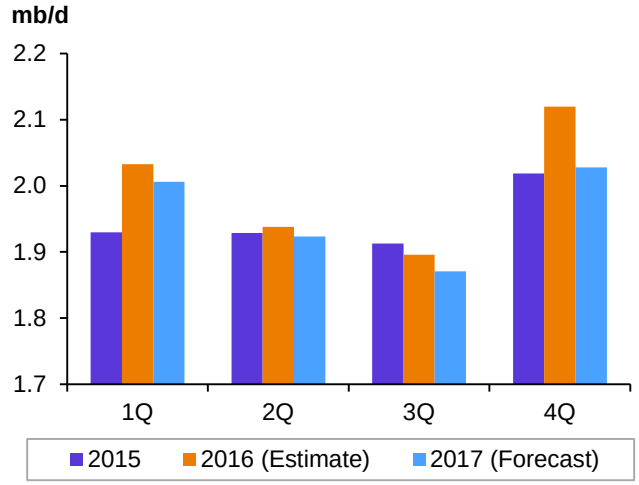
Norway

Norway's oil supply is estimated to have increased by 0.05 mb/d over the previous year to average 2.0 mb/d in 2016, unchanged from the previous *MOMR*. Preliminary production figures for 4Q16 indicate average production of about 2.12 mb/d, while those for December show an average daily production of about 2.09 mb/d. This is 60 tb/d or 3.0% less than in November, and the reason was due to Goliat's shut down once again due to a technical failure in its offloading equipment.

According to the monthly Norwegian Petroleum Directorate (NPD) report, oil production increased for the third consecutive year in 2016 and gas production remained at the high record seen in the previous year. Substantial reductions in operating and exploration costs were a key factor behind this relatively high level of production. Average daily liquid production in December consisted of 1.69 mb/d of oil (-50 tb/d m-o-m), 0.37 mb/d of NGLs (-10 tb/d m-o-m) and 0.03 mb/d of condensate. Oil production in December was about 3.5% above the same month last year.

Graph 5.15

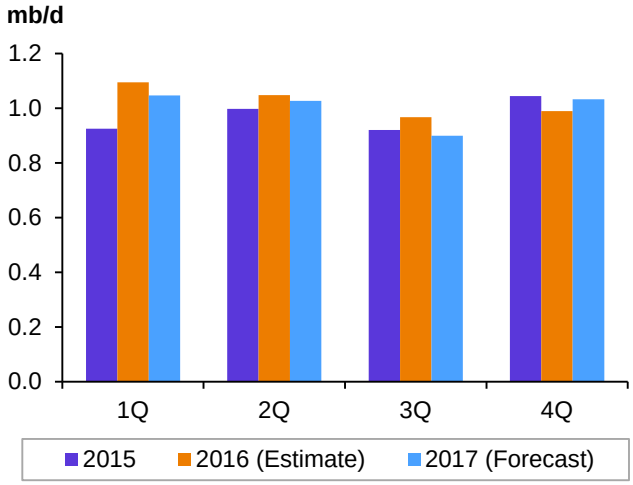
Norway quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.16

UK quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

UK

UK oil production is estimated to have increased by 50 tb/d to average 1.02 mb/d in 2016, while a contraction of 20 tb/d is expected for this year. Despite higher maintenance in 2016, UK's oil supply has increased, offsetting steep underlying declines. UK liquids production in December was lower by 60 tb/d m-o-m to average 1.03 mb/d with crude oil production decreasing by 44 tb/d to reach 0.92 mb/d. Total production in 4Q16 was higher q-o-q by 20 tb/d at 0.99 mb/d, but lower by 50 tb/d, y-o-y.

Developing Countries

Total oil production from the group of **developing countries (DCs)** is estimated to have declined by 60 tb/d y-o-y to average 12.13 mb/d in 2016, following an upward revision of 20 tb/d. The main reason for this contraction was lower production in Latin America compared with recent years.

In **2017**, DC supply is forecast to grow by 0.16 mb/d to average 12.29 mb/d, following an upward revision of 12 tb/d. The key region for growth is expected to be Latin America with 0.17 mb/d – mainly from Brazil – to average 5.29 mb/d and, to a lesser degree, Africa, increasing by 70 tb/d – mainly from the Congo and Ghana – to stand at 2.18 mb/d. Other Asia's oil supply will see a decline of 40 tb/d to average 3.58 mb/d, revised up by 40 tb/d following an upward revision in Indonesia. A decline of 50 tb/d is also expected for non-OPEC Middle East supply, to stand at 1.24 mb/d in 2017.

Other Asia

Other Asia's oil production is estimated to increase by 20 tb/d in 2016 to average 3.62 mb/d, while a contraction of 40 tb/d is predicted in 2017, following Indonesia being added to non-OPEC from the beginning of the year. Although **Indonesia** could have increased its oil output by 50 tb/d last year, a contraction of 30 tb/d is expected for this year, declining to average 0.89 mb/d.

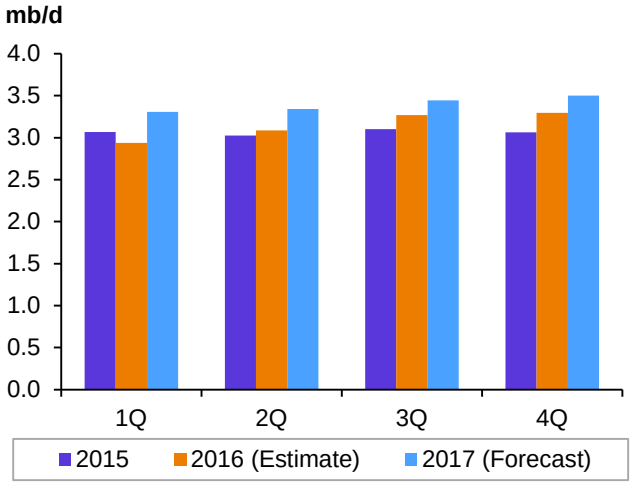
In **Malaysia,** despite starting up the Malika field in December 2016 located in deepwater Sabah, a minor contraction of 10 tb/d is expected for this year compared with minor growth of 10 tb/d last year. Production in India and the Asia Others category is expected to rise by a total of 30 tb/d in 2017.

Latin America

After a downward revision in Colombia's oil production, oil supply from Latin America is predicted to increase by 0.17 mb/d, to average 5.29 mb/d in 2017, despite declining by 70 tb/d in 2016.

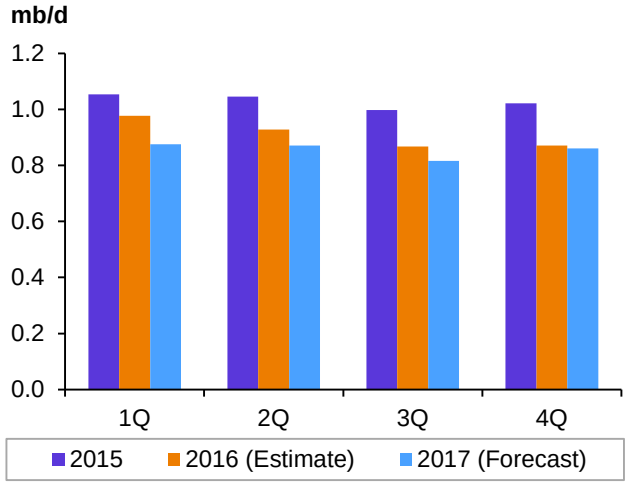
Brazil's liquids supply is estimated to average 3.15 mb/d in 2016, an increase of 0.08 mb/d over the previous year. Total liquids output in December rose by 70 tb/d m-o-m to average 3.33 mb/d. Preliminary crude oil production showed an increase of 67 tb/d m-o-m in December to average 2.68 mb/d. As a result, oil production in 4Q16 increased by 20 tb/d q-o-q to average 3.29 mb/d. Brazil's Petrobras, following the start-ups of three production units in 2016 and, most recently, Cidade de Caraguatatuba, will start up another four FPSOs − Tartaruga Verde e Mestiça, Lula Norte (P-67), Lula Sul (P-66), and Libra. Oil production is expected to increase by 0.25 mb/d to average 3.40 mb/d when these projects materialize later this year.

Graph 5.17
Brazil quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.18
Colombia quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

In **Colombia**, oil production in December declined by 20 tb/d m-o-m to average 0.86 mb/d, although output in 4Q16 was steady at 0.87 mb/d, q-o-q. Annual production is expected to have declined by 0.12 mb/d to average 0.91 mb/d in 2016. The main reason for this high decline rate was less investment due to low oil prices in 2016, but Colombia's oil sector plans to double its Capex this year, as it seeks to maintain output at around 900 tb/d. Upstream Capex is expected to rise to between $4.5 bn and $4.9 bn, with $3.1 bn to $3.4 bn being earmarked for development drilling and $1.4 bn to $1.6 bn for exploration. Nonetheless, the production decline is expected to ease in the current year to 50 tb/d, with average yearly output reaching 0.86 mb/d.

Middle East

In 2017, oil output from Oman is expected to decline by 40 tb/d to average 0.96 mb/d following the announced production adjustments, with half of this coming from annual decline. Bahrain has also decided to adjust its oil production this year by 20 tb/d. Middle East oil production will decline in 2017 by 50 tb/d to average 1.24 mb/d, remaining unchanged from January's *MOMR*. The main non-OPEC oil producers in the Middle East – Oman, Bahrain, Syria and Yemen – produced 1.28 mb/d in 2016, indicating growth of 10 tb/d.

Africa

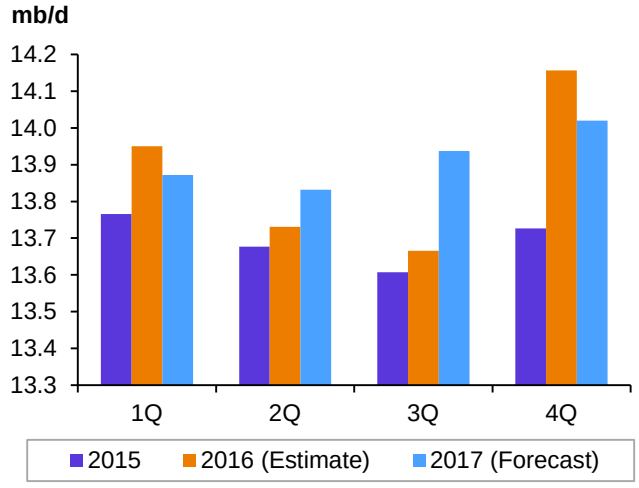
Oil output in Africa is estimated to decline by 20 tb/d in 2016, remaining unchanged from last month's report to average 2.11 mb/d. Most African countries saw an oil production decline or stagnant output y–o-y in 2016 except Congo, which had growth from its new Moho Marine Nord project. In 2017, oil production will continue to grow by 30 tb/d in Congo as well as in South Africa, Ghana and Chad. Declines are seen coming from Sudan, South Sudan and Equatorial Guinea. For the region, growth is expected at 70 tb/d, to average 2.18 mb/d.

FSU, other regions

FSU's oil supply is expected to grow by 0.18 mb/d in 2016 to average 13.88 mb/d, following an upward revision of 10 tb/d. In 2016, oil production increased in Russia, while declining in Kazakhstan, Azerbaijan and FSU Others. The oil production forecast for 2017 was revised down this month by 30 tb/d to now show growth of 0.04 mb/d for a total of 13.92 mb/d. Downward revisions were seen in Russia's production in line with its announced production adjustments.

Graph 5.19

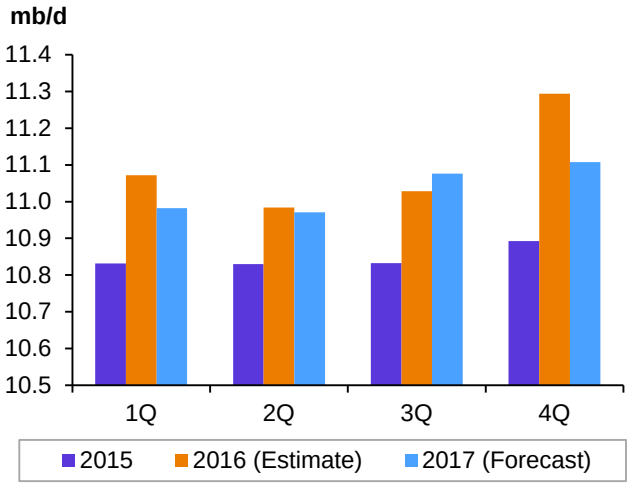
FSU quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.20

Russia quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Russia

Russia's oil production declined by 120 tb/d in January 2017 to average 11.19 mb/d. Output in 4Q16 was 0.4 mb/d higher y-o-y. Russian oil output is estimated to have increased by 0.25 mb/d to average 11.08 mb/d in 2016, following an upward revision of 20 tb/d. Russia's oil supply for 2017 was revised down by 30 tb/d this month to now show a contraction of 60 tb/d to average 11.03 mb/d.

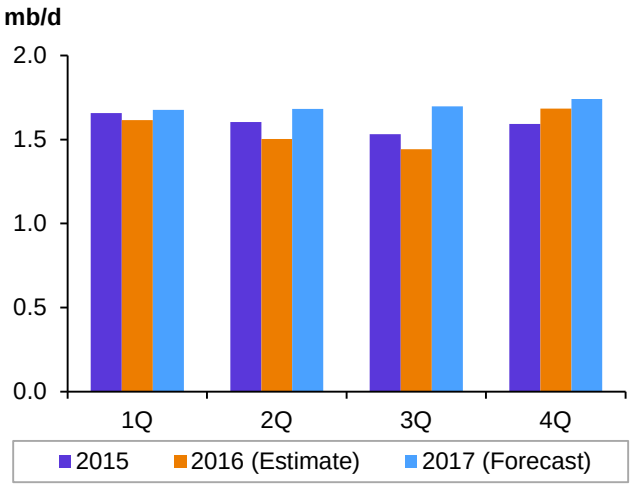
Following the completion of three horizontal side tracked wells in the Vladimir Filanovsky field in the Russian sector of the Caspian Sea, cumulative production has reached 7.15 million barrels, and construction of a fourth well is under way. In another project, Gazpromneft Shelf has started two new production wells at the Prirazlomnoye field offshore northern Russia. Six production wells, two injection wells and one absorption well are currently in operation at the Prirazlomnaya platform. The total length of the two wells is more than 8 kilometres (5 miles), and one is equipped with a domestically-produced electronic submersible pump.

Caspian

Kazakhstan's crude oil output grew by 10 tb/d in December to average 1.43 mb/d, with liquids output – which includes NGLs – averaging 1.70 mb/d. As a result, Kashagan's production reached a maximum of 0.12 mb/d at the end of 2016. For 2017, crude oil production is seen declining by a total of 20 tb/d from fields located in the Aktobe and Kyzylorda regions, according to the Ministry. The adjusted Kazakh oil supply is now seen growing by 0.14 mb/d to average 1.70 mb/d. However, production ramp-ups of the Kashagan field could lead to a maximum level of 0.27 mb/d by year end.

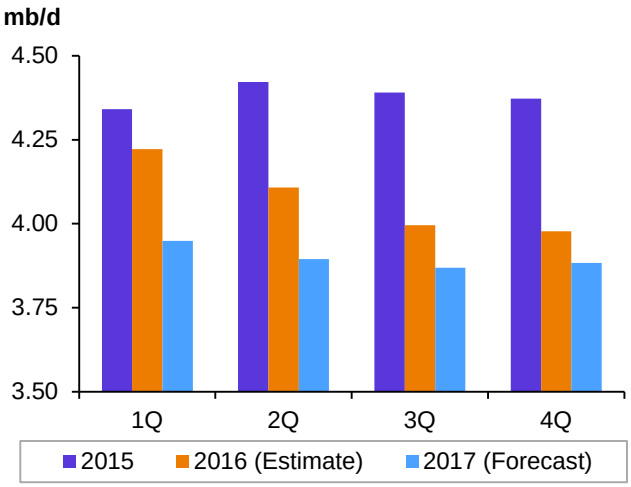
Azerbaijan's oil supply in 2016 was revised down by 10 tb/d to average 0.85 mb/d, indicating a decline of 10 tb/d following weaker-than-expected output in 4Q16. Azeri crude oil output in December increased by 90 tb/d, m-o-m. However, production in 2H16 was lower by 30 tb/d than the 0.86 mb/d produced in 1H16. In 2017, oil production in Azerbaijan is expected to contract by 40 tb/d to average 0.81 mb/d.

Graph 5.21
Kazakhstan quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.22
China quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

China

China's supply in 2016 is expected to contract by 0.31 mb/d from the previous year to average 4.08 mb/d. Chinese crude oil output increased in December by 40 tb/d to average 4.05 mb/d following a m-o-m increase of 130 tb/d in November, m-o-m. Chinese oil production in 2017 is anticipated to contract for a second year by 0.18 mb/d, revised down by 30 tb/d, to average 3.90 mb/d. China National Offshore Oil Production (CNOOC) plans to reduce production slightly in 2017, but is targeting a large rebound in investment, as it looks to secure future growth. Last year's spending was down by 24% relative to 2015. The company aims to produce 1.23 mb/d-1.26 mb/d of oil equivalent in 2017, down from an estimated 1.3 mb/d last year. CNOOC aims to rise spending up to 40% this year to sustain growth. Investment is targeted at between $8.7 bn and $10.2 bn, compared with a projected $7.2 bn in 2016.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids are estimated to have averaged 6.10 mb/d in 2016, representing growth of 0.15 mb/d over the previous year. In 2017, OPEC NGLs and non-conventional liquids production is projected to average 6.24 mb/d, representing an increase of 0.15 mb/d over the previous year.

Table 5.6
OPEC NGLs + non-conventional oils, 2014-2017*, *mb/d*

	2014	2015	Change 15/14	1Q16	2Q16	3Q16	4Q16	2016	Change 16/15	2017	Change 17/16
Total OPEC	**5.83**	**5.94**	0.11	6.05	6.08	6.11	6.15	**6.10**	0.15	**6.24**	0.15

*Note: * 2016 = Estimate and 2017 = Forecast.*
Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, OPEC crude oil production in January decreased by 890 tb/d compared to the previous month to average 32.14 mb/d. Crude oil output decreased the most in Saudi Arabia, Iraq and the UAE, while production in Nigeria, Libya and I.R. Iran increased.

Table 5.7
OPEC crude oil production based on secondary sources, *tb/d*

	2015	2016	2Q16	3Q16	4Q16	Nov 16	Dec 16	Jan 17	Jan/Dec
Algeria	1,106	1,088	1,084	1,090	1,089	1,089	1,087	1,045	*-41.7*
Angola	1,753	1,730	1,772	1,761	1,623	1,701	1,674	1,651	*-23.2*
Ecuador	544	546	550	547	543	544	544	527	*-16.7*
Gabon	220	217	219	219	209	219	209	199	*-10.0*
Iran, I.R.	2,838	3,502	3,539	3,646	3,725	3,719	3,725	3,775	*50.2*
Iraq	3,935	4,382	4,290	4,396	4,601	4,590	4,642	4,476	*-165.7*
Kuwait	2,771	2,849	2,799	2,879	2,876	2,868	2,859	2,718	*-141.2*
Libya	405	391	312	311	571	577	610	675	*64.7*
Nigeria	1,861	1,577	1,541	1,417	1,570	1,645	1,474	1,576	*101.8*
Qatar	666	656	662	652	645	651	641	618	*-22.5*
Saudi Arabia	10,142	10,406	10,299	10,596	10,544	10,625	10,443	9,946	*-496.2*
UAE	2,898	2,967	2,921	3,004	3,082	3,084	3,090	2,931	*-159.3*
Venezuela	2,367	2,159	2,182	2,112	2,056	2,063	2,034	2,004	*-30.5*
Total OPEC	**31,506**	**32,470**	**32,168**	**32,629**	**33,134**	**33,374**	**33,029**	**32,139**	***-890.2***

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

Table 5.8
OPEC crude oil production based on direct communication, *tb/d*

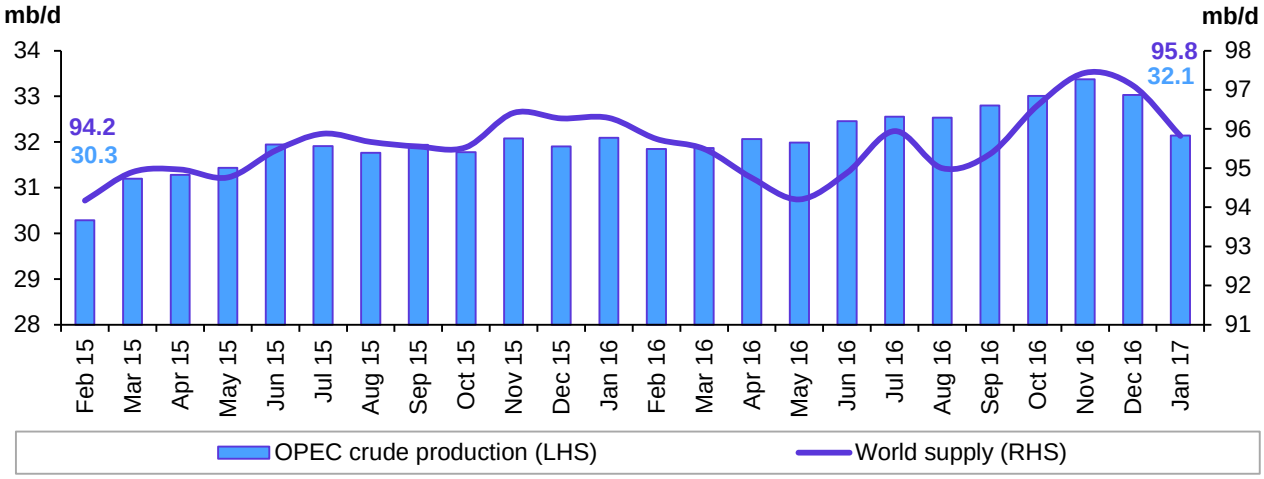
	2015	2016	2Q16	3Q16	4Q16	Nov 16	Dec 16	Jan 17	*Jan/Dec*
Algeria	1,157	1,146	1,126	1,162	1,168	1,184	1,149	1,091	*-58.0*
Angola	1,767	1,708	1,730	1,720	1,611	1,688	1,639	1,615	*-24.0*
Ecuador	543	549	554	551	543	544	544	534	*-9.8*
Gabon	..	..	..	..	..	..	..	..	..
Iran, I.R.	3,152	3,651	3,570	3,653	3,993	3,990	4,010	3,920	*-90.0*
Iraq	3,504	4,648	4,523	4,666	4,802	4,800	4,830	4,630	*-200.0*
Kuwait	2,859	2,954	2,934	2,969	2,915	2,900	2,844	2,710	*-134.0*
Libya	..	..	..	..	..	..	..	..	..
Nigeria	1,748	1,447	1,485	1,209	1,431	1,536	1,370	1,604	*233.7*
Qatar	656	652	655	644	632	646	611	615	*3.7*
Saudi Arabia	10,193	10,460	10,360	10,651	10,602	10,720	10,465	9,748	*-717.6*
UAE	2,989	3,089	3,035	3,174	3,201	3,195	3,220	3,060	*-160.0*
Venezuela	2,654	2,379	2,392	2,331	2,287	2,274	2,270	2,250	*-20.1*
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 decreased by 1.29 mb/d in January to average 95.82 mb/d, representing a decline of 0.46 mb/d y-o-y. A decrease in both non-OPEC supply, including OPEC NGLs, of 0.39 mb/d and in OPEC crude production of 0.89 mb/d reduced overall global oil output in January. The share of OPEC crude oil in total global production stood at 33.5% in January, a decrease of 0.5% from the month before. Estimates are based on preliminary data for non-OPEC supply, direct communication for OPEC NGLs and non-conventional liquids, and secondary sources for OPEC crude oil production.

Graph 5.23
OPEC and world oil supply

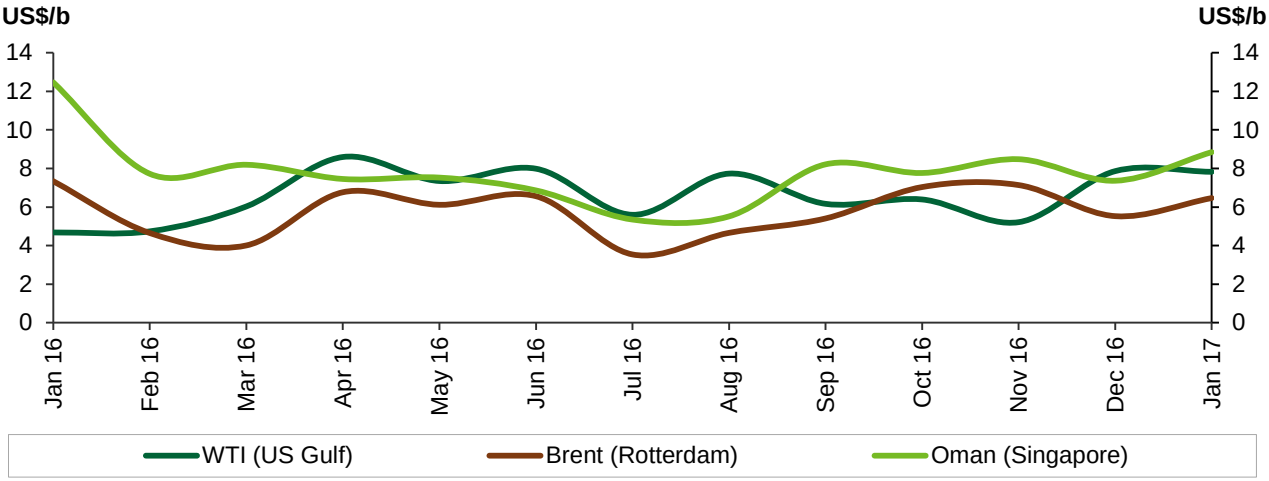


Source: OPEC Secretariat.

Product Markets and Refinery Operations

Product markets in the Atlantic Basin received support in January from the top of the barrel on the back of higher export opportunities in gasoline and naphtha. This, along with the positive performance at the bottom of the barrel, allowed refinery margins to remain healthy. Meanwhile, margins in Asia strengthened on the back of firm regional demand.

Table 6.1
Refinery margins



Sources: Argus Media and OPEC Secretariat.

Higher export opportunities at the top of the barrel continued to lend support to the **US** products market, despite weak seasonal domestic gasoline demand and the continued rise in inventories. In addition, colder weather in the Northeast boosted heating fuel demand.

This positive performance, along with the tightening seen at the bottom of the barrel, allowed US Gulf Coast (USGC) refinery margins for WTI crude to continue at the healthy levels gained in the previous month, remaining around $8/b during January.

The **European** products market recovered in January supported by stronger domestic demand amid export opportunities for gasoline to West Africa, and higher arbitrage volumes of naphtha and fuel oil to Asia. Meanwhile, at the middle of the barrel, despite the colder weather, gasoil crack spreads remained under pressure by increasing inventories in the Amsterdam-Rotterdam-Antwerp (ARA) region and expectations of higher inflows into the region.

The refinery margin for Brent crude in Northwest Europe (NWE) showed a recovery of almost $1 versus the previous month to average $6.50/b during January.

Asian product markets continued to be supported by strong seasonal demand in January, which, along with some tightening sentiment fuelled by some refinery outages, allowed margins to strengthen. The best performance was exhibited by the top of the barrel on the back of stronger gasoline and naphtha demand.

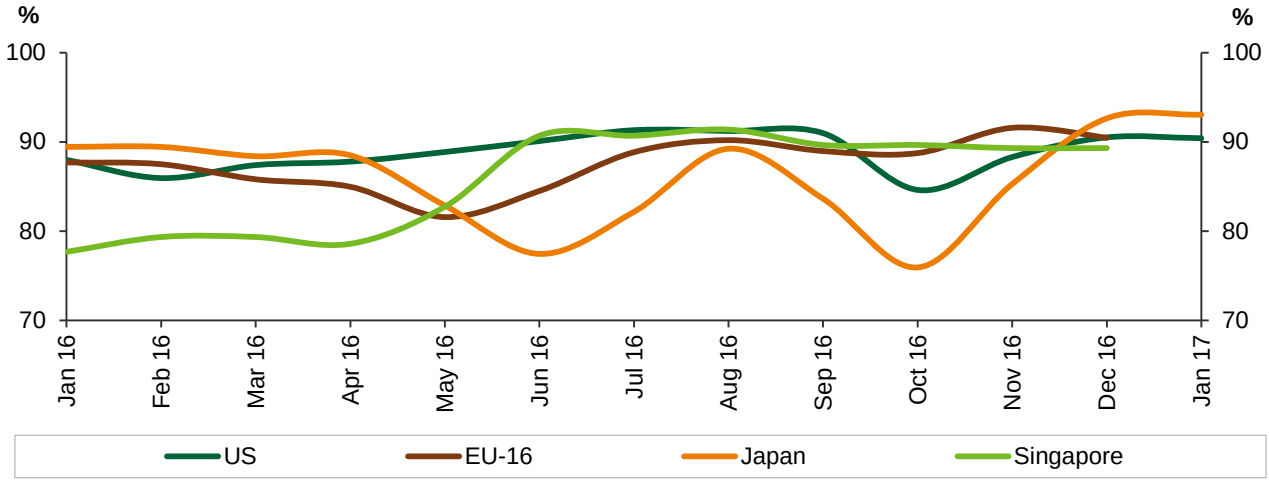
Refinery margins in Singapore averaged around $9/b in January, gaining more than $1 versus the previous month's level.

Refinery operations

Refinery utilisation in the **US** averaged around 90% in January, corresponding to 16.4 mb/d, around 160 tb/d lower than the previous month and around 300 tb/d higher than the same month a year ago, as the sector was not impacted by weather conditions as it was last year.

After recovery from the impact of the Colonial Pipeline outage in the previous months, US refinery runs have been on the rise, mainly in the USGC, taking advantage of stronger export opportunities and ahead of the spring maintenance season in the region.

Graph 6.2
Refinery utilisation rates



Sources: Argus Media and OPEC Secretariat.

European refinery runs averaged around 90% of capacity in January, corresponding to a throughput of 10.6 mb/d, a similar level to the previous month and up by around 300 tb/d from the same month a year ago. Refinery throughputs continued at a high level in Europe to enjoy the healthy margins and catch up with strong winter demand and arbitrage export opportunities. In the Mediterranean area, refinery levels have been impacted by some unplanned outages.

In **Asia**, refinery utilisation rates were on the rise in 4Q16, taking advantage of the seasonal increase in regional demand amid export opportunities. In India, refinery runs averaged around 5.1 mb/d in December, 200 tb/d higher than in the previous month. Refinery runs in Singapore for December averaged around 89%, similar to the previous month. Meanwhile, Chinese refinery throughputs averaged 10.6 mb/d during January, decreasing by around 660 tb/d versus the previous month, when it hit record-high levels. Export quota issues have been impacting activities in the Chinese refinery sector. In Japan, throughputs averaged 93% of capacity in the first month of the year.

US market

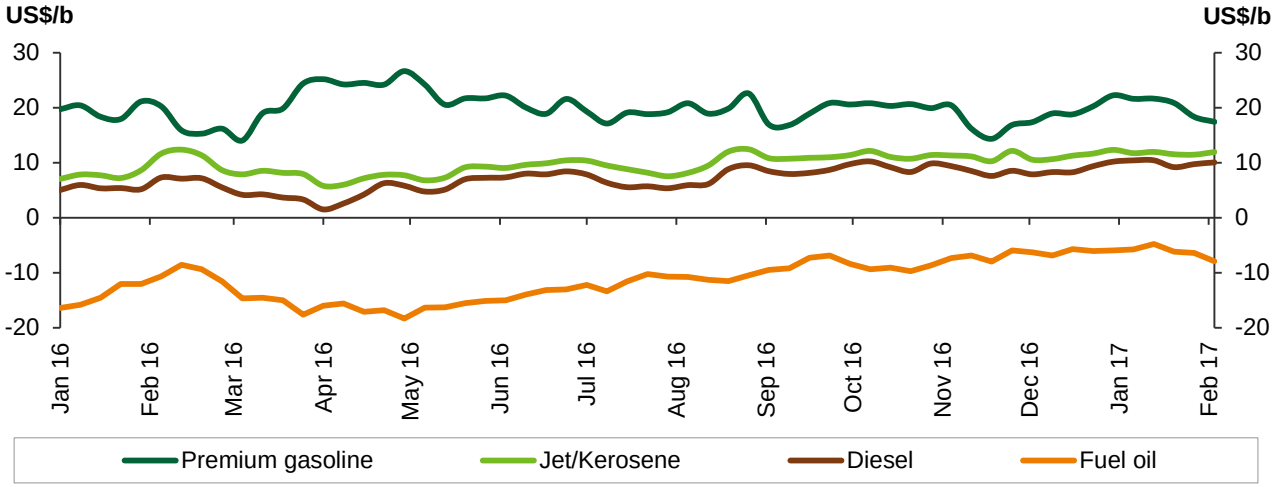
US **gasoline** demand stood at around 8.4 mb/d in January, approximately 600 tb/d lower than in the previous month and 300 tb/d lower than in the same month a year earlier.

Despite the bearish sentiment fuelled by weak seasonal domestic demand and the ongoing rise in inventories, building by more than 20 mb during January to remain well above the five-year average level, gasoline crack spreads managed to continue strengthening in the US.

The gasoline market continued to receive support from stronger export opportunities to Latin America, mainly to Mexico, Colombia and Brazil.

The gasoline crack spread showed a slight gain of 50¢ compared with the previous month's level to average around $20/b in January.

Graph 6.3
US Gulf crack spread vs. WTI



Sources: Argus Media and OPEC Secretariat.

Middle distillate demand stood at around 3.7 mb/d in January, which is 100 tb/d lower than in the previous month and around 80 tb/d lower than the same month a year earlier.

The middle distillate market continued to see support from higher export opportunities to Europe, as well as to Latin American countries such as Brazil and Mexico.

Additional support came from news of a temporary shortage of high sulphur heating oil in the northeast region as colder weather boosted demand for heating fuel, which has also caused a narrowing of sulphur spreads worldwide.

The USGC gasoil crack spread averaged around $10/b in January, gaining more than $1 from the previous month's level. Further gains were limited, due to the fact that middle distillate inventories continued to rise during January.

At the bottom of the barrel, **fuel oil** margins continued strengthening as the market continued to be supported by healthy demand in the USGC amid tightening regional market. Higher arbitrage volumes to Singapore were reported, thus lending support to the US fuel oil market.

The USGC high sulphur fuel oil (HSFO) crack spread gained slightly, rising by 30¢ to average minus $6/b in January.

European market

Product markets in Europe recovered during January, supported by export opportunities for gasoline to West Africa, and arbitrage volumes of naphtha and fuel oil to Asia.

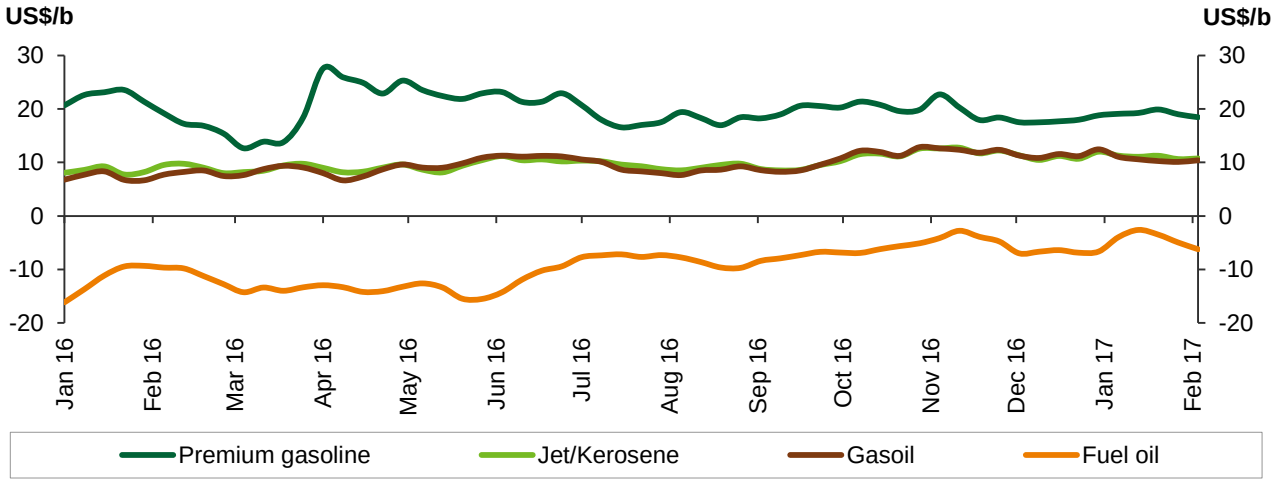
The **gasoline** market strengthened in Europe on the back of stronger regional demand amid higher export opportunities to the West African market.

The gasoline market was also supported by some blending components being exported to Singapore and China, taking advantage of new stringent specifications in that region.

The gasoline crack spread against Brent gained more than $1 over the previous month's level to average around $19/b during January. Additional gains were capped by water levels in the lower Rhine, which limited barge activities amid ARA gasoline inventories increasing almost 10% in January.

The light distillate **naphtha** crack showed a strong recovery, gaining more than $3/b in January as the market saw support from stronger petrochemical demand as feedstocks became more competitive due to increasing prices in LPG and aromatics streams. Additional demand was also seen from gasoline blenders.

Graph 6.4
Rotterdam crack spread vs. Brent



Sources: Argus Media and OPEC Secretariat.

The European **gasoil** market continued weakening in January due to pressure coming from the supply side despite colder weather boosting heating demand. This was mainly due to low Rhine river water level which limited barge operations and caused a sharp increasing of more than 25% in ARA gasoil inventories in January, thus fuelling bearish sentiment to the market.

Another bearish factor has been the expected increase in inflows to the region. These are not only apparent in the Baltic region, where exports have so far been delayed by bad weather conditions, but also in the US as higher inventories seen in the USGC – amid lower freight rates – could be seen to further widen the arbitrage.

The gasoil crack spread against Brent crude at Rotterdam lost 80¢ versus the previous month's level to average around $10.5/b in January. Further losses were avoided by some supports from the demand side as higher requirements were reported from Egypt, Greece, Turkey and Belgium.

At the bottom of the barrel, the **fuel oil** market in January showed a sharp recovery on the back of strong regional demand amid some arbitrage opportunities to Asia and the Middle East.

Another supportive factor was the expectation of higher demand for straight-run fuel oil in Europe in the coming weeks due to refinery maintenance.

In addition, ARA fuel oil inventories were decreasing, thus supporting the regional fuel oil market.

The NWE fuel oil crack gained almost $3 compared with the previous month to average around minus $4/b in January.

Asian market

The Asian market strengthened during January and refinery margins continued at healthy levels on the back of firm regional demand, which has been able to ease the oversupply environment caused by increasing refinery runs and high inventories during the last months of 2016.

The Asian **gasoline** market continued to receive support from the demand side, with strong regional demand mainly from Bangladesh, Vietnam and Indonesia where the availability has been impacted by

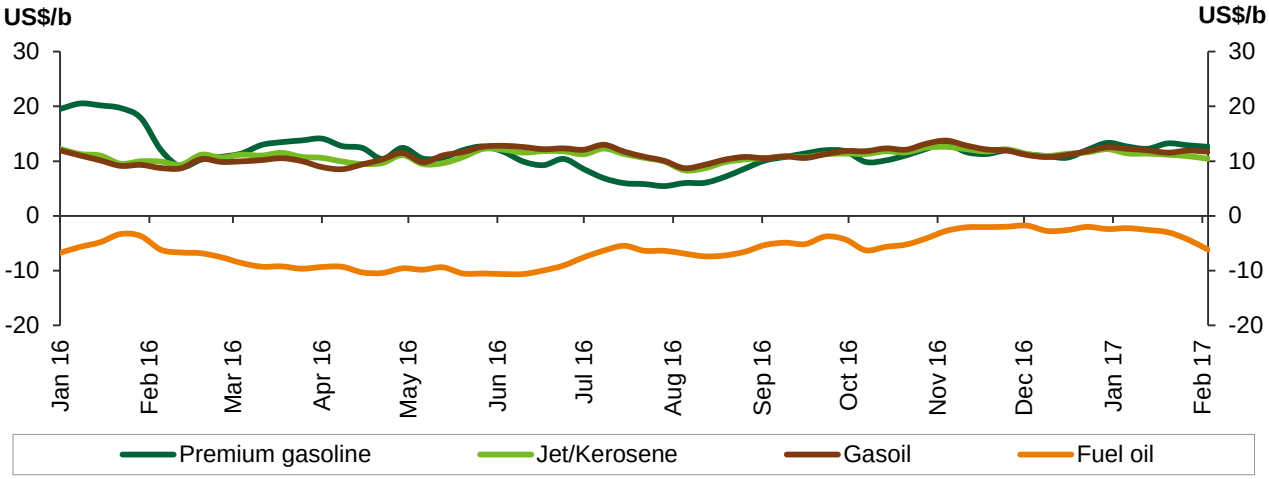
some operational issues in Balikpapan refinery. A higher requirement from East Africa, mainly from Tanzania, has also supported the gasoline market.

On the other hand, some tightening sentiment was fuelled by news about the shutdown of the Ruwais refinery in the Middle East. Another supporting factor has been the lower exports seen from South Korea as increasing production has been absorbed by stronger domestic demand, thus offsetting higher supplies seen from India.

The gasoline crack spread in Singapore against Oman averaged around $13/b in January, gaining more than $1 compared with the previous month's level.

The Singapore **naphtha** recovered during January, gaining almost $3/b on the back of the stronger demand from the steam cracker units amid the petrochemical sector enjoying healthy margins. In addition the higher LPG prices have incentivised the use of incremental naphtha as feedstock, thus boosting its demand.

Graph 6.5
Singapore crack spread vs. Oman



Sources: Argus Media and OPEC Secretariat.

At the middle of the barrel, the **gasoil** crack spread partially recovered the ground lost in the previous month, supported by firm demand seen in Southeast Asia region. The higher demand reported from several countries such as Bangladesh and Indonesia has been easing the oversupply situation created by the increasing supplies seen from China and India during previous weeks. This has contributed to an easing of the balance in the region. Another supporting factor was the expected impact on inflows due to the outage of the Ruwais refinery in the Middle East.

The gasoil crack spread in Singapore against Oman averaged around $12/b in January, gaining slightly by 50¢ compared with the previous month's level. The gain was limited by decelerating demand growth seen in China and India.

The Asian **fuel oil** market continued to receive support from firmer demand for power generation, mainly from South Korea, where fuel oil demand has continued to rise, despite the restart of its nuclear capacity.

Even with positive fundamentals and a tight balance, higher arbitrage volumes from the West have started to exert some pressure on the margins.

The fuel oil crack spread in Singapore against Oman averaged about minus $3.2/b in January, losing around 70¢ from the previous month.

Table 6.1
Refinery crude throughput, *mb/d*

	2014	2015	2016	1Q16	2Q16	3Q16	4Q16	1Q17 **
Total OECD	**36.33**	**37.41**	**37.78**	**37.78**	**37.19**	**38.77**	**38.26**	**38.24**
OECD America*	**18.69**	**18.94**	**19.19**	**19.05**	**19.24**	**19.65**	**19.26**	**19.45**
of which US	15.55	15.90	16.21	15.94	16.27	16.68	16.07	16.09
OECD Europe	**11.23**	**11.87**	**11.67**	**11.54**	**11.18**	**12.19**	**12.01**	**11.77**
of which:								
France	1.09	1.15	1.10	1.13	0.94	1.19	1.25	1.22
Germany	1.84	1.88	1.87	1.87	1.81	1.94	1.90	1.90
Italy	1.18	1.32	1.28	1.22	1.28	1.36	1.33	1.29
UK	1.12	1.12	1.07	1.01	1.07	1.12	1.09	1.07
OECD Asia Pacific	**6.41**	**6.59**	**6.92**	**7.19**	**6.78**	**6.93**	**6.99**	**7.02**
of which Japan	3.07	3.08	3.26	3.49	3.17	3.24	3.23	3.25
Non-OECD	**41.13**	**42.05**	**43.01**	**42.95**	**42.60**	**42.98**	**42.55**	**42.63**
of which:								
China	10.16	11.00	11.51	11.32	11.66	11.53	11.35	11.37
Middle East	6.60	6.98	7.36	7.42	7.19	7.43	7.36	7.42
Russia	5.92	5.79	5.65	5.61	5.49	5.83	5.71	5.71
Latin America	4.96	4.81	4.49	4.72	4.43	4.40	4.49	4.49
India	4.50	4.58	4.92	4.94	4.88	4.90	5.00	5.10
Africa	2.29	2.15	2.19	2.19	2.17	2.15	2.20	2.15
Total world	**77.46**	**79.46**	**80.80**	**80.73**	**79.79**	**81.74**	**80.81**	**80.87**

*Note: * Data includes Mexico and Chile.*
*** OPEC Secretariat's estimate.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Table 6.2
Refined product prices, *US$/b*

		Dec 16	Jan 17	Change Jan/Dec	Year-to-date 2016	Year-to-date 2017
US Gulf (Cargoes FOB):						
Naphtha*		53.74	56.90	3.16	36.87	56.90
Premium gasoline	*(unleaded 93)*	71.77	72.76	0.99	51.15	72.76
Regular gasoline	*(unleaded 87)*	66.19	67.04	0.85	43.42	67.04
Jet/Kerosene		63.33	64.23	0.90	39.49	64.23
Gasoil	*(0.2% S)*	60.95	62.50	1.55	37.07	62.50
Fuel oil	*(3.0% S)*	45.46	46.76	1.30	19.12	46.76
Rotterdam (Barges FoB):						
Naphtha		50.90	55.06	4.16	35.13	55.06
Premium gasoline	*(unleaded 98)*	71.37	73.82	2.45	53.41	73.82
Jet/Kerosene		64.50	65.60	1.10	39.21	65.60
Gasoil/Diesel	*(10 ppm)*	64.89	65.05	0.16	38.11	65.05
Fuel oil	*(1.0% S)*	46.70	50.60	3.90	19.85	50.60
Fuel oil	*(3.5% S)*	42.28	43.03	0.75	15.08	43.03
Mediterranean (Cargoes FOB):						
Naphtha		49.70	54.21	4.51	33.42	54.21
Premium gasoline**		64.86	66.95	2.09	47.01	66.95
Jet/Kerosene		62.61	63.81	1.20	37.27	63.81
Diesel		65.41	66.54	1.12	39.48	66.54
Fuel oil	*(1.0% S)*	48.84	52.19	3.35	21.22	52.19
Fuel oil	*(3.5% S)*	44.01	45.77	1.76	18.35	45.77
Singapore (Cargoes FOB):						
Naphtha		51.51	55.71	4.20	36.78	55.71
Premium gasoline	*(unleaded 95)*	66.68	69.47	2.79	50.33	69.47
Regular gasoline	*(unleaded 92)*	64.25	66.77	2.52	47.04	66.77
Jet/Kerosene		64.10	65.17	1.07	37.93	65.17
Gasoil/Diesel	*(50 ppm)*	64.09	65.90	1.81	37.37	65.90
Fuel oil	*(180 cst 2.0% S)*	51.68	55.05	3.37	26.77	55.05
Fuel oil	*(380 cst 3.5% S)*	49.47	50.47	1.00	22.77	50.47

*Note: * Barges.*
*** Cost, insurance and freight (CIF).*
Sources: Argus Media and OPEC Secretariat.

Tanker Market

Spot freight rates in January continued the recovery started in 4Q16, showing general improvements across all tanker sectors. This improved sentiment was seen on all reported routes and in various tanker segments.

Dirty tanker spot freight rates registered gains on all reported vessels, with the highest gains reflected on Aframax tankers. On average, VLCC spot freight rates increased by 6%, while spot freight rates for Suezmax went up by 4%. Aframax spot rates increased by 15%, while dirty tanker gains were driven by a firmer market in West Africa, mainly to eastern destinations – Middle East and Mediterranean – as well as delays due to congestion in the Turkish Straits and severe weather conditions.

The clean market showed higher monthly freight rates on all reported routes as registered mainly for medium range tankers, edging up by 40% on the East of Suez and by 16% in the West of Suez.

Spot fixtures

OPEC spot chartering declined by 0.6% in January compared to the previous month to reach 11.88 mb/d, according to preliminary data. Within the Middle East, spot chartering towards the east showed a decline of 2%, while towards the west it dropped by 7.9%. Middle East-to-East spot chartering ended the month at 5.58 mb/d less, while the Middle East-to-West route ended the month at 2.71 mb/d, lower from the 2.95 mb/d registered one month ago. On a y-o-y basis, OPEC spot chartering in January showed an increase of 12.4% compared to the same month a year ago, while global spot chartering declined in January by 3.4% compared to the previous month to stand at 16.19 mb/d. However, this was 12.4% higher compared to the same month a year ago.

Table 7.1
Tanker chartering, sailings and arrivals, *mb/d*

	Nov 16	Dec 16	Jan 17	*Change* Jan 17/Dec 16
Spot Chartering				
All areas	15.96	16.76	16.19	-0.58
OPEC	11.10	11.95	11.88	-0.07
Middle East/East	6.04	5.69	5.58	-0.11
Middle East/West	2.35	2.95	2.71	-0.23
Outside Middle East	2.71	3.31	3.59	0.28
Sailings				
OPEC	24.01	24.07	24.28	0.22
Middle East	17.36	17.53	17.49	-0.05
Arrivals				
North America	9.72	10.01	10.28	0.26
Europe	12.34	12.51	12.40	-0.11
Far East	8.92	8.66	8.39	-0.27
West Asia	4.41	4.72	4.83	0.11

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

Sailings from OPEC were 0.9% higher in January, standing at 24.28 mb/d, up from 24.07 mb/d in the previous month and remaining 2% higher than in the same month a year ago. Middle East sailings in January averaged 17.49 mb/d, down 0.3% from the previous month. Crude oil arrivals into North America increased by 2.6% in January over the previous month and into West Asia were up by 2.3%. Conversely, crude oil arrivals to Europe and the Far East were all lower m-o-m in January by 0.8% and 3.2%, respectively.

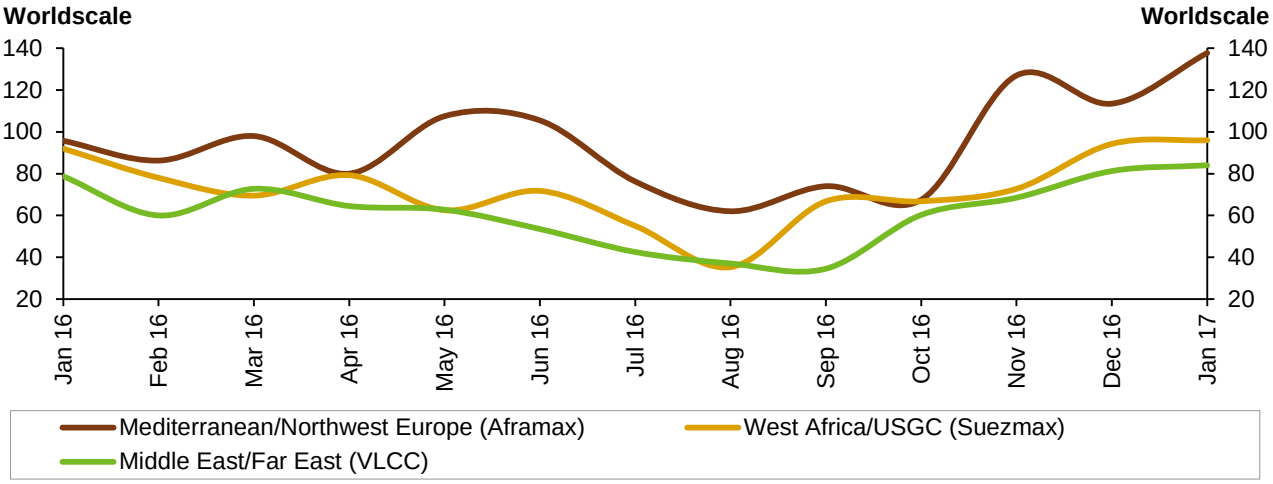
Spot freight rates

VLCC

The month of January started with slow activity in the chartering market where tonnage demand was limited for several classes, putting pressure on tanker earnings. Nevertheless, chartering activity resumed later mainly when third decade requirements came into the market. **VLCC** activity in West Africa kept at high levels mainly to the east, reducing the amount of access tonnage and supporting freight rates in that region. Therefore, average spot freight rates for tankers operating from West Africa-to-East showed the highest gains from the same class operating on the different routes, increasing by 8% from the previous month to average WS 84 points. Freight rates for VLCC trading on both Middle East-to-West and Middle East-to-East showed gains of 6% and 3%, respectively, in January from a month ago to stand at WS 53 points and WS 84 points, respectively. Generally, VLCC activity increased for February fixtures, showing an improved sentiment in the Middle East and other areas for old and modern types of vessels, although gains varied.

Graph 7.1

Monthly averages of crude oil spot freight rates



Sources: Argus and Platts.

Suezmax

Suezmax spot freight rates increased by 4% on average in January over the previous month to stand at WS 89 points. The average monthly gains came despite a fairly slow start seen at the beginning of the month, which, combined with a balanced tonnage list, was not enough to support Suezmax freight rates, particularly in the east. However, a flow of inquiries came into the market, lifting activities in several areas, including West Africa, the Mediterranean and the North Sea, which resulted in a clear reduction in the tonnage list, providing support to freight rates. The escalating momentum pushed ship owners to hold their requirements as they were trying to prevent rates from escalating further. Suezmax rates in the Mediterranean continued to receive support from the delays in the Turkish Straits as the fog prolonged the total transit time, reducing spot vessel availability, mainly in the Mediterranean and Black Sea. While Suezmax class experiencing rate fluctuations in January in accordance with the activity in the market and the length of the tonnage list, average rates generally increased by 4%

compared with the previous month as the rate for Suezmax operating on the West Africa-to-US route and NWE-to-US routes both increased by 2% and 7%, respectively, from a month earlier.

Table 7.2
Spot tanker crude freight rates, *Worldscale*

Crude	Size *1,000 DWT*	Nov 16	Dec 16	Jan 17	*Change* Jan 17/Dec 16
Middle East/East	230-280	69	81	84	3
Middle East/West	270-285	39	49	53	3
West Africa/East	260	68	77	84	7
West Africa/US Gulf Coast	130-135	73	94	96	2
Northwest Europe/US Gulf Coast	130-135	64	76	81	5
Indonesia/East	80-85	88	114	115	1
Caribbean/US East Coast	80-85	126	137	156	19
Mediterranean/Mediterranean	80-85	134	115	142	27
Mediterranean/Northwest Europe	80-85	127	114	138	24

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax spot freight rates increased in January, up by 15% from a month before, benefiting from the cold weather as higher fixtures on the ice class ships became a main requirement for loading in some ports in the Baltic Sea.

Difficult weather conditions caused further delays in the Turkish Straits and in several ports, leading to a sudden jump in Aframax freight rates in the Mediterranean and Black Sea. Freight rates in the Mediterranean declined afterwards, despite continued severe weather conditions and the closure of the Turkish Straits; however, lower volumes of cargoes in the market combined with tonnage build-up, along with competition from larger vessels, to push down freight rates from the high level they reached earlier.

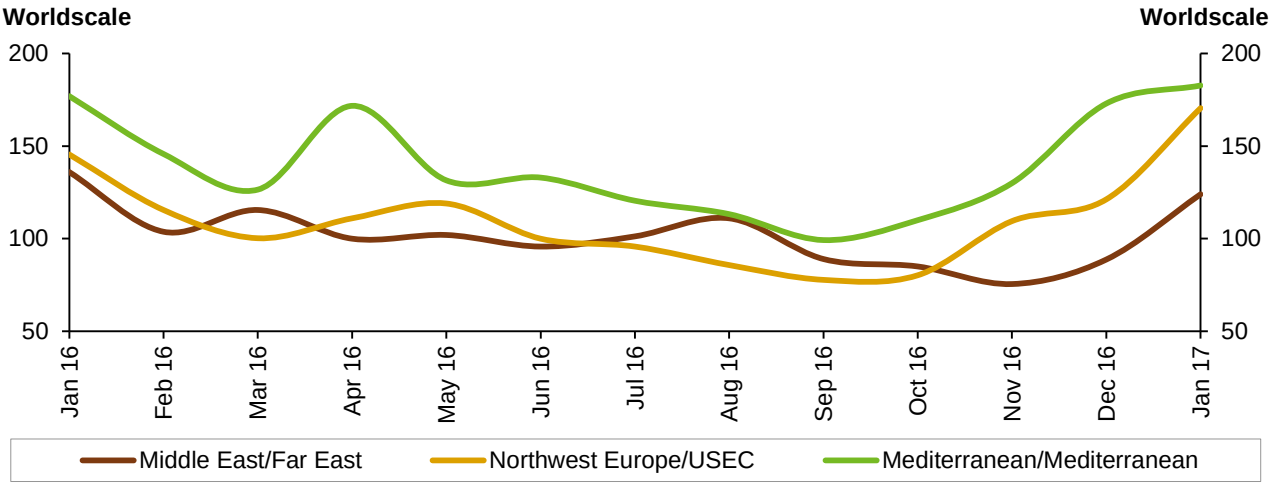
Thus, on average, spot freight rates for tanker trading on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE increased by 23% and 21%, respectively, from a month ago. In the Caribbean, Aframax spot freight rates registered a bounce of 14% from a month before for tankers operating on the Caribbean-to-US route to stand at WS 156 points. Those gains were driven by delays caused by foggy weather, as well as lighterage requirements. On the other hand, average freight rate on the Indonesia-to-East route exhibited the smallest increase amid other routes, growing by WS 1 point from a month ago.

Clean spot freight rates

As seen in the dirty segment of the market, clean tanker spot freight rates shared the tanker market's upward momentum, showing a generally improved sentiment in January from the previous month, supported mainly by winter demand and severe weather conditions. The gains in the clean tanker segment were mostly registered for medium range classes while other vessels in the product market did not share the same fortune.

In the East of Suez, clean tanker spot freight rates experienced an increase of 40% compared with the previous month. Clean spot freight rates for tankers moving between the Middle East-to-East and Singapore-to-East routes increased by 40% each to stand at WS 124 points and WS 174 points, respectively. Spot freight rates for tankers operating on the NWE-to-US East Coast (USEC) route increased by 41% to average WS 171 points in January.

Graph 7.2
Monthly average of clean spot freight rates



Sources: Argus Media and OPEC Secretariat.

In the Mediterranean, clean spot freight rates increased in January compared with the previous month, supported by bad weather conditions as well as delays in the Turkish Straits. Clean spot freight rates for tankers trading on the Mediterranean-to-Mediterranean route rose by 6% in January compared with the previous month to average WS 183 points, while clean spot freight rates for tankers operating on the Mediterranean-to-NWE route gained 8% to stand at WS 198 points.

Table 7.3
Spot tanker product freight rates, *Worldscale*

Products	Size *1,000 DWT*	Nov 16	Dec 16	Jan 17	*Change* Jan 17/Dec 16
Middle East/East	30-35	76	89	124	35
Singapore/East	30-35	104	125	174	49
Northwest Europe/US East Coast	33-37	110	121	171	49
Mediterranean/Mediterranean	30-35	130	173	183	10
Mediterranean/Northwest Europe	30-35	140	183	198	15

Sources: Argus Media and OPEC Secretariat.

Oil Trade

Preliminary data for January shows that US crude oil imports increased to average 8.4 mb/d, up by 489 tb/d from the previous month and by 683 tb/d or 9% from the previous year. Similarly, US monthly product imports rose from a month ago by 268 tb/d and by 155 tb/d or 8% from the same month in the previous year.

Japan's crude imports increased by 473 tb/d or 15% y-o-y to average 3.6 mb/d. Crude imports increased from last year by 105 tb/d or 3%, while Japan's product imports increased in December by 62 tb/d or 11% m-o-m to average 622 tb/d, although down by a slight 56 tb/d from the previous year.

In December, China's crude imports increased by 697 tb/d or 9% from the previous month to reach a peak record of 8.6 mb/d. At the same time, crude imports increased by 754 tb/d or 10% y-o-y. China's product imports dropped in December to average 1.2 mb/d, showing a fall of just 20 tb/d from November and 190 tb/d from the same month in 2015.

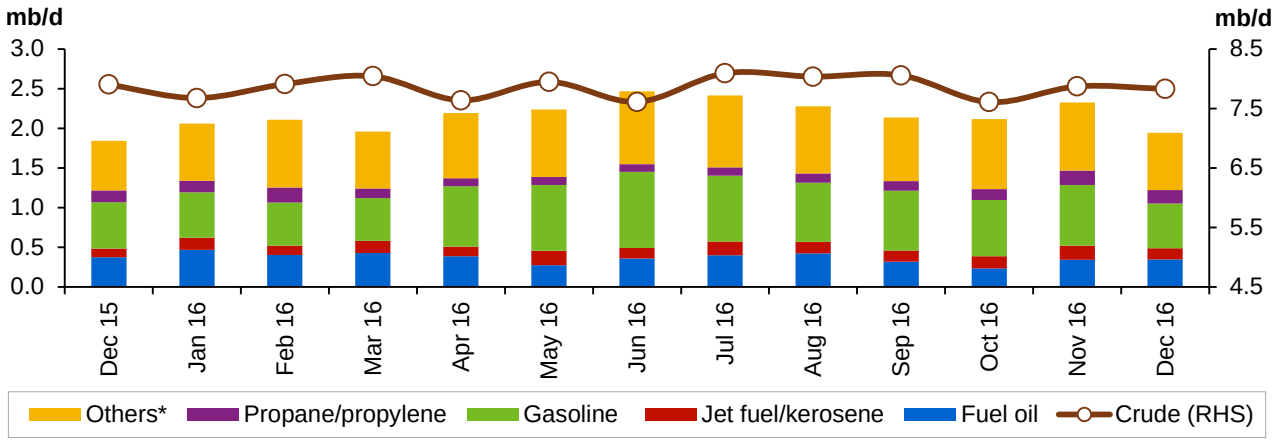
In December, India's crude imports dropped by 357 tb/d or 8% from the previous month to reach 4.2 mb/d, the lowest level seen since July 2016, while annually crude imports reflected a gain of 34 tb/d or 1%. Indian product imports in December increased both on a monthly and an annual basis by 18 tb/d and 243 tb/d, respectively, to average 685 tb/d in December.

US

January preliminary data shows that US **crude oil imports** increased to average 8.4 mb/d, up by 489 tb/d from the previous month and 683 tb/d or 9% over the previous year.

Graph 8.1

US imports of crude and petroleum products

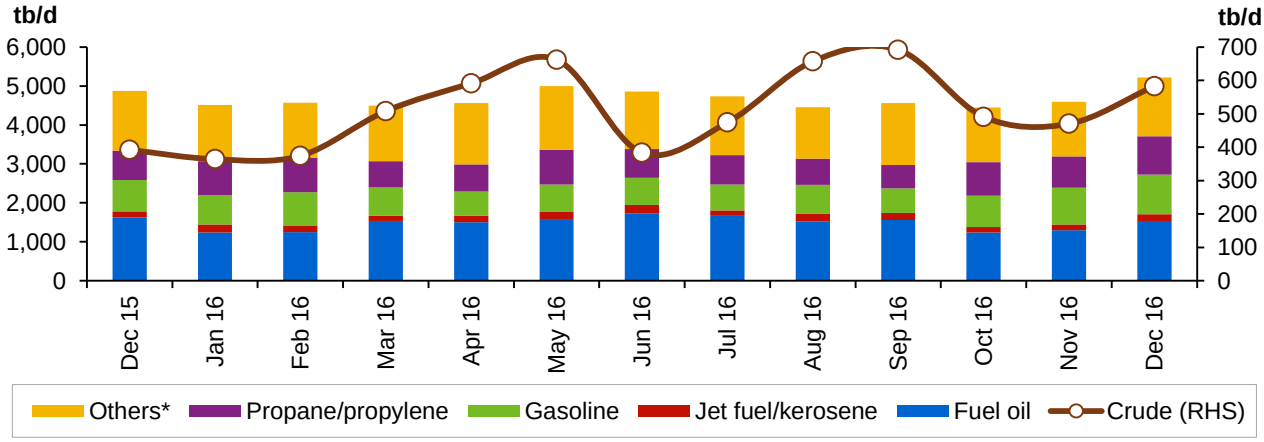


*Note: *Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.*
Sources: US Energy Information Administration and OPEC Secretatiat.

US monthly **product imports** also increased from a month ago by 268 tb/d and by 155 tb/d or 8% from the same month last year.

In January, US **product exports** were 350 tb/d less than a month ago to average 4.9 mb/d. In annual terms, they were higher than a year ago by 351 tb/d or 4%.

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 Energy Information Administration and OPEC Secretatiat.

As a result, **US total net imports rose in January by 450 tb/d or 9% to average 5.7 mb/d**, showing an increase of 1.1 mb/d or 26% from the same month last year.

Table 8.1
US crude and product net imports, *tb/d*

	Nov 16	Dec 16	Jan 17	*Change* Jan 17/Dec 16
Crude oil	7,457	7,281	7,716	435
Total products	-2,537	-3,268	-2,650	618
Total crude and products	**4,920**	**4,013**	**5,066**	**1,053**

Sources: US Energy Information Administration and OPEC Secretatiat.

In November, the top first and second suppliers to the US maintained the same order as seen last month. Canada remained the premier **crude supplier,** accounting for 44% of total US crude imports, up from a month ago by 320 tb/d or 10%. Saudi Arabia maintained its position as second-largest supplier to the US in November, although with exports down from the previous month by 23 tb/d. Venezuela came in as third-top supplier, accounting for 10% of total US crude imports, as it increased its exports to the country by 73 tb/d or 10% from the previous month.

Total **crude imports** from **OPEC Member Countries** were higher in November from the previous month, up by 153 tb/d or 5%, accounting for 40% of total US crude imports. US **product imports from OPEC Member Countries** were higher by 100 tb/d or 50% from the previous month and 31 tb/d or 11% from the previous year.

Looking to **product supplier share**, Canada and Russia maintained their position as the first and second suppliers to the US, accounting for 22% and 19%, respectively. In November, Canada's product exports to the US rose from the previous month by 116 tb/d, while Russia's imports went down by 19 tb/d from a month before. Algeria came in as third supplier to the US, holding a share of 8% as it increased its exports to the country by 30 tb/d from the previous month.

Looking into **import regions**, the largest US crude imports continued to be sourced from North America, averaging 3.6 mb/d in November. Latin America was in second place with average imports of 2.2 mb/d in November. The Middle East came in third, with an average of 1.7 mb/d, while imports from Africa increased from the previous month to average 589 tb/d.

As to crude imports by PADDs, in East Coast PADD 1, the highest crude imports came from Africa and North America, averaging 4,100 tb/d and 261 tb/d, respectively. Imports from PADD 2 remained mostly sourced from North America and averaged 2.3 mb/d, showing slight imports from the Middle East.

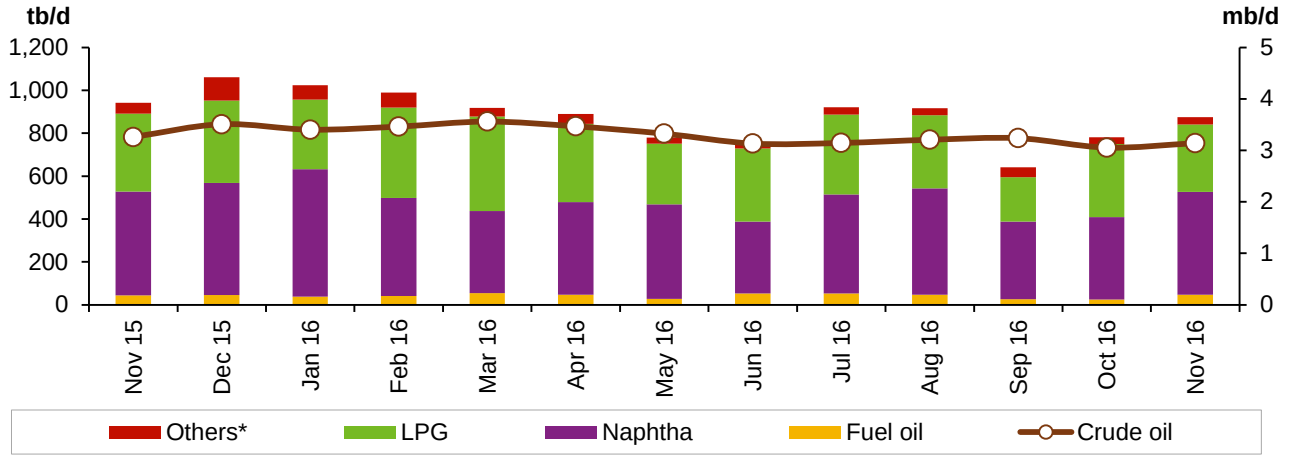
PADD 3 showed higher imports in November, as volumes increased from all sources. However, Latin America and the Middle East remained the main crude oil suppliers to the PADD, averaging 1.7 mb/d and 1.3 mb/d, respectively. As seen earlier, PADD 4 only imported from North America and averaged 322 tb/d in November, up by 16 tb/d from a month ago. Main imports to the West Coast came from Latin America, North America and the Middle East and stood at 370 tb/d, 284 tb/d and 256 tb/d, respectively.

Japan

Japanese crude oil imports increased in December continuing the gains seen in the previous month, and were up by 473 tb/d or 15% to average 3.6 mb/d. In a y-o-y comparison, crude imports increased from last year by 105 tb/d or 3%. At the same time, Japan's refinery runs increased by 180 tb/d in December from a month ago.

Graph 8.3

Japan's imports of crude and petroleum products



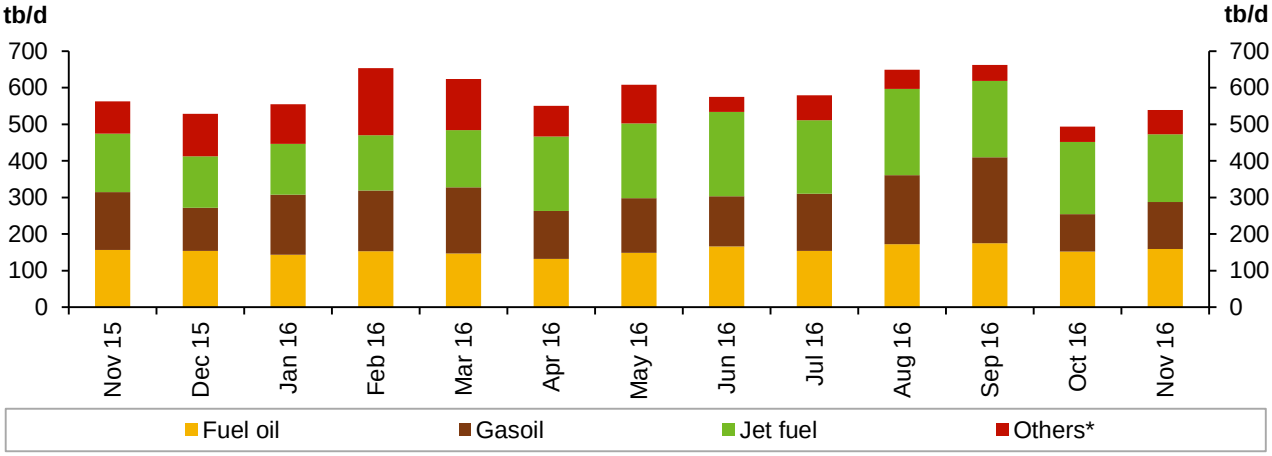
*Note: *Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Looking at **crude supplier share**, Saudi Arabia maintained its position as first crude supplier to Japan, with a share of 40% of total crude exports to the country, up by 195 tb/d from a month before. The UAE came in second with a share of 23% of total crude exports, showing an increase in volume by 71 tb/d compared with the previous month. Qatar was third supplier in December with a share of 10%. Volumes imported from Qatar increased by 115 tb/d over last month.

Japan's **product imports** increased in December by 62 tb/d to average 622 tb/d, up by 11% m-o-m and by a slight 56 tb/d from last year. The country's oil product sales rose for the second consecutive month in December, up by 0.6% from a year earlier.

Japan's **product exports** rose in December by 18 tb/d to average 557 tb/d, above last year's level by 29 tb/d or 6%.

Graph 8.4
Japan's exports of petroleum products



**Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Accordingly, **Japan's net imports increased in December by 517 tb/d to average 3.7 mb/d,** the highest point since February 2015, reflecting a monthly gain of 16% and up by a slight 1% over the previous year.

Table 8.2
Japan's crude and product net imports, *tb/d*

	Oct 16	Nov 16	Dec 16	*Change* Dec 16/Nov 16
Crude oil	3,055	3,140	3,613	473
Total products	-54	21	64	43
Total crude and products	**3,001**	**3,161**	**3,677**	**517**

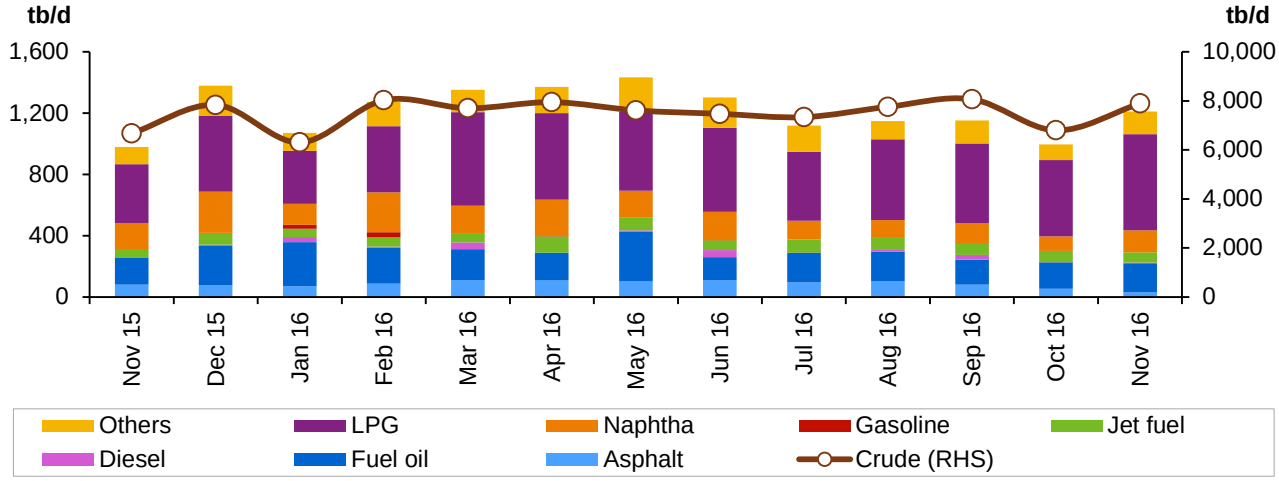
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

China

China's **crude imports** increased in December by 697 tb/d or 9% from the previous month to reach a new record high of 8.6 mb/d, while at the same time crude imports reflected an annual gain of 754 tb/d or 10%. Meanwhile, China's refinery throughput increased in December from a month earlier, while its product imports dropped in December to average 1.2 mb/d, down by just 20 tb/d from November and 190 tb/d from the same month in 2015. The annual drop came mainly on the back of lower naphtha imports.

As to crude oil supplier share, Russia, Oman and Saudi Arabia were **top suppliers** to China in December, accounting for 14%, 10% and 10%, respectively. Crude imports from Russia and Oman were higher from the month before by 67 tb/d and 189 tb/d, respectively, while imports from Saudi Arabia dropped by 304 tb/d.

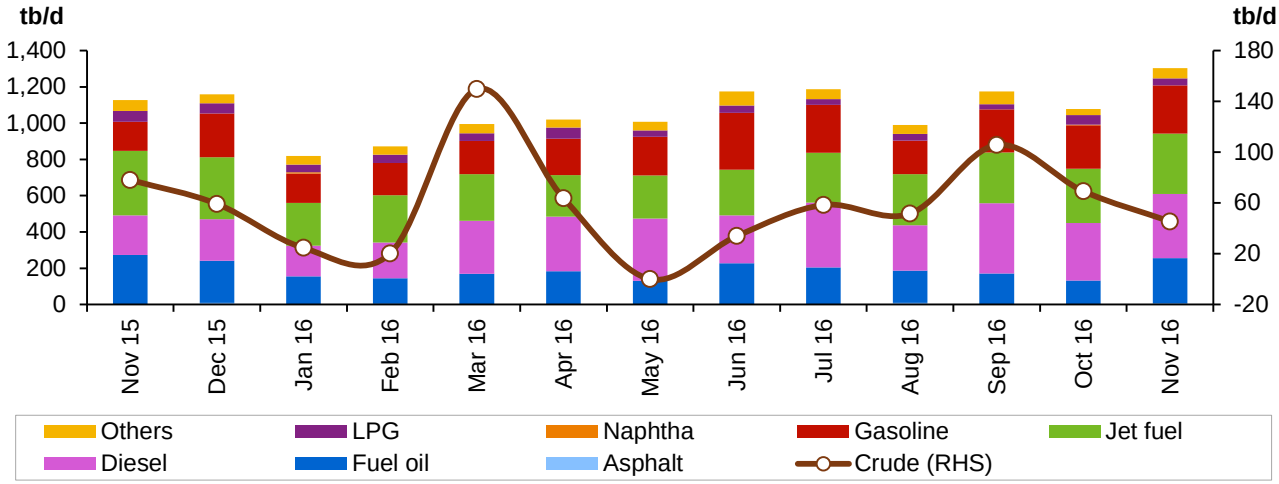
Graph 8.5
China's imports of crude and petroleum products



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

In December, China **exported** 81 tb/d of crude, up by 36 tb/d from the month before. Chinese product exports rose by 140 tb/d m-o-m to average 1.4 mb/d in December.

Graph 8.6
China's exports of crude and petroleum products



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

As a result, **China's net oil imports increased by 502 tb/d over the previous month and by 259 mb/d from a year before.**

Table 8.3
China's crude and product net imports, *tb/d*

	Oct 16	Nov 16	Dec 16	*Change* Dec 16/Nov 16
Crude oil	6,728	7,848	8,509	661
Total products	-83	-93	-252	-160
Total crude and products	**6,645**	**7,756**	**8,257**	**502**

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

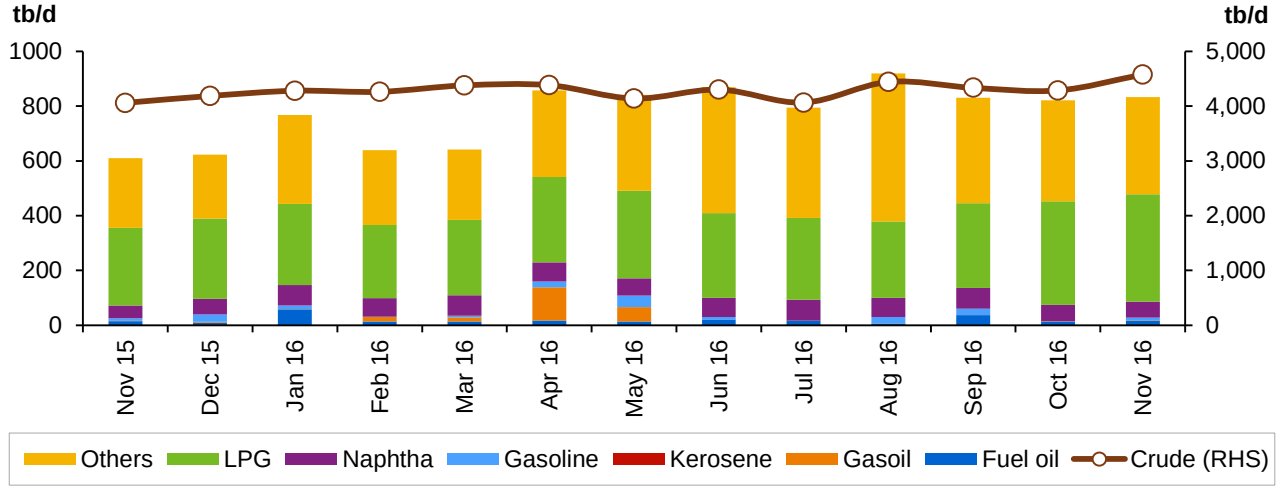
India

In December, Indian **crude imports** dropped by 357 tb/d or 8% from the previous month to reach 4.2 mb/d, the lowest level seen since July 2016, while annually crude imports reflected a gain of 34 tb/d or 1%. India's refinery runs increased by 200 tb/d in December from the previous month.

The country's December **product imports** increased on both a monthly and annual basis by 18 tb/d and 243 tb/d, respectively, to average 685 tb/d in December. Annual product import increases came on the back of higher LPG and diesel imports in December, which rose by 123 tb/d and 17 tb/d, respectively, from a month ago.

Graph 8.7

India's imports of crude and petroleum products

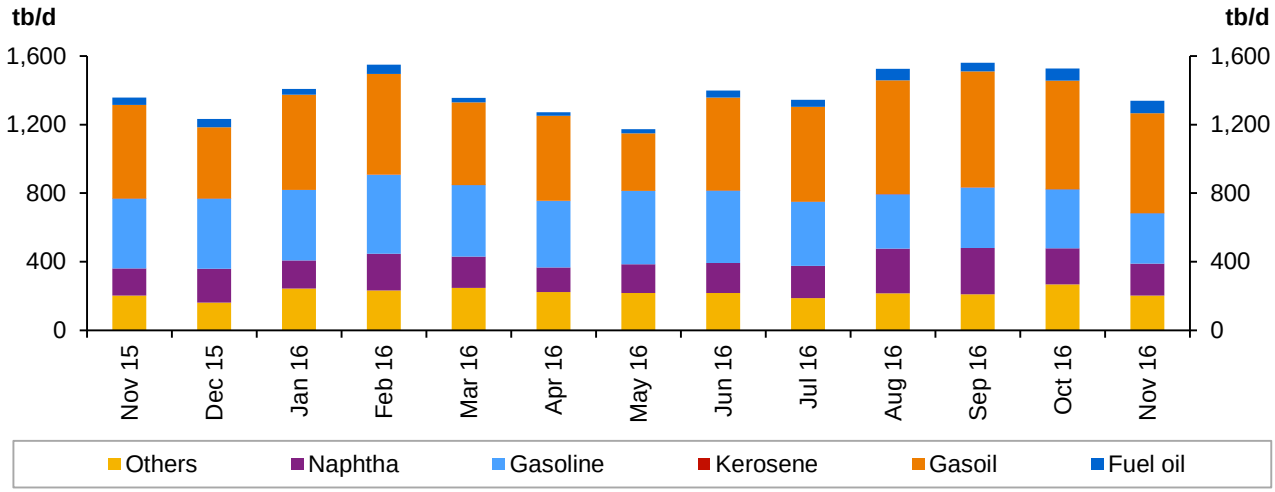


Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

India's **product exports** were up in December by 96 tb/d or 8% from a year earlier to average 1.3 mb/d, primarily due to higher volumes of diesel going out.

Graph 8.8

India's exports of petroleum products



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

Consequently, **India's net imports** dropped by 330 tb/d to average 3.8 mb/d, reflecting a decline of 8% m-o-m, though remaining higher than a year ago by 180 tb/d.

Table 8.4
India's crude and product net imports, *tb/d*

	Oct 16	Nov 16	Dec 16	Change Dec 16/Nov 16
Crude oil	4,286	4,576	4,220	-357
Total products	-707	-492	-465	27
Total crude and products	**3,580**	**4,085**	**3,755**	**-330**

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 (FSU) dropped by 131 tb/d or 2% to average 6.8 mb/d. Crude exports through Russian pipelines declined as well by 130 tb/d or 3% to average 4.2 mb/d.

Total shipments from the **Black Sea** dropped by 143 tb/d or 23% to average 480 tb/d, as exports through the Novorossiysk port declined. Total **Baltic Sea** exports went up by 21 tb/d in December, mainly as shipments from Primorsk port terminal increased by 64 tb/d, while Ust Luga port terminal exports dropped by 43 tb/d. **Druzhba pipeline** total shipments declined by 10 tb/d to average 1.1 mb/d, while shipments from **Kozmino** showed no significant changes from the previous month, averaging 676 tb/d.

Exports through the **Lukoil system** dropped by a slight 6 tb/d in the Barents Sea, while rising by 6 tb/d in the Baltic Sea.

Asia Russia Fareast total exports were down by 29 tb/d or 8% from the previous month.

Black Sea total exports rose by 85 tb/d, mainly as supplies from Supsa and Batumi ports were up from the previous month. In the Mediterranean Sea, the Baku–Tbilisi–Ceyhan (BTC) pipeline kept stable from the previous month to average 581 tb/d.

FSU total product exports were higher in December than over the previous month by 85 tb/d or 3% to average 3.2 mb/d. This increase in product exports came as a result of higher exports of gasoline, VGO, fuel oil and gasoil.

Table 8.5

Recent FSU exports of crude and petroleum products by sources, *tb/d*

		2016	3Q16	4Q16	Nov 16	Dec 16
Transneft system						
Europe	**Black sea total**	**600**	**580**	**545**	**624**	**480**
	Novorossiysk port terminal - total	600	580	545	624	480
	of which: Russian oil	443	425	386	484	326
	Others	157	156	159	140	154
	Baltic sea total	**1,593**	**1,561**	**1,668**	**1,585**	**1,605**
	Primorsk port terminal - total	1,000	1,005	1,010	913	977
	of which: Russian oil	1,000	1,005	1,010	913	977
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	593	556	658	671	628
	of which: Russian oil	388	360	446	456	418
	Others	205	196	212	216	210
	Druzhba pipeline total	**1,072**	**1,097**	**1,098**	**1,092**	**1,082**
	of which: Russian oil	1,040	1,066	1,066	1,060	1,051
	Others	32	31	32	32	32
Asia	**Pacific ocean total**	**646**	**658**	**666**	**674**	**676**
	Kozmino port terminal - total	646	658	666	674	676
	China (via ESPO pipeline) total	**335**	**311**	**332**	**336**	**336**
	China Amur	335	311	332	336	336
Total Russian crude exports		**4,246**	**4,207**	**4,309**	**4,310**	**4,180**
Lukoil system						
Europe &	**Barents sea total**	**159**	**163**	**154**	**163**	**157**
North America	Varandey offshore platform	159	163	154	163	157
Europe	**Baltic sea total**	**15**	**14**	**13**	**8**	**15**
	Kalinigrad port terminal	15	14	13	8	15
Other routes						
Asia	**Russian Far East total**	**360**	**274**	**372**	**376**	**348**
	Aniva bay port terminal	119	95	135	144	121
	De Kastri port terminal	241	179	236	232	226
	Central Asia total	**194**	**200**	**195**	**190**	**184**
	Kenkiyak-Alashankou	194	200	195	190	184
Europe	**Black sea total**	**1,078**	**948**	**1,226**	**1,255**	**1,290**
	Novorossiysk port terminal (CPC)	957	822	1,113	1,172	1,154
	Supsa port terminal	79	77	64	44	82
	Batumi port terminal	42	49	49	39	54
	Kulevi port terminal	0	0	0	0	0
	Mediterranean sea total	**668**	**663**	**615**	**583**	**581**
	BTC	668	663	615	583	581
Russian rail						
	Russian rail	**34**	**35**	**37**	**38**	**37**
	of which: Russian oil	30	33	36	37	36
	Others	4	2	2	1	1
Total FSU crude exports		**6,754**	**6,505**	**6,921**	**6,924**	**6,792**
Products						
	Gasoline	186	139	173	152	177
	Naphtha	511	536	510	553	489
	Jet	37	54	30	27	23
	Gasoil	962	859	877	933	945
	Fuel oil	1,044	1,013	1,023	1,093	1,157
	VGO	297	324	333	320	372
Total FSU product exports		**3,036**	**2,925**	**2,945**	**3,078**	**3,163**
Total FSU oil exports		**9,791**	**9,430**	**9,866**	**10,002**	**9,955**

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

OECD commercial oil stocks fell in December to stand at 2,999 mb. At this level, OECD commercial oil stocks are around 299 mb above the latest five-year average. Crude and products indicate a surplus of around 216 mb and 83 mb above the seasonal norm, respectively. In terms of days of forward cover, OECD commercial stocks stood at 63.8 days, some 5.5 days higher than the latest five-year average.

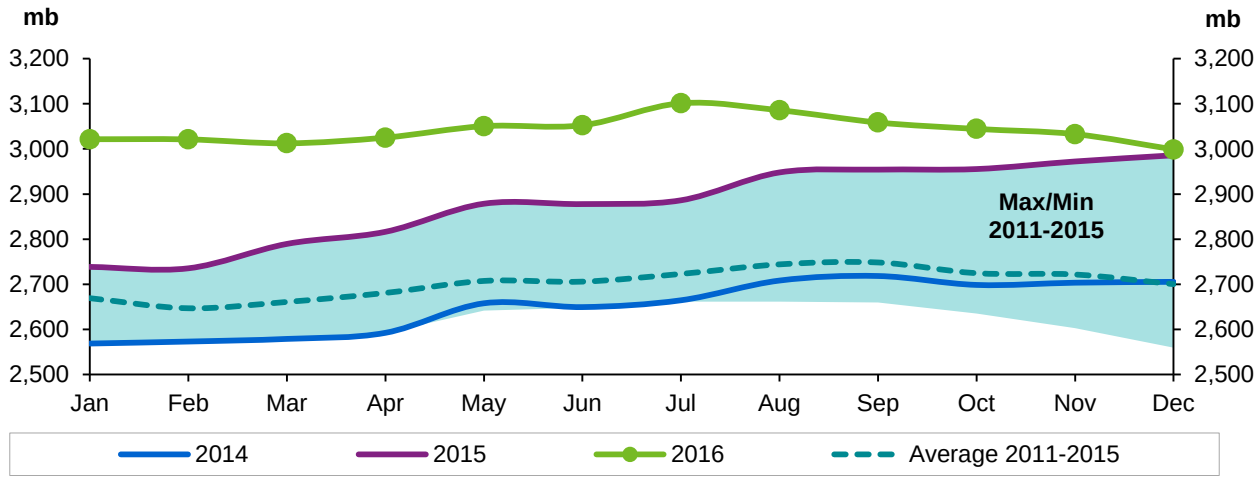
Preliminary data for January shows that total commercial oil stocks in the US rose by 20.3 mb to stand at 1,342.2 mb. At this level, they are around 28.1 mb above the same month a year ago and 198.5 mb higher than the latest five-year average. Within components, crude and products rose by 9.3 mb and 11 mb, respectively.

OECD

Preliminary data for December shows that **total OECD commercial oil stocks** fell by 33.8 mb for the fifth consecutive month to stand at 2,999 mb, which is around 13.0 mb higher than the same time one year ago and 299 mb above the latest five-year average. From January to December this year, OECD commercial stock builds have shown considerable signs of slowing, as they increased by only 13 mb compared with a build of 281 mb 2015. Within components, crude and products fell by 13.5 mb and 20.3 mb, respectively.

Graph 9.1

OECD's commercial oil stocks



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

OECD commercial **crude** stocks fell in December to stand at 1,504 mb, which is 23 mb above the same time one year earlier and around 216 mb higher than the latest five-year average. OECD America and OECD Europe experienced a stock draw, while OECD Asia Pacific stocks witnessed a build.

OECD **product** inventories also fell by 20.3 mb in December to stand at 1,504 mb, which is 9.5 mb below a year ago at the same time and 83 mb above the seasonal norm. Within the regions, OECD America and OECD Asia Pacific experienced a stock draw, while OECD Europe stocks witnessed a build.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.7 mb in December to stand at 63.9 days, which is in line with the previous year in the same period and 5.5 days higher than the latest five-year average. Within the regions, OECD Americas had 6.9 days more of forward cover than the historical average to stand at 64.1 days in December. OECD Asia Pacific stood 5.0 days above the seasonal average to finish the month at 51.1 days. At the same time, OECD Europe indicated a surplus of 3.0 days above the seasonal norm, averaging 71.3 days in December.

Stock Movements

Commercial stocks in **OECD Americas** fell by 36.7 mb in December to stand at 1,588 mb. At this level, they are 27 mb above a year ago and 211 mb higher than the seasonal norm. Within the components, crude and products fell by 13.5 mb and 20.3 mb, respectively.

At the end of December, commercial **crude** oil stocks in OECD Americas fell, ending the month at 828 mb, which is 4.0 mb below the same time one year ago and 166 mb above the latest five-year average. Higher US crude runs, which increased by about 280,000 b/d to average 16.6 mb, were behind the drop in US crude oil stocks. Lower US crude imports also contributed to this drop.

Product stocks in OECD Americas also fell by 27.1 mb in December, reversing the November build. At 760 mb, they are 4.9 mb bellow the same time one year ago and 45.5 mb higher than the seasonal norm. Higher consumption, especially from gasoline, could be behind the drop.

OECD Europe's commercial stocks rose by 4.3 mb in December, ending the month at 975 mb, which was 15 mb lower than the same time a year ago, but 58.6 mb above the latest five-year average. Crude fell by 5.3 mb, while product stocks rose by 9.6 mb.

OECD Europe's commercial **crude** stocks fell in December, ending the month at 411 mb, which is 15.7 mb lower than a year earlier, but 23.9 mb higher than the latest five-year average. The fall in crude oil stocks could be attributed to lower domestic production as crude throughput deceased in December.

In contrast, OECD Europe's commercial **product** stocks rose by 9.6 mb to end December at 564 mb, which is 0.5 mb higher than a year ago at the same time and 34.7 mb higher than the seasonal norm. This build could be attributed to lower demand in the region.

OECD Asia Pacific commercial oil stocks fell by 1.4 mb in December following a drop of 10.4 mb in November. At 436 mb, they are 0.9 mb higher than a year ago and 29 mb above the five-year average. Within components, crude rose by 1.4 mb, while product stocks fell by 2.9 mb.

In December, **crude** inventories ended the month at 265 mb, which is 4.0 mb below a year ago, yet 26.2 mb above the seasonal norm. OECD Asia Pacific's total **product** inventories ended December at 171 mb, standing 4.9 mb higher than the same month a year ago and 2.9 mb above the seasonal norm.

Table 9.1
OECD's commercial stocks, *mb*

	Oct 16	Nov 16	Dec 16	*Change* Dec 16/Nov 16	Dec 15
Crude oil	1,523	1,518	1,504	-13.5	1,482
Products	1,521	1,515	1,495	-20.3	1,504
Total	**3,044**	**3,033**	**2,999**	**-33.8**	**2,986**
Days of forward cover	**65.5**	**64.6**	**63.9**	**-0.7**	**63.8**

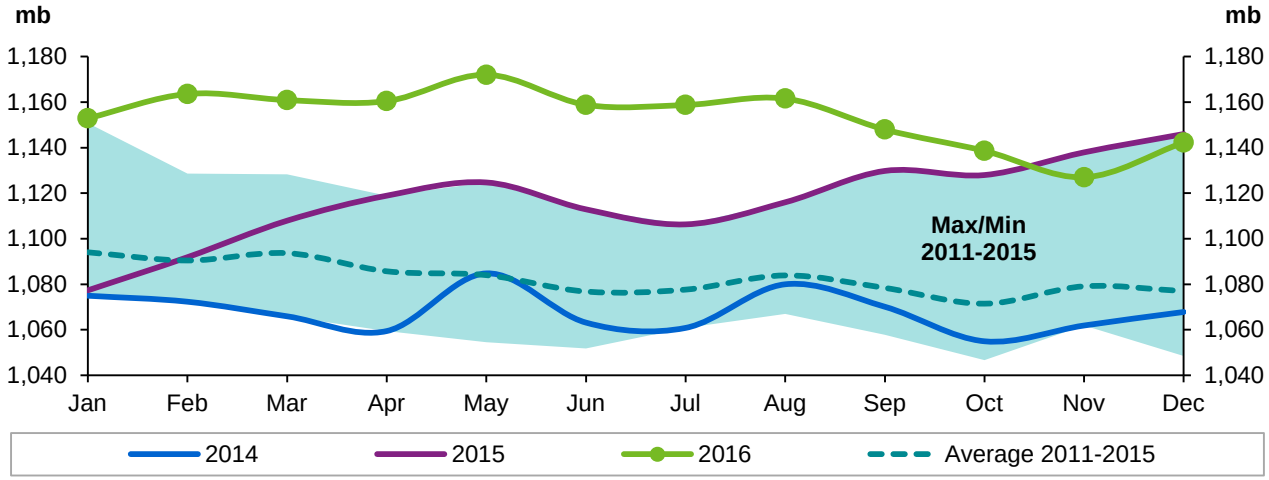
Note: Totals may not add up due to independent rounding.
Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

EU plus Norway

Preliminary data for December shows total **European stocks** rose by 15.3 mb reversing the fall of 11.6 mb in November. At 1,142.3 mb, European stocks are 3.7 mb, or 0.3%, lower than the same time a year ago, but remained 65.3 mb or 6.1%, higher than the latest five-year average. Crude stocks fell by 5.3 mb, while product stocks rose by 20.6 mb.

European **crude inventories** fell in December to stand at 471.4 mb, which is 19.0 mb, or 3.9%, lower than the same period a year ago, but 9.5 mb, or 2.0%, higher than the seasonal norm. The fall in crude oil stocks could come from lower domestic production as crude throughput deceased by 157 tb/d to average 10.7 mb/d in December.

Graph 9.2
EU-15 plus Norway's total oil stocks



Source: Euroilstock.

In contrast, **European product stocks** rose by 20.6 mb, ending December at 670.9 mb. At this level, they are 15.3 mb, or 2.3%, higher than the same time a year ago, and 55.9 mb, or 9.1%, above the seasonal norm. All products, with the exception of naphtha, saw a build.

Distillate stocks rose by 14.6 mb in December to stand at 451.9 mb. At this level, distillate inventories are 12.9 mb, or 2.9%, higher than the same time one year ago, and 56.4 mb, or 14.3%, above the latest five-year average.

Gasoline stocks also rose by 4.0 mb in December to stand at 117.9 mb, which is 3.1 mb, or 2.7%, above a year earlier, and 7.3 mb, or 6.6%, higher than the seasonal norm. The build in distillate and gasoline stocks could be attributed to lower domestic demand.

Residual fuel oil stocks rose by 2.1 mb in December to stand at 76.9 mb, which is 2.9 mb, or 3.6%, less than the same month a year ago and 5.0 mb, or 6.1%, lower than the latest five-year average.

Table 9.2
EU-15 plus Norway's total oil stocks, *mb*

				Change	
	Oct 16	Nov 16	Dec 16	Dec 16/Nov 16	Dec 15
Crude oil	**474.8**	**476.8**	**471.4**	**-5.3**	**490.5**
Gasoline	115.6	113.9	117.9	4.0	114.8
Naphtha	23.8	24.2	24.2	0.0	22.0
Middle distillates	449.6	437.3	451.9	14.6	439.0
Fuel oils	74.8	74.8	76.9	2.1	79.8
Total products	**663.8**	**650.3**	**670.9**	**20.6**	**655.6**
Total	**1,138.6**	**1,127.0**	**1,142.3**	**15.3**	**1,146.0**

Sources: Argus and Euroilstock.

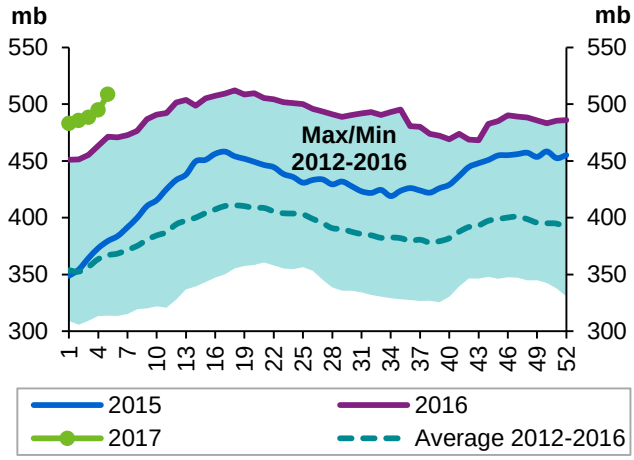
US

Preliminary data for January shows that **total commercial oil stocks** in the US rose by 20.3 mb, reversing the drop of 36.7 mb in December to stand at 1,342.2 mb. At this level, they are around 28.1 mb, or 2.1%, above the same period a year ago and 198.5 mb, or 17.4%, higher than the latest five-year average. Within components, crude and products rose by 9.3 mb and 11 mb, respectively.

US **commercial crude stocks** rose in January to stand at 488.3 mb, which is 9.3 mb, or 4.2%, above the same time one year ago and 116 mb, or 31%, above the latest five-year average. The drop in US commercial crude stocks could be attributed to higher crude throughputs, which increased by about 200 tb/d to average 16.4 mb/d. Higher crude imports also contributed to this build. In contrast, stocks in Cushing, Oklahoma, fell by more than 4 mb, ending January at 64.1 mb.

Graph 9.3

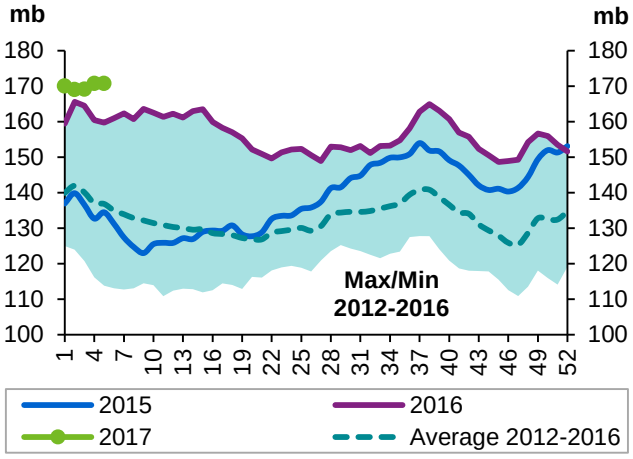
US weekly commercial crude oil inventories



Sources: US Energy Information Administration and OPEC Secretariat.

Graph 9.4

US weekly distillates inventories



Sources: US Energy Information Administration and OPEC Secretariat.

Total product stocks also rose by 11.0 mb in January to stand at 853.9 mb, which was around 8.5 mb, or 1.0%, above the level seen the same time a year ago, and 82.5 mb, or 10.3%, above the seasonal norm. Within products, the picture was mixed; gasoline, distillates and jet fuel stocks experienced builds, while propylene and residual fuels saw a drop.

Gasoline stocks rose considerably by 17.8 mb in January to settle at 253.2 mb, which is 7.7 mb or 3.0% lower than the same period a year ago, yet 11.4 mb, or 4.7%, above the latest five-year average. The build came mainly from lower consumption, which averaged 8.3 mb/d, lower than in the previous month. Lower gasoline output limited a further build in gasoline stocks.

Distillate stocks also rose by 7.5 mb in January, ending the month at 169.1 mb. At this level, they indicated a surplus of 8.6 mb, or 5.3%, with the same period a year ago, and 31.9 mb, or 23.2%, above the latest five-year average. The build in middle distillate stocks came from lower consumption, which decreased by nearly 150,000 b/d to average around 3.7 mb/d. Lower production limited a further build in middle distillate stocks.

Jet fuel oil inventories rose by 1.1 mb to 44.1 mb in January, which is 1.6 mb, or 3.8%, higher than the same period a year ago, and 3.9 mb, or 9.6%, above the seasonal norm.

In contrast, **residual fuel** stocks fell by 1.0 mb, ending January at 41.4 mb, which is 2.6 mb, or 6.0%, below the same period a year ago, and 4.5 mb, or 12.1%, higher than the latest five-year average.

Table 9.3
US onland commercial petroleum stocks, *mb*

	Nov 16	Dec 16	Jan 17	Change Jan 17/Dec 16	Jan 16
Crude oil	**488.6**	**479.0**	**488.3**	**9.3**	**468.7**
Gasoline	233.4	235.5	253.2	17.8	261.0
Distillate fuel	160.2	161.7	169.1	7.5	160.6
Residual fuel oil	40.6	42.5	41.4	-1.0	44.1
Jet fuel	44.8	43.0	44.1	1.1	42.5
Total	**1,358.6**	**1,321.9**	**1,342.2**	**20.3**	**1,314.1**
SPR	**695.1**	**695.1**	**695.1**	**0.0**	**695.1**

Sources: US Energy Information Administration and OPEC Secretariat.

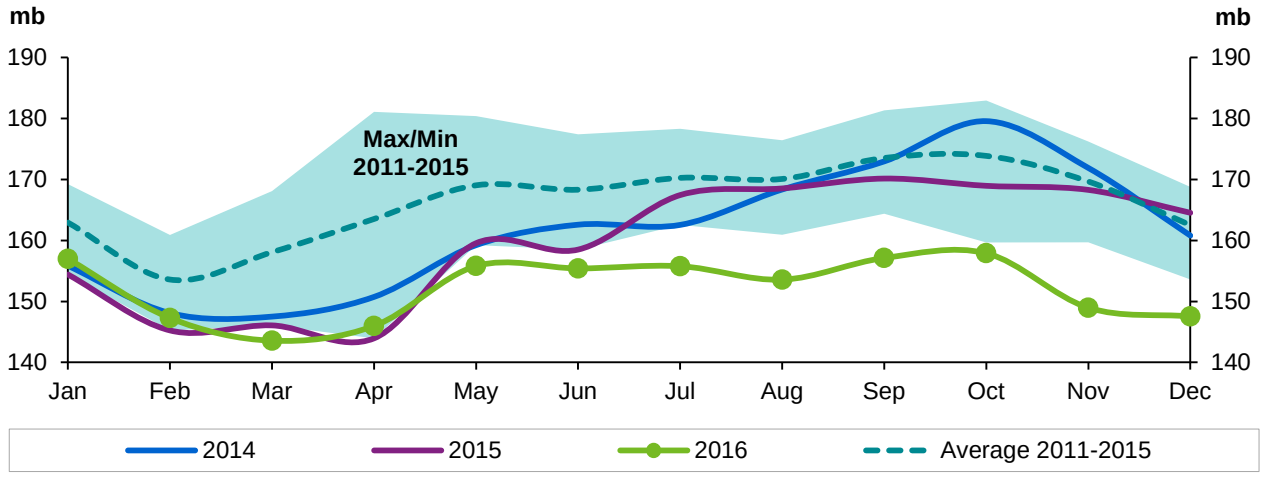
Japan

In Japan, total **commercial oil stocks** fell by 1.4 mb in December for the second consecutive month. At 147.5 mb, Japanese total commercial stocks are 17.0 mb, or 10.3%, less than the same time a year ago and 15.0 mb, or 9.2%, below the five-year average. Within components, crude rose by 1.4 mb, while product stocks fell by 2.9 mb.

Japanese commercial **crude oil stocks** rose in December to stand at 88.7 mb, which is 9.8 mb, or 10.0%, below the same period a year ago and 6.2 mb, or 6.5%, below the seasonal norm. The build was driven by higher crude imports, which increased by around 470,000 b/d, or 15.0%, to average 3.61 mb/d. Higher crude throughput limited a further build in crude commercial inventories.

Japan's total **product inventories** also fell by 2.9 mb in December to stand at 58.8 mb. At this level, they stood at 7.2 mb or 10.9% lower than last year in the same month and 8.8 mb, or 13.0%, less than the seasonal norm. This drop came on the back of higher domestic product sales, which increased by nearly 280,000 b/d to average 3.55 mb/d. It should be noted that Japan's total oil sales in December hit their lowest level in more than 40 years as Japan continued to seek alternative sources of energy, resulting in continued slowing oil consumption.

Graph 9.5
Japan's commercial oil stocks



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

Distillate stocks fell by 2.1 mb in December to stand at 27.8 mb. At this level, they stood at 4.4 mb, or 13.7%, lower than the same period a year ago and 3.8 mb, or 12.1%, below the seasonal average. Within distillate components, jet fuel, kerosene and gasoil fell by 7.1%, 9.6% and 9.1%, respectively. The fall in gasoil and kerosene came mainly from higher domestic sales, which increased by 5.2% and

50.4%, respectively. However, the drop in jet fuel oil stocks could be attributed to lower production, as they decreased by 6.4%.

Total **residual fuel oil stocks** also fell by 0.1 mb in December to stand at 13.4 mb, which is 1.4 mb, or 9.4%, lower than a year ago and 2.0 mb, or 12.8%, below the latest five-year average. Within fuel oil components, fuel oil A and fuel B.C fell by 6.3% and 11.1%, respectively. This drop was driven by higher domestic sales, which rose by 21.9% and 14.9%, respectively.

In contrast, **gasoline** inventories rose by 0.2 mb to end December at 9.7 mb, which is 0.1 mb, or 1.2%, lower than a year ago at the same time and 1.0 mb, or 9.5%, lower than the seasonal norm. The build in gasoline stocks could be driven by higher production, which increased by 12.7%. **Gasoline** stocks rose in October to stand at 67.8 mb, which is 16.0 mb above the same time a year ago. The build in gasoline stocks was driven by higher output combined with lower demand, attributed to less travel due to cold weather.

In contrast, **diesel** and **kerosene** inventories fell by 1.5 mb and 1.0 mb to stand at 51.8 mb and 16.8 mb, respectively. This fall in diesel stocks came on the back of healthy consumption, driven by higher agricultural and industrial activities.

Table 9.4
Japan's commercial oil stocks*, *mb*

	Oct 16	Nov 16	Dec 16	Change Dec 16/Nov 16	Dec 15
Crude oil	**92.4**	**87.3**	**88.7**	**1.4**	**98.5**
Gasoline	9.7	9.5	9.7	0.2	9.8
Naphtha	9.8	8.8	7.9	-0.9	9.2
Middle distillates	32.8	29.9	27.8	-2.1	32.2
Residual fuel oil	13.3	13.4	13.4	-0.1	14.8
Total products	**65.5**	**61.7**	**58.8**	**-2.9**	**66.0**
Total**	**157.9**	**149.0**	**147.5**	**-1.4**	**164.5**

*Note: * At the end of the month.*
*** Includes crude oil and main products only.*
Source: Ministry of Economy, Trade and Industry of Japan.

China

The latest information for China showed total **commercial oil inventories** fell slightly by 0.4 mb in December to stand at 362.8 mb, which is 21.3 mb lower than the previous year. Within the components, crude fell by 4.3 mb, while product inventories rose by 3.9 mb. In December, commercial **crude** stocks fell for the third consecutive month to 222.3 mb, standing 21.2 mb below the previous year at the same time. This drop could be attributed to higher crude runs as crude imports were up.

Table 9.5
China's commercial oil stocks, *mb*

	Oct 16	Nov 16	Dec 16	Change Dec 16/Nov 16	Dec 15
Crude oil	**230.1**	**226.5**	**222.3**	**-4.3**	**245.2**
Gasoline	67.8	68.4	71.9	3.5	56.3
Diesel	51.8	49.8	49.1	-0.7	63.1
Jet kerosene	16.8	18.5	19.6	1.1	14.4
Total products	**136.4**	**136.6**	**140.5**	**3.9**	**133.7**
Total	**366.5**	**363.2**	**362.8**	**-0.4**	**378.9**

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

On the other hand, total **product** stocks in China rose by 3.9 mb in December to stand at 140.5 mb. Total product stocks were 0.2 mb below the same time a year ago. Gasoline and kerosene inventories saw builds of 3.5 mb and 1.1 mb, respectively, while diesel experienced a fall of 0.7 mb.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of December, product stocks in **Singapore** fell by 5.2 mb to stand at 44.9 mb. At this level, they are 5.0 mb, or 9.9%, below the same period a year ago. All products witnessed draws.

Light and **middle distillate** stocks fell in December by 0.6 mb and 4.5 mb, respectively. At 12.3 mb, light distillates stood at 0.2 mb, or 1.9%, lower than last year at the same time, while middle distillates ended December at 10.4 mb, which is 2.0 mb, or 16.1%, lower than a year ago in the same period. The drop in both products was driven by higher exports combined with higher demand in the region.

Residual fuel oil stocks fell slightly by 0.1 mb in December, ending the month at 22.2 mb. At this level, they are 2.7 mb, or 10.9%, lower than the same time a year ago. The fall could be attributed to higher marine bunkers in the region.

Product stocks in **Amsterdam-Rotterdam-Antwerp** (ARA) rose by 0.6 mb in December to stand at 39.9 mb. At this level, they are 7.2 mb, or 15.3%, lower than at the same time a year ago. Within products, gasoline, naphtha and fuel oil saw a build, while gasoil and jet oil experienced a stock draw.

Gasoline inventories rose by 0.9 mb, ending December at 8.9 mb, which is 2.1 mb, or around 30.7 %, higher than the same month of the previous year. This build could be attributed to lower demand in the region. **Fuel oil stocks** also rose by 0.5 mb in December to stand at 4.7 mb, which is 3.1 mb, or nearly 40%, lower than at the same period a year ago. This build was mainly driven by higher imports to the ARA hub.

In contrast, **gasoil** fell by 1.2 mb in December to stand at 19.5 mb. At this level, it stood at 6.4 mb, or 23.7%, below a year ago at the same time.

Balance of Supply and Demand

Demand for OPEC crude in 2016 stands at 31.3 mb/d, which is 1.8 mb/d higher than the 2015 level. In 2017, demand for OPEC crude is projected to be 32.1 mb/d, around 0.8 mb/d higher than this year.

Estimate for 2016

Demand for OPEC crude in 2016 stood at 31.3 mb/d, representing an increase of 1.8 mb/d from the previous year's level. In terms of quarters, there were upwards revisions of 0.2 mb/d, 0.2 mb/d and 0.1 mb/d for the first, second and third quarters, respectively. The fourth quarter remained unchanged.

Table 10.1
Supply/demand balance for 2016*, *mb/d*

	2015	1Q16	2Q16	3Q16	4Q16	2016
(a) World oil demand	**93.30**	**93.58**	**93.74**	**95.55**	**95.59**	**94.62**
Non-OPEC supply**	57.85	57.87	56.37	56.73	57.81	57.20
OPEC NGLs and non-conventionals	5.94	6.05	6.08	6.11	6.15	6.10
(b) Total non-OPEC supply and OPEC NGLs	**63.80**	**63.92**	**62.45**	**62.84**	**63.95**	**63.29**
Difference (a-b)	**29.50**	**29.66**	**31.29**	**32.71**	**31.63**	**31.33**
OPEC crude oil production	**31.51**	**31.94**	**32.17**	**32.63**	**33.13**	**32.47**
Balance	**2.00**	**2.28**	**0.88**	**-0.08**	**1.50**	**1.14**

*Note: * 2016 = Estimate.*
*** Data includes Indonesia.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Forecast for 2017

The forecast **demand for OPEC crude in 2017** remained broadly unchanged from the previous month. There were slight upwards revisions of 0.1 mb/d in both the second and fourth quarters, while the other quarters remained unchanged.

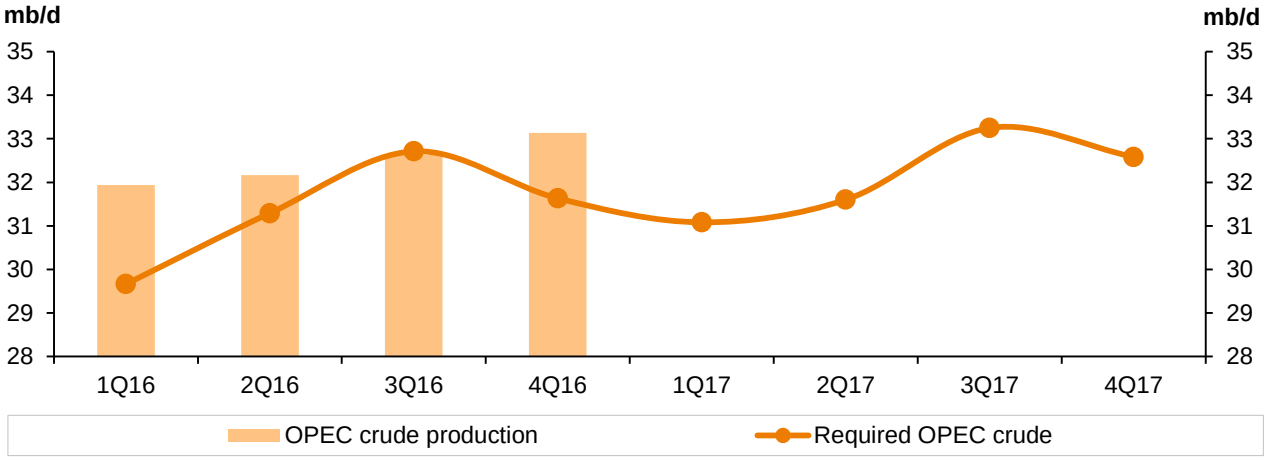
Table 10.2
Supply/demand balance for 2017*, *mb/d*

	2016	1Q17	2Q17	3Q17	4Q17	2017
(a) World oil demand	**94.62**	**94.84**	**94.85**	**96.77**	**96.76**	**95.81**
Non-OPEC supply**	57.20	57.59	57.04	57.26	57.84	57.44
OPEC NGLs and non-conventionals	6.10	6.17	6.21	6.26	6.33	6.24
(b) Total non-OPEC supply and OPEC NGLs	**63.29**	**63.76**	**63.25**	**63.52**	**64.17**	**63.68**
Difference (a-b)	**31.33**	**31.08**	**31.60**	**33.25**	**32.58**	**32.14**

*Note: * 2017 = Forecast.*
*** Data includes Indonesia.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Graph 10.1

Balance of supply and demand, 2016-2017*



*Note: * 2016 = Estimate and 2017 = Forecast.*
Source: OPEC Secretariat.

Table 10.3:

World oil demand and supply balance, *mb/d*

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	46.1	45.8	46.4	46.8	46.2	47.2	47.0	46.8	47.0	46.4	47.5	47.1	47.0
Americas	24.2	24.2	24.6	24.6	24.7	25.1	24.8	24.8	24.8	24.8	25.4	24.9	25.0
Europe	13.6	13.5	13.7	13.6	13.9	14.4	13.9	14.0	13.7	14.0	14.4	13.9	14.0
Asia Pacific	8.3	8.1	8.0	8.6	7.6	7.7	8.3	8.1	8.5	7.6	7.7	8.2	8.0
DCs	29.1	29.9	30.6	30.7	31.0	31.5	31.1	31.1	31.3	31.6	32.1	31.8	31.7
FSU	4.5	4.6	4.6	4.5	4.4	4.7	5.0	4.7	4.6	4.4	4.8	5.1	4.7
Other Europe	0.6	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	10.3	10.7	11.1	11.0	11.5	11.4	11.7	11.4	11.2	11.7	11.6	11.9	11.6
(a) Total world demand	**90.7**	**91.7**	**93.3**	**93.6**	**93.7**	**95.5**	**95.6**	**94.6**	**94.8**	**94.9**	**96.8**	**96.8**	**95.8**
Non-OPEC supply													
OECD	22.2	24.3	25.3	25.3	24.2	24.6	25.1	24.8	25.2	24.8	24.8	25.2	25.0
Americas	18.2	20.1	21.1	21.0	20.1	20.5	20.7	20.6	20.9	20.6	20.8	21.0	20.8
Europe	3.6	3.6	3.8	3.9	3.7	3.6	3.9	3.8	3.8	3.7	3.5	3.8	3.7
Asia Pacific	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
DCs	11.8	12.0	12.2	12.0	12.0	12.2	12.3	12.1	12.2	12.2	12.3	12.4	12.3
FSU	13.6	13.5	13.7	14.0	13.7	13.7	14.2	13.9	13.9	13.8	13.9	14.0	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	4.2	4.3	4.4	4.2	4.1	4.0	4.0	4.1	3.9	3.9	3.9	3.9	3.9
Processing gains	2.1	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	**54.1**	**56.4**	**57.9**	**57.9**	**56.4**	**56.7**	**57.8**	**57.2**	**57.6**	**57.0**	**57.3**	**57.8**	**57.4**
OPEC NGLs + non-conventional oils	5.6	5.8	5.9	6.1	6.1	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.2
(b) Total non-OPEC supply and OPEC NGLs	**59.7**	**62.2**	**63.8**	**63.9**	**62.5**	**62.8**	**64.0**	**63.3**	**63.8**	**63.3**	**63.5**	**64.2**	**63.7**
OPEC crude oil production (secondary sources)	30.5	30.3	31.5	31.9	32.2	32.6	33.1	32.5					
Total supply	90.2	92.5	95.3	95.9	94.6	95.5	97.1	95.8					
Balance (stock change and miscellaneous)	-0.5	0.9	2.0	2.3	0.9	-0.1	1.5	1.1					
OECD closing stock levels, *mb*													
Commercial	2,559	2,705	2,986	3,012	3,052	3,059	2,999	2,999					
SPR	1,584	1,580	1,587	1,593	1,591	1,594	1,600	1,600					
Total	**4,144**	**4,285**	**4,573**	**4,606**	**4,643**	**4,653**	**4,599**	**4,599**					
Oil-on-water	909	924	1,017	1,055	1,094	1,068	1,102	1,102					
Days of forward consumption in OECD, *days*													
Commercial onland stocks	55.9	58.3	63.8	65.1	64.6	65.1	63.8	63.8					
SPR	34.6	34.1	33.9	34.5	33.7	33.9	34.0	34.0					
Total	**90.4**	**92.4**	**97.7**	**99.6**	**98.3**	**99.1**	**97.8**	**97.8**					
Memo items													
FSU net exports	9.0	8.9	9.1	9.5	9.4	8.9	9.1	9.2	9.3	9.4	9.1	8.9	9.2
(a) - (b)	**31.0**	**29.5**	**29.5**	**29.7**	**31.3**	**32.7**	**31.6**	**31.3**	**31.1**	**31.6**	**33.2**	**32.6**	**32.1**

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

Source: OPEC Secretariat.

Table 10.4

World oil demand/supply balance: changes from last month's table* , *mb/d*

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	-	-	-	-	-	-	0.2	0.1	0.1	0.1	-	0.2	0.1
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	0.1	-	0.1	0.1	-	0.1	0.1
Asia Pacific	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
DCs	-	-	-	-	-	-	-0.1	-	-	-	-	-0.1	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
(a) Total world demand	**-**	**-**	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.3**	**0.2**	**0.1**	**0.2**	**0.2**
World demand growth	***-***	***-***	***0.1***	***-***	***-***	***-***	***0.2***	***0.1***	***0.1***	***-***	***-***	***-***	***-***
Non-OPEC supply													
OECD	-	-	-	-	-	-	0.1	-	0.2	0.1	0.2	0.2	0.2
Americas	-	-	-	-	-	-	0.1	-	0.3	0.1	0.2	0.2	0.2
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	0.2	-	0.3	0.1	0.2	0.2	0.2
Total non-OPEC supply growth	-	-	-	-	-	-	0.2	-	0.2	0.1	0.2	-	0.1
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-**	**-**	**-**	**-**	**-**	**-**	**0.2**	**-**	**0.3**	**0.1**	**0.2**	**0.2**	**0.2**
OPEC crude oil production (secondary sources)	***-***	***-***	***-***	***0.1***	***0.1***	***0.1***	***-***	***0.1***					
Total supply	-	-	-	0.1	0.1	0.1	0.2	0.1					
Balance (stock change and miscellaneous)	-	-	-0.1	-0.1	-0.1	-0.1	-	-0.1					
OECD closing stock levels (mb)													
Commercial	-	-	-	-2	-	3	-	-					
SPR	-	-	-	-	-	-	-	-					
Total	-	-	-	-2	-	3	-	-					
Oil-on-water	-	-	-	-	-	-	-	-					
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-	-					
SPR	-	-	-	-	-	-	-	-					
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**					
Memo items													
FSU net exports	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) - (b)	**-**	**-**	**0.1**	**0.2**	**0.2**	**0.1**	**-**	**0.1**	**-**	**0.1**	**-**	**0.1**	**-**

*Note: * This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the January 2017 issue.*

This table shows only where changes have occurred.

Source: OPEC Secretariat.

Table 10.5

OECD oil stocks and oil on water at the end of period

	2014	2015	2016	4Q14	1Q15	2Q15	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16
Closing stock levels, mb												
OECD onland commercial	**2,705**	**2,986**	**2,999**	**2,705**	**2,789**	**2,878**	**2,954**	**2,986**	**3,012**	**3,052**	**3,059**	**2,999**
Americas	1,414	1,561	1,588	1,414	1,458	1,508	1,542	1,561	1,589	1,609	1,617	1,588
Europe	886	990	975	886	939	940	967	990	1,002	1,006	991	975
Asia Pacific	405	435	436	405	392	430	445	435	421	438	450	436
OECD SPR	**1,580**	**1,587**	**1,600**	**1,580**	**1,583**	**1,585**	**1,579**	**1,587**	**1,593**	**1,591**	**1,594**	**1,600**
Americas	693	697	697	693	693	696	697	697	697	697	697	697
Europe	470	473	481	470	470	471	467	473	477	473	476	481
Asia Pacific	417	416	422	417	420	418	415	416	419	421	421	422
OECD total	**4,285**	**4,573**	**4,599**	**4,285**	**4,372**	**4,463**	**4,533**	**4,573**	**4,606**	**4,643**	**4,653**	**4,599**
Oil-on-water	**924**	**1,017**	**1,102**	**924**	**864**	**916**	**924**	**1,017**	**1,055**	**1,094**	**1,068**	**1,102**
Days of forward consumption in OECD, *days*												
OECD onland commercial	**58**	**56**	**64**	**58**	**61**	**61**	**64**	**64**	**65**	**65**	**65**	**64**
Americas	55	53	64	58	60	60	63	64	64	64	65	64
Europe	67	65	71	66	69	66	70	73	72	70	72	71
Asia Pacific	49	48	51	47	52	56	54	51	55	57	55	51
OECD SPR	**34**	**35**	**34**	**34**	**35**	**34**	**34**	**34**	**34**	**34**	**34**	**34**
Americas	29	29	28	28	28	28	28	28	28	28	28	28
Europe	32	35	35	35	35	33	34	35	34	33	35	35
Asia Pacific	50	51	50	48	55	54	51	49	55	54	51	50
OECD total	**91**	**90**	**98**	**92**	**96**	**95**	**98**	**98**	**100**	**98**	**100**	**98**

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

Table 10.6

Non-OPEC supply and OPEC natural gas liquids, *mb/d*

	2013	2014	2015	3Q16	4Q16	2016	Change 16/15	1Q17	2Q17	3Q17	4Q17	2017	Change 17/16
US	11.2	13.0	14.0	13.4	13.7	13.6	-0.4	13.9	13.8	13.9	14.0	13.9	0.2
Canada	4.0	4.3	4.4	4.6	4.7	4.5	0.0	4.7	4.5	4.6	4.7	4.6	0.2
Mexico	2.9	2.8	2.6	2.5	2.4	2.5	-0.1	2.4	2.3	2.3	2.3	2.3	-0.2
OECD Americas*	**18.2**	**20.1**	**21.1**	**20.5**	**20.7**	**20.6**	**-0.5**	**20.9**	**20.6**	**20.8**	**21.0**	**20.8**	**0.2**
Norway	1.8	1.9	1.9	1.9	2.1	2.0	0.0	2.0	1.9	1.9	2.0	2.0	0.0
UK	0.9	0.9	1.0	1.0	1.0	1.0	0.1	1.0	1.0	0.9	1.0	1.0	0.0
Denmark	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.6	0.7	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
OECD Europe	**3.6**	**3.6**	**3.8**	**3.6**	**3.9**	**3.8**	**0.0**	**3.8**	**3.7**	**3.5**	**3.8**	**3.7**	**-0.1**
Australia	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	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**	**0.5**	**0.4**	**0.4**	**0.4**	**0.0**	**0.4**	**0.5**	**0.4**	**0.4**	**0.4**	**0.0**
Total OECD	**22.2**	**24.3**	**25.3**	**24.6**	**25.1**	**24.8**	**-0.5**	**25.2**	**24.8**	**24.8**	**25.2**	**25.0**	**0.2**
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.9	0.8	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.6	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Vietnam	0.3	0.3	0.4	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Asia others	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Asia*	**3.5**	**3.5**	**3.6**	**3.6**	**3.6**	**3.6**	**0.0**	**3.6**	**3.6**	**3.6**	**3.5**	**3.6**	**0.0**
Argentina	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Brazil	2.6	2.9	3.1	3.3	3.3	3.1	0.1	3.3	3.3	3.4	3.5	3.4	0.3
Colombia	1.0	1.0	1.0	0.9	0.9	0.9	-0.1	0.9	0.9	0.8	0.9	0.9	-0.1
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	**4.8**	**5.0**	**5.2**	**5.2**	**5.2**	**5.1**	**-0.1**	**5.2**	**5.2**	**5.3**	**5.4**	**5.3**	**0.2**
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	0.9	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Syria	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
Yemen	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**0.0**	**1.2**	**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	0.3	0.3	0.3	0.0	0.3	0.3	0.4	0.4	0.3	0.0
Egypt	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
Equatorial Guinea	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
South Africa	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Sudans	0.2	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Africa other	0.3	0.3	0.3	0.3	0.4	0.3	0.0	0.3	0.3	0.3	0.4	0.3	0.0
Africa	**2.1**	**2.1**	**2.1**	**2.1**	**2.2**	**2.1**	**0.0**	**2.1**	**2.2**	**2.2**	**2.2**	**2.2**	**0.1**
Total DCs	**11.8**	**12.0**	**12.2**	**12.2**	**12.3**	**12.1**	**-0.1**	**12.2**	**12.2**	**12.3**	**12.4**	**12.3**	**0.2**
FSU	**13.6**	**13.5**	**13.7**	**13.7**	**14.2**	**13.9**	**0.2**	**13.9**	**13.8**	**13.9**	**14.0**	**13.9**	**0.0**
Russia	10.6	10.7	10.8	11.0	11.3	11.1	0.2	11.0	11.0	11.1	11.1	11.0	-0.1
Kazakhstan	1.6	1.6	1.6	1.4	1.7	1.6	0.0	1.7	1.7	1.7	1.7	1.7	0.1
Azerbaijan	0.9	0.9	0.9	0.8	0.8	0.9	0.0	0.8	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
China	**4.2**	**4.3**	**4.4**	**4.0**	**4.0**	**4.1**	**-0.3**	**3.9**	**3.9**	**3.9**	**3.9**	**3.9**	**-0.2**
Non-OPEC production	**52.0**	**54.2**	**55.7**	**54.5**	**55.6**	**55.0**	**-0.7**	**55.4**	**54.8**	**55.1**	**55.6**	**55.2**	**0.2**
Processing gains	2.1	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	**54.1**	**56.4**	**57.9**	**56.7**	**57.8**	**57.2**	**-0.7**	**57.6**	**57.0**	**57.3**	**57.8**	**57.4**	**0.2**
OPEC NGL	5.4	5.6	5.7	5.8	5.9	5.8	0.1	5.9	5.9	6.0	6.1	6.0	0.1
OPEC non-conventional	0.2	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
OPEC (NGL+NCF)	**5.6**	**5.8**	**5.9**	**6.1**	**6.1**	**6.1**	**0.2**	**6.2**	**6.2**	**6.3**	**6.3**	**6.2**	**0.1**
Non-OPEC & OPEC (NGL+NCF)	**59.7**	**62.2**	**63.8**	**62.8**	**64.0**	**63.3**	**-0.5**	**63.8**	**63.3**	**63.5**	**64.2**	**63.7**	**0.4**

*Note: * OECD Americas includes Chile. Other Asia includes Indonesia.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Table 10.7

World rig count, *units*

	2014	2015	2016	Change 2016/15	1Q16	2Q16	3Q16	4Q16	Dec 16	Jan 17	Change Jan/Dec
US	1,862	977	509	*-468*	551	420	479	586	634	683	*49*
Canada	380	192	131	*-61*	172	49	122	180	209	302	*93*
Mexico	86	52	26	*-26*	36	22	25	19	19	16	*-3*
OECD Americas	2,327	1,221	665	*-556*	759	490	626	785	862	1,001	*139*
Norway	17	17	17	*-1*	18	17	18	13	16	12	*-4*
UK	16	14	9	*-5*	9	9	9	9	11	8	*-3*
OECD Europe	145	117	96	*-21*	104	92	94	94	99	98	*-1*
OECD Asia Pacific	26	17	7	*-11*	10	6	5	6	10	14	*4*
Total OECD	**2,499**	**1,355**	**768**	***-587***	**873**	**588**	**724**	**885**	**971**	**1,113**	***142***
Other Asia*	228	202	180	*-22*	176	178	185	181	182	184	*2*
Latin America	172	145	68	*-77*	83	62	64	64	63	60	*-3*
Middle East	108	102	88	*-14*	98	92	85	75	74	73	*-1*
Africa	47	30	18	*-12*	21	19	15	17	17	16	*-1*
Total DCs	**555**	**479**	**354**	***-126***	**378**	**351**	**349**	**337**	**336**	**333**	***-3***
Non-OPEC rig count	**3,053**	**1,834**	**1,122**	***-712***	**1,251**	**939**	**1,073**	**1,223**	**1,307**	**1,446**	***139***
Algeria	48	51	54	*3*	52	54	55	53	52	51	*-1*
Angola	15	11	6	*-5*	9	9	4	3	4	5	*1*
Ecuador	24	12	4	*-8*	3	3	5	6	7	6	*-1*
Gabon	7	4	1	*-3*	1	1	0	0	0	0	*0*
Iran**	54	54	57	*3*	57	57	57	57	57	57	*0*
Iraq**	79	52	43	*-9*	49	42	39	41	41	41	*0*
Kuwait**	38	47	44	*-2*	41	42	47	46	44	52	*8*
Libya**	10	3	1	*-2*	1	1	1	1	1	1	*0*
Nigeria	34	30	25	*-5*	27	25	24	23	23	25	*2*
Qatar	10	8	8	*0*	7	7	7	10	10	10	*0*
Saudi Arabia	134	155	156	*1*	157	154	155	157	156	155	*-1*
UAE	34	42	51	*8*	50	50	51	52	50	50	*0*
Venezuela	116	110	100	*-10*	111	103	93	92	94	93	*-1*
OPEC rig count	**603**	**578**	**549**	***-29***	**565**	**549**	**539**	**542**	**539**	**546**	***7***
World rig count* **	**3,656**	**2,412**	**1,670**	***-742***	**1,816**	**1,488**	**1,612**	**1,765**	**1,846**	**1,992**	***146***
of which:											
Oil	2,795	1,727	1,170	*-557*	1,268	1,043	1,135	1,235	1,291	1,375	*84*
Gas	743	563	370	*-193*	422	315	343	400	426	481	*55*
Others	95	100	111	*11*	106	110	116	112	112	119	*7*

*Note: * Other Asia includes Indonesia.*

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

**** Data excludes China and FSU.*

Totals may not add up due to independent rounding.

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

Monthly Endnotes

OPEC-non-OPEC producers reaffirm commitment on cooperation at inaugural meeting of JMMC

The Joint OPEC-Non-OPEC Ministerial Monitoring Committee (JMMC) held its inaugural meeting on 22 January 2017 at the OPEC Secretariat in Vienna, Austria.

The JMMC was established following OPEC's 171st Ministerial Conference Decision of 30 November 2016 and the subsequent Declaration of Cooperation made at the joint OPEC-non-OPEC ministerial meeting held on 10 December 2016. The JMMC is tasked with ensuring that the objectives of OPEC's 171st Ministerial Conference Decision and the Declaration of Cooperation are achieved through successful implementation of voluntary adjustments in production. The JMMC will also facilitate the exchange of joint analyses and outlooks, which will provide valuable input to the evaluation of the conformity process.

At the December meeting, 11 non-OPEC oil producers cooperated with the 13 OPEC Member Countries in a concerted effort to accelerate the rebalancing of the global oil market through an adjustment in combined production of 1.8 mb/d. The resulting Declaration, which came into effect on 1 January 2017, is for six months, and is extendable for an additional six months pending the status of supply and demand, as well as global inventories.

The JMMC is composed of three OPEC Member Countries – Algeria, Kuwait and Venezuela, and two non-OPEC countries – the Russian Federation and Oman.

At the meeting, the members of the JMMC reaffirmed their commitment to joint cooperation for the achievement of a lasting stability in the oil market in the interest of oil producers and consumers. The Committee agreed to full and timely conformity to the agreement with the following stipulations:

- The OPEC Secretariat will present a monthly production data report on OPEC Member Countries' crude oil and of the participating non-OPEC oil liquid production to the JMMC by the 17th of each upcoming month.
- Evaluation of conformity to the respective country production adjustment will be based on production data only.
- Each of the five member countries of the JMMC will nominate one technical contact person, to form a Joint Technical Committee (JTC), which shall include the Presidency of the OPEC Conference and shall assist the respective Ministers. The JTC will regularly cooperate with the OPEC Secretariat in preparing the monthly report for the JMMC and meet on a monthly basis before submitting their report to the JMMC.
- The JMMC will communicate monthly, after the 17th of each upcoming month, to consider the reports presented by the JTC and the OPEC Secretariat, as well as meet after the 17th of March 2017 and before the OPEC Conference in May 2017.
- The JMMC will issue a monthly press release on the progress towards the implementation of the OPEC 171st Ministerial Conference Decision and the Declaration of Cooperation.
- The JMMC will report to the Conference on the effect of the implementation of the OPEC 171st Ministerial Conference Decision and the Declaration of Cooperation on the market.

In its review of the market, the JMMC expressed its satisfaction regarding the strong level of commitment to the agreed framework.

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
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
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

Glossary of terms

HH	Henry Hub
HSFO	high-sulphur fuel oil
SRFO	straight-run fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
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
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
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

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OPEC Basket average price

US$/b

up 0.73 in January

January 2017	52.40
December 2016	51.67

January OPEC crude production

mb/d, according to secondary sources

down 0.9 in January

January 2017	32.14
December 2016	33.03

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2016	3.0	1.7	1.6	1.0	1.7	6.7	7.1
2017	3.2	1.9	2.2	1.1	1.6	6.2	7.1

Supply and demand

mb/d

2016		**16/15**	**2017**		**17/16**
World demand	94.6	1.3	World demand	95.8	1.2
Non-OPEC supply	57.2	–0.7	Non-OPEC supply	57.4	0.2
OPEC NGLs	6.1	0.2	OPEC NGLs	6.2	0.1
Difference	**31.3**	**1.8**	**Difference**	**32.1**	**0.8**

OECD commercial stocks

mb

	Oct 16	Nov 16	Dec 16	Dec 16/Nov 16	Dec 15
Crude oil	1,523	1,518	1,504	–13.5	1,482
Products	1,521	1,515	1,495	–20.3	1,504
Total	**3,044**	**3,033**	**2,999**	**–33.8**	**2,986**
Days of forward cover	65.5	64.6	63.9	–0.7	63.8

Next report to be issued on 14 March 2017.