

OPEC

Monthly Oil Market Report

17 January 2019

Feature article:

Monetary policies and their impact on the oil market

Oil market highlights	iii
Feature article	v
Crude oil price movements	1
Commodity markets	9
World economy	12
World oil demand	31
World oil supply	41
Product markets and refinery operations	58
Tanker market	65
Oil trade	69
Stock movements	75
Balance of supply and demand	81



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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) fell in December 2018 for the second consecutive month, dropping \$8.39, or 12.8%, month-on-month (m-o-m) to average \$56.94/b. This is the lowest level since October 2017. Oil prices were pressured by concerns surrounding global oversupply and softening oil demand, amid high uncertainty about global economic growth. Nonetheless, the average ORB registered a significant increase of \$17.35, or 33%, in 2018, compared with the previous year. The second consecutive yearly rise came amid a more balanced global oil market for most of the year, which was enhanced by the voluntary production adjustments under the 'Declaration of Cooperation', as well as from a continuing general healthy global economy and steady oil demand growth in 2018. In December, ICE Brent was on average \$8.27, or 12.5%, lower m-o-m at \$57.67/b, while NYMEX WTI fell by \$7.71, or 13.6%, m-o-m to average \$48.98/b. The Brent and WTI market structures remained in contango, while the Dubai market structure was marginally flatter.

World Economy

The global economic growth forecast remains unchanged at 3.7% for 2018 and 3.5% for 2019. In the OECD, US growth is unchanged at 2.9% for 2018 and 2.6% for 2019. Euro-zone growth remains at 1.9% for 2018 and 1.7% for 2019. GDP growth in Japan was revised down slightly to 0.8% for 2018 and 1.0% for 2019. In the non-OECD countries, both India's and China's growth forecasts remain at 7.5% and 6.5% for 2018, respectively, and at 7.2% and 6.1%, respectively, for 2019. Growth in Brazil remains unchanged at 1.1% for 2018 and 1.8% for 2019. Russia's GDP growth forecast is also unchanged at 1.6% for 2018 and 1.7% for 2019. The upside to global growth is limited, with the risk remaining skewed to the downside amid ongoing trade tensions, monetary tightening and geopolitical challenges.

World Oil Demand

In 2018, world oil demand growth is estimated at 1.50 mb/d, unchanged from last month's report. OECD Americas continues to lead growth in the OECD region in response to strong gains for light and middle distillates throughout 2018. Other Asia is estimated to lead demand growth in the non-OECD, and globally, on strengthening product demand growth in India, Indonesia, Singapore and Thailand. Total oil demand is now pegged at 98.78 mb/d. In 2019, world oil demand is forecast to rise by 1.29 mb/d, also in line with last month's projections. As a result, total world oil demand is projected to reach 100.08 mb/d for the year. Oil demand growth is expected to originate mainly from Other Asia, led by India, followed by China and OECD Americas. OECD countries are anticipated to rise by 0.25 mb/d in 2019, while non-OECD countries are projected to drive oil demand growth by adding an estimated 1.04 mb/d.

World Oil Supply

Non-OPEC oil supply growth in 2018 - including the State of Qatar - is estimated at 2.61 mb/d, an upward revision of 0.05 mb/d from the previous month's assessment to average 62.06 mb/d. This compares to an average of 60.03 mb/d – excluding Qatar liquids supply – in the December MOMR. The US, Canada, Russia and Kazakhstan are seen to be the main growth drivers, while Mexico and Norway are estimated to show the largest declines. Non-OPEC oil supply growth in 2019 was revised down by 0.06 mb/d to 2.10 mb/d and is now forecast to average 64.16 mb/d for the year. This was mainly due to a downward revision in Canada's supply forecast. The US, Brazil, Russia and the UK are projected to be the main drivers for this year's growth, while Mexico and Norway are expected to see sizeable declines, along with a mild y-o-y decline of 0.05 mb/d in Canada. OPEC NGLs – excluding Qatar – in 2018 and 2019 are now expected to grow by 0.04 mb/d and 0.11 mb/d, respectively, to show lower average levels of 4.98 mb/d and 5.09 mb/d. In December 2018, OPEC crude oil production decreased by 751 tb/d to average 31.58 mb/d, according to secondary sources.

Product Markets and Refining Operations

Product Markets in all main trading hubs weakened in December. The mild winter weather witnessed in early December, along with disappointing diesel and kerosene performances attributed to strong stock builds, as well as lower arbitrage opportunities and ample supplies, weighed on margins. Across the barrel, in all main regions, naphtha was the only product to exhibit a positive performance, supported by a pick-up in petrochemical requirements, particularly in Asia, which limited margin losses compared with other regions.

Tanker Market

December saw a softer sentiment in the tanker market, with average dirty tanker spot freights relatively stable, influenced by a drop in VLCC and Suezmax rates from the previous month. Lower rates came on the back of limited demand, as a result of the holiday season, which led to thin market activity in general. Nevertheless, the drop was offset by higher rates registered by the Aframax class, supported by severe weather conditions, delays and replacements in December. Clean tanker spot freight rates showed a positive performance on all routes, with significant gains registered on both the eastern and western directions of Suez.

Stock Movements

Preliminary data for November 2018 showed that total OECD commercial oil stocks fell slightly by 0.7 mb m-o-m to stand at 2,871 mb. This was 32 mb lower than the same month in the previous year, but 23 mb above the latest five-year average. Within the components, crude stocks indicated a surplus of 28.5 mb, while product stocks were 5.5 mb below the latest five-year average. In terms of days of forward cover, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 59.2 days. This was 1.5 days below the same period in 2017 and 1.4 days below the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2018 - excluding the State of Qatar - is estimated at 31.7 mb/d, 1.2 mb/d lower than the 2017 level. In 2019, demand for OPEC crude is forecast at 30.8 mb/d, around 0.9 mb/d lower than the 2018 estimate.

Feature Article

Monetary policies and their impact on the oil market

The monetary policy decisions of major central banks have continued to be a focus of economic analysis in recent months. In particular, the US Fed increased its target rate by 100 basis points (bps) in 2018, 25 bps more than expectations earlier in the year, mainly as a result of the additional impulse to economic activity provided by the government's fiscal stimulus. However, concerns have emerged that the pace of monetary tightening could result in a faster-than-anticipated slowdown in the US economy in 2019. Indeed, the spread between the yield of short- (2 years) and long-term (10 years) treasuries has declined considerably, signalling some economic deceleration going forward (see **Graph 1**).

Furthermore, no major acceleration in US inflation has been observed, despite persistent and robust labour market improvements in recent years. Inflation stands around the Fed's 2% target, with readings likely to remain restrained in the coming months. Fed policy makers, recognizing the downside risk for the economic outlook, decreased their median expectation of interest rate increases for 2019 to 50 bps at their last meeting, from their previous estimation of 75 bps.

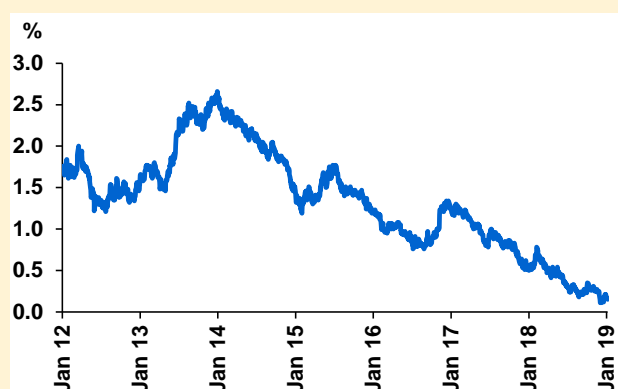
The central banks of the other major developed economies began monetary tightening last year, although the path forward remains uncertain. In the Euro-zone, the ECB stopped asset purchases in December, but with inflation readings still subdued, and given a significant deceleration in core Euro-zone economies in 2H18, market participants have cast doubt on a potential 2019 rate hike. Uncertainties related to Brexit and budget disputes would also likely result in additional ECB caution. The Bank of England (BoE) increased interest rates by 25 bps last year, and the possibility of further tightening is contingent on the Brexit outcome. Meanwhile, the Bank of Japan (BoJ) signalled during 2018 that it expects to keep its monetary stimulus programme in place, with inflation rates much below the target and an ongoing subdued economic outlook (see **Graph 2**).

In 2018, the increasingly divergent central bank monetary policies resulted in a strengthening US dollar, particularly against currencies of emerging economies that face large current account deficits. This has forced some of their central banks to tighten monetary policy in order to stem capital outflows. For example, Argentina and Turkey, were forced to sharply increase interest rates and, in the case of Argentina, seek the support of the International Monetary Fund. The Reserve Bank of India (RBI) increased its main policy rate twice last year on surging inflation and a weakness in the Indian rupee. However, pressure on the currency moderated in 4Q18, providing more room for the RBI to remain accommodative. In the case of China, the People's Bank of China (PBoC) reduced the ratio of required reserves three times in 2018, in an effort to support the economy. In early January 2019, the bank announced an additional cut, with further cuts to bank reserve requirements likely to be implemented during the year to spur bank lending.

While the economic risk remains skewed to the downside, the likelihood of a moderation in monetary tightening is expected to slow the decelerating economic growth trend in 2019. This has recently been reflected in global financial markets with asset prices recovering somewhat from the low levels seen at the end of 2018. The positive effect on market sentiment was also witnessed in the oil market.

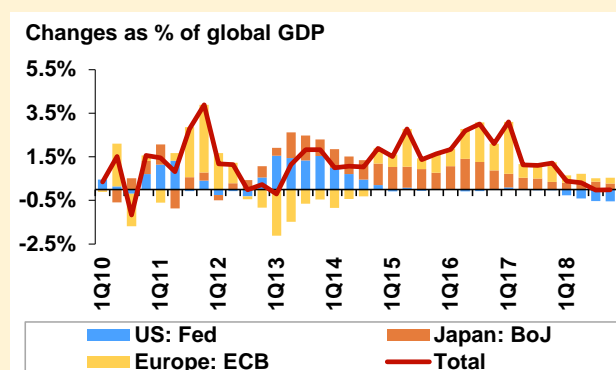
If the anticipated moderation in monetary policies coupled with an improvement in financial markets materializes, this could provide further support to ongoing increases in non-OPEC supply. Therefore, the ongoing collaboration between OPEC and non-OPEC producing countries participating in the 'Declaration of Cooperation' remains essential in helping to maintain balance in the oil market.

Graph 1: US 10-year treasury constant maturity minus two-year treasury constant maturity



Source: Federal Reserve Bank of St. Louis.

Graph 2: Central bank balance assets



Sources: Oxford Economics, Bank of Japan, European Central Bank and US Federal Reserve.

Table of Contents

Contributors to the OPEC Monthly Oil Market Report	i
Oil Market Highlights	iii
Feature Article	v
<i>Monetary policies and their impact on the oil market</i>	v
Crude Oil Price Movements	1
OPEC Reference Basket	1
The oil futures market	3
The futures market structure	5
The light sweet/medium sour crude spread	7
The impact of the US dollar (USD) and inflation on oil prices	7
Commodity Markets	9
Trends in selected commodity markets	9
Investment flows into commodities	11
World Economy	12
OECD	13
Non-OECD	19
World Oil Demand	31
World oil demand in 2018 and 2019	31
OECD	32
Non-OECD	36
World Oil Supply	41
Monthly revisions to non-OPEC supply growth forecast	42
Non-OPEC oil supply in 2018 and 2019	43
OECD	43
OECD Americas	45
Developing Countries (DCs)	51
OPEC crude oil production	56
World oil supply	57
Product Markets and Refinery Operations	58
Refinery margins	58
Refinery operations	59
Product markets	59

Tanker Market	65
Spot fixtures	65
Sailings and arrivals	65
Dirty tanker freight rates	66
Clean tanker freight rates	68
Oil Trade	69
US	69
Japan	70
China	71
India	72
Former Soviet Union (FSU)	73
Stock Movements	75
OECD	75
US	77
Japan	78
EU plus Norway	79
Singapore and Amsterdam-Rotterdam-Antwerp (ARA)	80
Balance of Supply and Demand	81
Balance of supply and demand in 2018	81
Balance of supply and demand in 2019	82
Appendix	83
Glossary of Terms	88
Abbreviations	88
Acronyms	89

Crude Oil Price Movements

The **OPEC Reference Basket (ORB)** fell sharply in December for the second consecutive month, tumbling \$8.39, or 12.8%, m-o-m to average \$56.94/b, reaching its lowest monthly level since October 2017. Oil prices were pressured by concerns about global oversupply and deteriorating oil demand, amid high uncertainty about global economic growth, as well as weak refining margins. All ORB component values decreased in December, along with their respective crude oil benchmarks. For the year, the ORB value was \$17.35, or 33.1%, higher at \$69.78/b compared with the previous year.

Crude oil futures prices fell further in December, despite unplanned outages in the North Sea and Libya. Oil prices continued to decline throughout the month, as investors remained concerned about oil market oversupply amid rising trade tension between China and the US and signs of softer economic forecasts, which could curb global oil demand growth in 2019. In December, ICE Brent was \$8.27, or 12.5%, m-o-m lower at \$57.67/b, while NYMEX WTI fell by \$7.71, or 13.6%, to average \$48.98/b. For the year, ICE Brent is \$16.96, or 31.0%, y-o-y higher at \$71.69/b compared to 2017, while NYMEX WTI increased by \$14.05, or 27.6%, to \$64.90/b. DME Oman crude oil futures also declined m-o-m by \$8.65, or 13.2%, in December over the previous month, to settle at \$56.98/b. For the year, DME Oman was up by \$16.63, or 31.2%, to stand at \$69.88/b.

Hedge funds and other money managers cut their combined speculative net long positions, linked to both ICE Brent and NYMEX WTI in December, to reach their lowest levels in more than two years, amid worries about oil market oversupply and high uncertainty about global economic and oil demand growth.

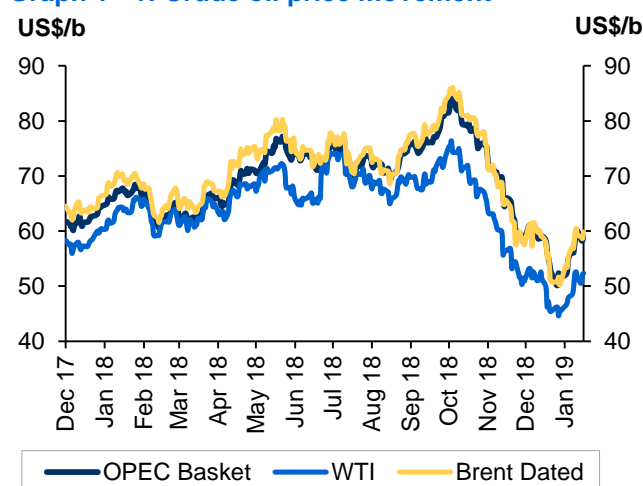
The Brent and WTI **market structures** remained in contango, as the oil market continued to be concerned about market oversupply and weaker oil demand in the coming months amid a deteriorating global economic outlook. Meanwhile, the Dubai M1/M3 backwardation was little changed.

The **sweet/sour differential** narrowed in Europe and on the US Gulf Coast (USGC), due to a tighter supply of medium sour crudes in these regions, while the sweet/sour spread widened in Asia on softer middle distillate margins.

OPEC Reference Basket

The **OPEC Reference Basket** registered a significant increase in 2018, compared with the previous year, rising for the second consecutive year amid a more balanced global oil market, which was supported by voluntary production adjustments under the Declaration of Cooperation, as well as by healthy global economic and oil demand growth in 2018, which helped to support market fundamentals. Nonetheless, the ORB value deteriorated sharply in 4Q18 due to high levels of uncertainty surrounding global economic growth forecasts, which was intensified by easing geopolitical tension and by the potential negative impact of US-China trade dispute on the global economy. All these factors contributed to sharp selloffs and consequent drops in the global equity markets, while OECD oil inventories showed builds.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

The ORB value averaged significantly higher in 2018 at \$69.78/b, up by \$17.35/b, or 33.1%, compared with 2017.

Crude Oil Price Movements

In December, the **ORB** value fell sharply for the second consecutive month, tumbling by \$8.39, or 12.8% m-o-m, to average \$56.94/b, reaching its lowest monthly level since October 2017. Oil prices were pressured by concerns about global oversupply and deteriorating demand, amid high uncertainty about global economic growth, as well as weak refining margins.

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

	Nov 18	Dec 18	Change		Average	
			Dec/Nov	%	2017	2018
Basket	65.33	56.94	-8.39	-12.8	52.43	69.78
Arab Light	66.36	58.24	-8.12	-12.2	52.59	70.59
Basrah Light	64.12	56.12	-8.00	-12.5	51.87	68.62
Bonny Light	65.90	57.82	-8.08	-12.3	54.55	72.11
Djeno	62.06	54.36	-7.70	-12.4	52.77	68.59
Es Sider	63.11	55.66	-7.45	-11.8	52.82	69.78
Girassol	65.66	57.52	-8.14	-12.4	54.47	71.72
Iran Heavy	62.83	54.84	-7.99	-12.7	51.71	67.97
Kuwait Export	65.15	57.10	-8.05	-12.4	51.60	68.90
Merey	65.87	49.89	-15.98	-24.3	47.63	64.47
Murban	68.05	59.33	-8.72	-12.8	54.82	72.20
Oriente	59.76	51.26	-8.50	-14.2	50.00	66.10
Qatar Marine	65.88	57.33	-8.55	-13.0	52.80	69.50
Rabi Light	63.91	56.21	-7.70	-12.0	53.16	70.30
Sahara Blend	64.96	56.41	-8.55	-13.2	54.12	71.44
Zafiro	65.36	57.66	-7.70	-11.8	54.04	71.36
Other Crudes						
Dated Brent	64.66	56.96	-7.70	-11.9	54.17	71.22
Dubai	65.79	57.29	-8.50	-12.9	53.08	69.68
Isthmus	65.43	55.58	-9.85	-15.1	54.60	68.74
LLS	64.48	55.87	-8.61	-13.4	54.05	70.16
Mars	61.23	53.32	-7.91	-12.9	50.63	66.82
Minas	59.17	50.28	-8.89	-15.0	48.99	65.44
Urals	64.41	57.18	-7.23	-11.2	53.27	70.13
WTI	56.75	49.52	-7.23	-12.7	50.82	65.16
Differentials						
Brent/WTI	7.91	7.44	-0.47	-	3.35	6.05
Brent/LLS	0.18	1.09	0.91	-	0.11	1.06
Brent/Dubai	-1.13	-0.33	0.80	-	1.09	1.54

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

Crude oil physical benchmarks fell sharply in December for the second consecutive month, with WTI, Dated Brent and Dubai spot prices decreasing m-o-m by \$7.23, \$7.70 and \$8.50, respectively, to settle at \$49.52/b, \$56.96/b and \$57.29/b.

Light sweet crude **ORB components** from **West and North Africa**, including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro, dipped \$7.90 on average, or 12.3%, m-o-m to \$56.52/b in December. Crude oil prices declined mainly due to a lower Dated Brent benchmark, but also due to weaker crude differentials, despite the longer-than-expected shutdown of the Buzzard oil field in the North Sea, the shutdown and the declaration of force majeure of the Libyan El Sharara production field. Light sweet crude was under further pressure from deteriorating light distillate cracks.

Latin American ORB components also declined in December, along with their benchmark price. Venezuelan crude Merey dropped further, due to the sharp fall in fuel oil prices. Higher exports of cheaper heavy Canadian crude to the USGC displaced some Latin American crude and put additional pressure on heavy crude differentials. Venezuela's Merey and Ecuador's Oriente ended lower m-o-m by \$15.98, or 24.3%, to \$49.89/b, and by \$8.50, or 14.2%, to \$51.26/b, respectively.

The value of **multiple-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, decreased on average by \$8.04, or 12.4%, m-o-m to \$56.58/b in December, due to a sharp decline in the Dubai benchmark price, which rubbed out some increases in official selling prices (OSPs).

Similarly, **Middle Eastern spot components**, including Murban and Qatar Marine, also saw their values decline m-o-m by \$8.72, or 12.8%, to \$59.33/b and by \$8.55, or 13.0%, to \$57.33/b, respectively.

For the month, the **ORB value** decreased m-o-m by \$8.39, or 12.8%, to settle at \$56.94/b in December. For the year, the ORB value was \$17.35, or 33.1%, higher at \$69.78/b in 2018 compared with 2017.

On 16 January, the ORB stood at \$59.52/b, \$2.58 above the December average.

The oil futures market

Oil futures prices continued to increase in 2018, recording a second consecutive annual increase, with international benchmark ICE Brent crude futures rising by a hefty \$16.96, or 31%, y-o-y to average \$71.69/b. Oil prices were supported by solid oil market fundamentals and a more balanced global oil market after the elimination of a global oil inventory surplus, thanks to voluntary production adjustments by OPEC and non-OPEC participating countries under the Declaration of Cooperation, as well as healthy oil demand growth, supported by robust global economic growth. In October 2018, Brent futures prices rose briefly to more than \$86/b to reach their highest level since late 2014, as the market was concerned about potential oil supply disruptions, along with high geopolitical risks. However, oil prices experienced a sharp decline in 4Q18, dropping by more than 36%, as worries about an oil supply shortage reversed on concerns about market oversupply, after many large producers increased their crude output. This rose faster-than-expected, particularly from the US. A weaker global economic outlook and drop in the financial markets contributed to the oil price decline.

In December, oil futures prices fell further, despite unplanned outages in the North Sea and Libya. Oil prices continued to decline throughout December; the benchmark ICE Brent price dropped by more than \$8 m-o-m, as investors remained concerned about oil market oversupply amid rising trade tensions between China and the US and signs of slower economic growth, which could curb global oil demand growth in 2019. High uncertainty about the global economy has led to a severe drop in global equity indexes and a sell-off in the stock markets, as investors continued to exit amid deteriorating confidence. In late December, the ICE Brent price tumbled to \$50.47/b, its lowest point since August 2017, amid low market liquidity, as major traders were absent during end-of-the-year holidays.

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

	<u>Nov 18</u>	<u>Dec 18</u>	<u>Change</u>		<u>Average</u>	
			<u>Dec/Nov</u>	<u>%</u>	<u>2017</u>	<u>2018</u>
NYMEX WTI	56.69	48.98	-7.71	-13.6	50.85	64.90
ICE Brent	65.95	57.67	-8.27	-12.5	54.74	71.69
DME Oman	65.63	56.98	-8.65	-13.2	53.24	69.88
Transatlantic spread (ICE Brent-NYMEX WTI)	9.26	8.69	-0.56	-6.1	3.88	6.79

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

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

In December, **ICE Brent** was on average \$8.27, or 12.5%, m-o-m lower at \$57.67/b, while **NYMEX WTI** fell m-o-m by \$7.71, or 13.6%, to average \$48.98/b. On annual average, ICE Brent is \$16.96, or 31.0%, y-o-y higher at \$71.69/b, while NYMEX WTI increased by \$14.05, or 27.6%, to \$64.90/b.

DME Oman crude oil futures also declined m-o-m by \$8.65 in December, or 13.2% over the previous month, to settle at \$56.98/b. For the year, DME Oman was up by \$16.63, or 35.2%, y-o-y at \$69.88/b.

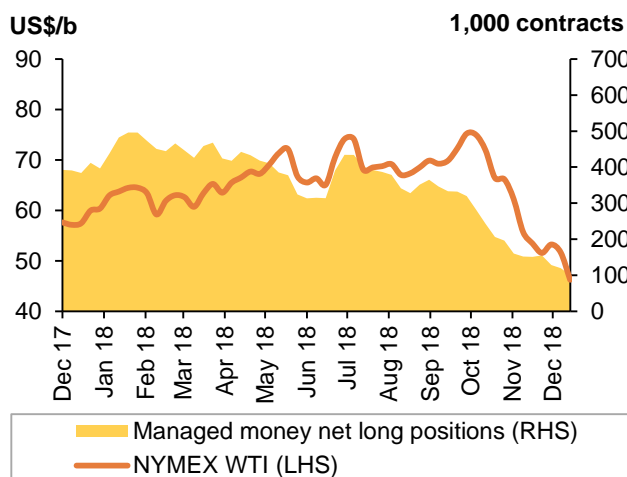
On 16 January, ICE Brent stood at \$61.32/b and NYMEX WTI at \$52.31/b.

Hedge funds and other money managers again cut their combined speculative net long positions linked to both ICE Brent and NYMEX WTI in December to reach the lowest levels in more than two years, amid high uncertainty regarding global economic performance and oil demand growth. Rising oil supply from major oil producers to historically high levels, particularly from the US, added further to concerns. Hedge funds and other money managers continued to bet on lower oil prices by cutting their long positions. Deteriorating market confidence led managed money to trade carefully in December.

Hedge funds and other money managers cut their combined net long positions in futures and options linked to **NYMEX WTI** by 54,290 contracts, or 35.0%, to 100,733 contracts in the week ending 18 December, the US Commodity Futures Trading Commission (CFTC) said.

Note: this section is exceptionally based on the latest available data released on 21 December, regarding NYMEX WTI futures and options, as the CFTC has not been publishing its Commitments of Traders report during the US Federal Government's partial shutdown.

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



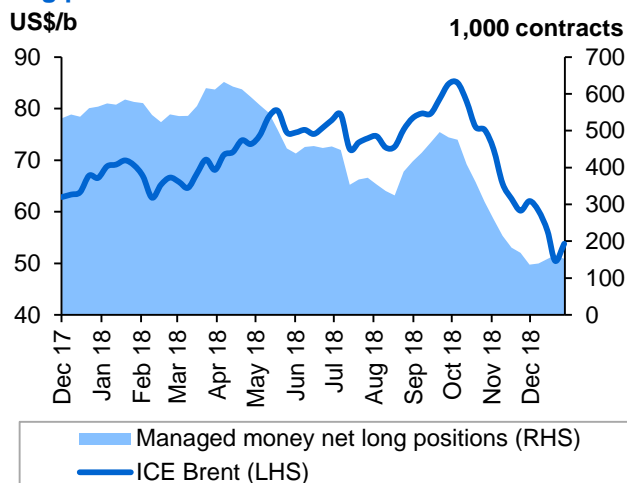
Sources: CFTC, CME Group and OPEC Secretariat.

The speculator group also decreased its combined futures and options net long positions in **ICE Brent** by 16,187 contracts, or 9.6%, to 152,325 lots in December, according to the ICE Exchange.

The **long-to-short ratio** in ICE Brent speculative positions remained very low, decreasing from 2.6:1 to 2.5:1, while the ratio in NYMEX WTI decreased from 3.0:1 to 1.9:1.

Total futures and options open interest volume in the two exchanges increased by 132,400 contracts, or 2.3%, to stand at 5.8 million contracts, to the week ending 18 December.

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



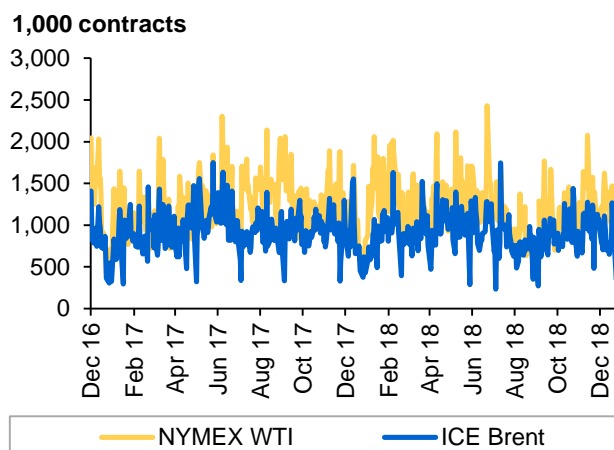
Sources: Intercontinental Exchange and OPEC Secretariat.

The December **daily average traded volume** for NYMEX WTI contracts decreased significantly by 167,423 lots, or 12.8%, to 1,145,435 contracts. Daily average traded volume for ICE Brent also declined sharply by 219,242 contracts, or 22.3%, to 765,922 lots.

The **daily aggregate traded volume** in December for both crude oil futures markets decreased by a hefty 386,665 contracts m-o-m to stand at 1.9 million futures contracts, or about 1.9 billion b/d of crude oil.

The December **total traded volume** in NYMEX WTI was 16.9% lower at 22.9 million contracts, and that of ICE Brent was 29.3% lower at 15.3 million lots.

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



Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

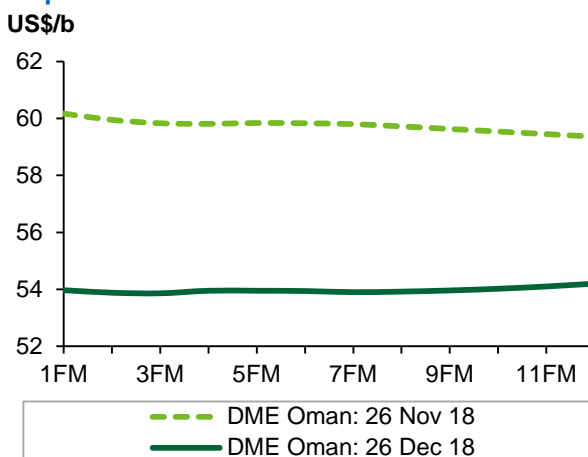
The futures market structure

The Brent and WTI market structure remained in contango as the oil market continued to be concerned about market oversupply in the coming months and weaker oil demand amid a deteriorating global economic outlook. Nonetheless, the Dubai M1/M3 backwardation was little changed.

The **Brent** crude futures structure remained in **contango** through December, despite unplanned production outages in the North Sea and Libya. The longer-than-expected shutdown of the Buzzard oil field in North Sea and the declaration of force majeure on the Libyan El Sharara production field were offset by growing concerns of market oversupply and worries about deteriorating global oil demand amid escalating trade tensions between China and the US. The continued fall in prices and the selloff of long positions on oil detained by hedge funds and other money managers have weighed on front-month prices.

Dubai intermonth **backwardation** was little changed in December, while the DME Oman backwardation structure flattened, and remained flat for next twelve months amid an increasingly well-supplied physical market, as well as concerns on market oversupply in the coming months.

Graph 1 - 5: DME Oman forward curves

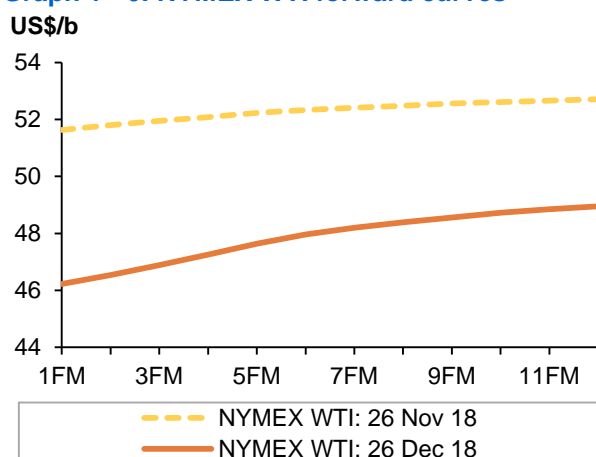


Note: FM = future month.

Sources: Dubai Mercantile Exchange and OPEC Secretariat.

The **WTI** price **contango** widened further in December and the forward structure steepened, on a continued rise in US stocks in Cushing, Oklahoma and a continued increase in US crude oil production to historically high levels. The contango persists across the WTI forward curve through 2019, reflecting a physical market imbalance in the coming months.

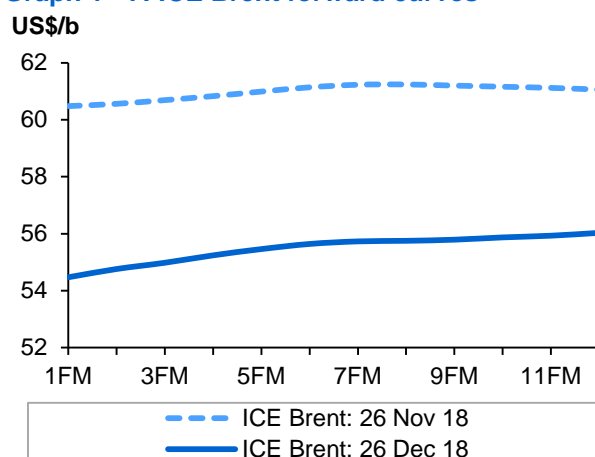
Graph 1 - 6: NYMEX WTI forward curves



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

Graph 1 - 7: ICE Brent forward curves



Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

Regarding the **M1/M3 structure**, the North Sea Brent contango of 52¢/b narrowed to 46¢/b, a rise of 6¢. The Dubai M1/M3 premium 36¢/b decreased to 33¢/b, down by 3¢. In the US, the M1/M3 WTI contango of 36¢/b widened again to 55¢/b, decreasing by 20¢.

The **spread between the ICE Brent and NYMEX WTI benchmarks** narrowed again in December, averaging \$8.69/b on a monthly basis, but remained wide enough to support US export economics in Europe and Asia. The Brent-WTI spread has diminished as international benchmark Brent declined more than US WTI, and as WTI found support from higher US refinery runs and the return of US Petroleum Administration for Defense District (PADD) 2 refineries from autumn maintenance.

The first-month ICE Brent/NYMEX WTI spread narrowed by 56¢ to \$8.69/b in December, from \$9.26/b the previous month.

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

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	26 Nov 18	51.63	51.80	51.95	52.33	52.71	1.08
	26 Dec 18	46.22	46.54	46.88	47.96	48.95	2.73
	Change	-5.41	-5.26	-5.07	-4.37	-3.76	1.65
ICE Brent	26 Nov 18	60.48	60.56	60.69	61.14	61.06	0.58
	26 Dec 18	54.47	54.76	54.98	55.64	56.03	1.56
	Change	-6.01	-5.80	-5.71	-5.50	-5.03	0.98
DME Oman	26 Nov 18	60.17	59.95	59.83	59.83	59.36	-0.81
	26 Dec 18	53.97	53.88	53.86	53.94	54.20	0.23
	Change	-6.20	-6.07	-5.97	-5.89	-5.16	1.04

Note: FM = future month.

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

The light sweet/medium sour crude spread

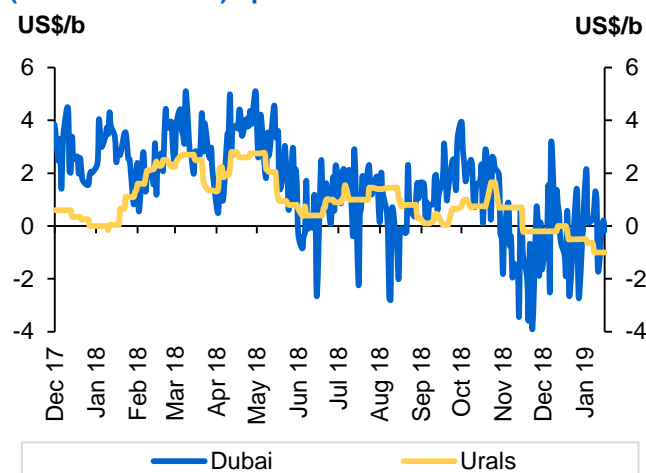
Sweet/sour differentials narrowed in Europe and in the USGC due to a tighter supply of medium sour crudes in these regions, while the sweet/sour spread widened in Asia on softer middle distillate margins.

In **Asia**, the Tapis premium over Dubai increased sharply in December, as light sweet crudes in the Asia Pacific were supported by a wider Brent premium over Dubai, limiting the flow of Brent linked grades from the Atlantic Basin. Sour crudes were also under pressure because of weaker refining margins in Singapore and China, and some refiners planned to reduce their purchases ahead of March-April scheduled maintenance. In the second part of December, most Asia-Pacific refiners had covered their February crude requirements, while some spot cargoes remained on offer. The Tapis/Dubai spread widened by 87¢ to \$3.60/b.

In **Europe**, the light sweet North Sea Brent premium to Urals medium sour crude turned negative in December as Urals crude differentials firmed in Northwest Europe to the highest premium to Dated Brent in five years, supported by long delays for cargoes due to bad weather through the Turkish Bosphorus and Dardanelles straits, as well as a lower January loading programme and strong buying interest. The Brent/Urals spread narrowed by 47¢ to minus 22¢/b.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars narrowed significantly, as light sweet crude prices weakened in the USGC amid a narrower spread between US benchmark WTI and Brent. On the other hand, tighter foreign alternative supplies in the USGC supported Mars crude differentials. The LLS/Mars spread narrowed by 70¢ to \$2.55/b.

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

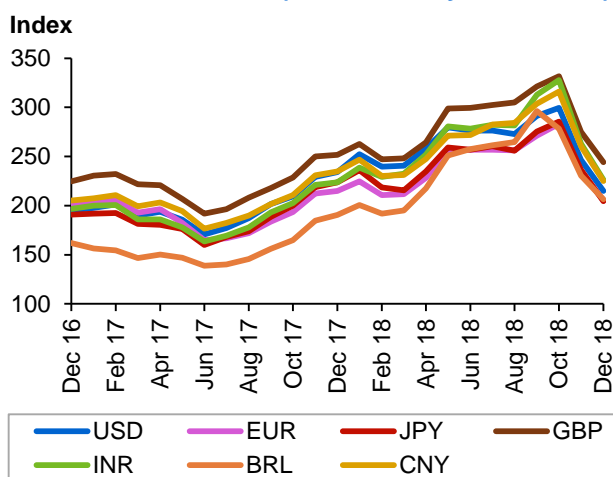


Sources: Argus Media, OPEC Secretariat and Platts.

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

The **USD** was mixed in December **against major currency counterparts**. Market expectations for interest rate hikes by the US Fed in 2019 declined significantly in December amid financial market turmoil. This was also the case in Europe, where there's considerable doubt regarding a potential rate hike by the European Central Bank (ECB) in 2019 after the summer – as was previously implied by ECB communications – amid a deceleration in Euro-zone economic activity in the second half. The USD lost on average 0.1% m-o-m against the euro in December. Financial market turmoil spurred a flight to safety, weakening the dollar against the Japanese yen and the Swiss franc by 0.7% and 0.9%, respectively. In contrast, the dollar increased by 1.8% against the pound sterling amid increasing uncertainty as the March deadline to leave the European Union approaches.

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



Sources: IMF and OPEC Secretariat.

Meanwhile, **emerging economy currencies** were also mixed. On average, the USD declined against the Chinese yuan in December by 0.7%, with the agreed delay in the imposition of further tariffs between the US and China providing support for the yuan. It decreased against the Indian rupee by 1.6% m-o-m, helped by lower oil prices.

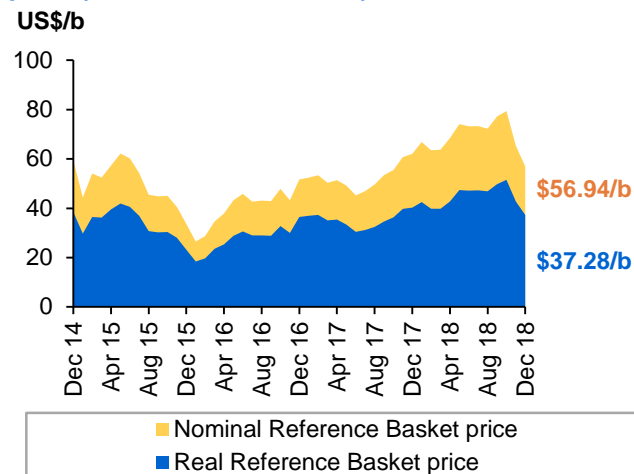
The USD advanced against the currencies of **commodity exporters**, up by 2.6% against the Brazilian real, and by 1.6% m-o-m against the Russian ruble.

In **nominal terms**, the price of the ORB decreased by \$8.39, or 12.8%, from \$65.33/b in November to \$56.94/b in December.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB decreased to \$37.28/b in December from a revised \$42.75/b (base June 2001=100) the previous month.

Over the same period, the **USD** increased slightly by 0.1% against the import-weighted modified Geneva I + USD basket, while inflation was stable m-o-m.

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



Source: OPEC Secretariat.

Commodity Markets

In December, **energy commodity** prices generally declined led by a sharp drop in crude oil prices amid concerns of a potential weakening of global economic growth. At the same time, milder December temperatures in the US, Europe and East Asia, also resulted in additional weakness across energy commodities. US natural gas prices declined sharply in the second half of the month amid warmer-than-average temperatures, losing the majority of the gains achieved the previous month. In Europe, similar weather patterns resulted in losses in natural gas prices. Coal prices in Asia were relatively stable after four months of declines.

In the group of **non-energy commodities**, base metal prices were under pressure as the global manufacturing slowdown continued despite a truce in the trade dispute between the US and China. Base metals were also affected by concerns over the outlook for the Chinese economy. In the group of precious metals, gold registered further advances, with expectations of a slower pace of rate increases in the US.

Trends in selected commodity markets

The **energy price index** decreased by around 11.3% in December. In 2018, energy price index was on average around 27.8% higher than in 2017.

Table 2 - 1: Commodity prices

Commodity	Unit	Monthly averages			% Change	Yearly average	
		Oct 18	Nov 18	Dec 18	Dec 18/Nov 18	2017	2018
Energy*		96.9	81.9	72.7	-11.3	68.1	87.0
Coal, Australia	US\$/mt	108.7	100.7	101.4	0.6	88.5	107.0
Crude oil, average	US\$/b	76.7	62.3	54.0	-13.4	52.8	68.3
Natural gas, US	US\$/mbtu	3.3	4.1	4.0	-3.7	3.0	3.2
Natural gas, Europe	US\$/mbtu	8.8	8.3	8.0	-3.5	5.7	7.7
Non-energy*		82.3	81.1	80.8	-0.4	83.8	85.2
Base metal*		86.1	83.8	82.7	-1.1	84.9	90.6
Precious metals*		92.6	92.7	94.9	2.2	97.8	97.2

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

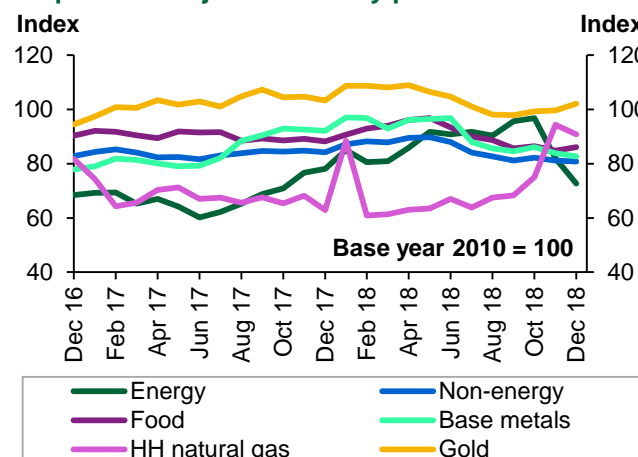
Sources: World Bank, Commodity price data and OPEC Secretariat.

In December, the **Henry Hub natural gas index** decreased on average by 15¢, or 3.7%, to \$3.98/mmbtu. Prices declined steeply in the last three weeks of the month with warmer-than-average temperatures significantly reducing the withdrawals from underground storage. According to the US Energy Information Administration (EIA) utilities withdrew 20 bcf from working gas underground storage during the week ending 28 December, lower than the median analyst expectations of a 47 bcf draw. Last year, utilities withdrew 193 bcf, while the current five year-average withdrawal is 107 bcf. The US Climate Prediction Center (CPC) forecast colder temperatures for "portions of the east of the country" in January. However, prices are significantly lower than the peak of \$4.8/mmbtu in mid-November, and in preparing this report were around \$3.4/mmbtu, after trading as low as \$2.8/mmbtu at the beginning of the month. In its most recent update, the CPC put the probability of El Nino continuing in the northern hemisphere through spring at 65%.

Natural gas prices in Europe declined with the **Title Transfer Facility** price falling by 3.5% in December on the continuation of warmer than usual weather, which has also resulted in smaller inventory drops. Natural gas inventories for EU Member States declined to around 70.4% of capacity at the end of December, versus 81.5% at the end of November. However, they were higher compared than the 64.8% level at the end of December last year, according to Gas Infrastructure Europe. In fact, this gap versus previous year inventory

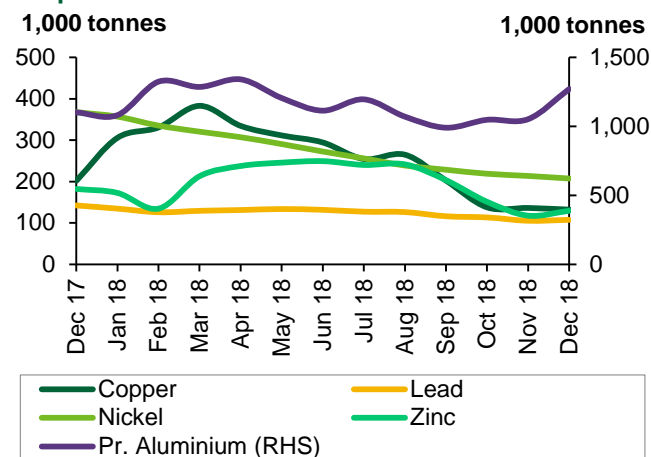
levels has continued to widen at the beginning of the month. This has kept prices in check despite the expected arrival of colder than average weather in the last ten days of January and the beginning February.

Graph 2 - 1: Major commodity price indices



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

Graph 2 - 2: Inventories at the LME



Sources: London Metal Exchange, Thomson Reuters and OPEC Secretariat.

Thermal coal prices increased slightly to an average of \$101.4/mt in December, or 0.6% m-o-m, with milder weather and China's government import restriction putting downward pressure on prices. Chinese trade data shows coal imports fell by 46.6% m-o-m in December, and by 55.0% y-o-y. Despite those imports still increased by 3.9% in 2018. At the same time, China's coal output increased by 4.5% y-o-y in November, as domestic production continued to ramp up to cover winter demand. Thermal power generation expanded by 3.9% y-o-y in November vs 3.7% y-o-y in October, according to the National Bureau of Statistics. Coal prices were supported at the end of the month by a cold snap, although the downward trend resumed at the beginning of January.

The **base metal price index** declined by 1.3% in December m-o-m. It declined by 14.6% in the second half of 2018. Prices continued to be pressured by the deepening slowdown in global manufacturing. The JPM Global Manufacturing Purchasers Managers' Index was at a 27-month low of 51.5 in December. In China, however, both manufacturing surveys by the NBS and Markit showed readings below 50.0, signalling a contraction in December activity in the main consumption centre.

On the back of worsening conditions for the manufacturing sector, and amid turmoil in financial markets, copper prices declined by 1.9% during the month. However, the low inventory levels at the London Metal Exchange (LME) – designated warehouses – around 132,000 mt vs 136,000 mt the previous month – prevented further price drop. Furthermore, the International Copper Study group estimated the global refined copper balance to be a 595,000 tonne deficit the first nine month of 2018, which suggests a tighter market. Chinese imports of unwrought copper exhibited a decline of 4.7% in December compared to the same month last year, although they still increased by 12.9% in 2018 according to official data. Imports of copper ores and concentrates also declined by 13.4% y-o-y in December, but increased overall in 2018.

Meanwhile, **aluminium prices** declined by 0.9%, mainly in connection with the lifting of sanctions on Russian producer Rusal, while at the same time, worries about the slowdown in China also played part. Amid increasing aluminium output in China in 2018 - by around 1.4% according to the International Aluminium Institute - in the January-November period, and the aforementioned sanctions on Rusal, China's aluminium exports rose by 20.9%, according to the last trade data. Large deliveries of aluminium to LME warehouses were registered during the month – leaving stocks at 1,271,200 mt vs 1,052,450 mt the previous month.

In the group of **precious metals**, the index rose by 2.3% amid increased demand for safe haven assets, and increasing volatility in financial markets, which resulted in market expectations for a slower pace of interest rate increases by the US Federal Reserve. Gold prices advanced by 2.4%, and silver by 2.9%. Meanwhile, platinum prices declined by 6.5% amid the continuing decline in the attractiveness of diesel cars. Platinum is used in the manufacturing of catalytic converters in diesel cars.

Investment flows into commodities

Open interest (OI) increased on average in the first three weeks of December for selected US commodity futures, such as crude oil, but declined for copper, natural gas, and precious metals. On average, the speculative net short positions decreased for precious metals, and net long positions declined for crude oil, copper and natural gas.

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

	Open interest		Net length			
	Nov 18	Dec 18	Nov 18	% OI	Dec 18	% OI
Crude oil	2,051	2,054	136	7	89	4
Natural gas	1,414	1,272	250	18	222	17
Precious metals	716	580	-91	-13	-9	-2
Copper	234	213	0	0	-5	-3
Total	4,415	4,120	254	23	383	35

Note: Data on this table is based on monthly average released on 21 December, as the CFTC has not been publishing its Commitments of Traders report during the US Federal Government's partial shutdown.

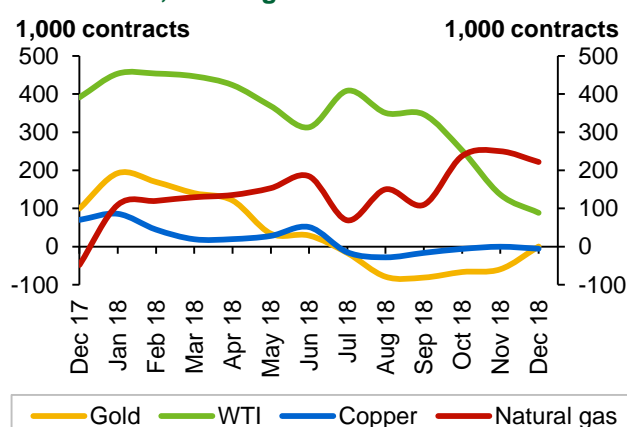
Sources: CFTC and OPEC Secretariat.

Henry Hub's natural gas OI decreased in December by 10.0%, while money managers' average net long positions decreased by 11.3% to 221,880 contracts.

Copper's OI decreased in December by 9.1% to 234,448 contracts. Money managers increased their net short positions to 5,402 contracts from only 172 contracts the previous month.

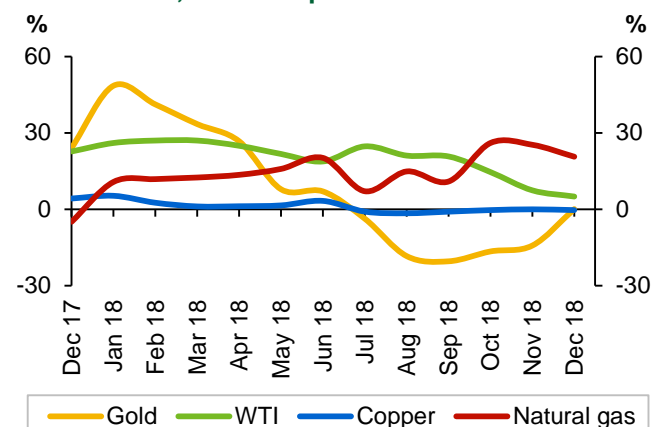
Precious metals' OI decreased by 18.9%. Money managers switched to an average net short position of 9,433 lots from 90,728 lots the previous month.

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



Note: Data on this graph is based on monthly average.
Sources: US Commodity Futures Trading Commission and OPEC Secretariat.

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



Note: Data on this graph is based on monthly average.
Sources: US Commodity Futures Trading Commission and OPEC Secretariat.

World Economy

Global economic growth remains unchanged from the previous month's report at 3.5% for 2019, following estimated growth of 3.7% in 2018. The slow-down in this year's economic growth has been confirmed by indicators in the past weeks, although the trend seems to have stabilised somewhat. Support for global economic growth has come from a recovery in oil-prices, possible progress in US-China trade negotiations and less ambitious monetary tightening by the Fed.

In the **OECD**, divergent growth trends have continued. Momentum in economic growth in the US continues, albeit at a slowing pace. However, this could potentially be aggravated by the government shutdown and ongoing trade frictions. With this potential downside, the 2019 growth forecast remains at 2.6%, after growth of 2.9% in 2018. Compared to the stronger momentum in the US, Euro-zone growth is forecast to continue to slow further this year to reach 1.7% in 2019, compared to 1.9% in 2018. After a larger-than-expected decline in 3Q18, the economic growth forecast for Japan has been revised down to 0.8% for 2018. There has also been a downward revision for growth of 1.0% in 2019. However, further downside risks to the OECD growth forecast for 2.3% in 2018 and 2.0% in 2019 remain.

In the **emerging economies**, the growth forecasts remain broadly unchanged. China's growth forecast remains at 6.5% for 2018 and 6.1% for 2019. India's economic growth seems to be slowing in a similar manner, remaining at 7.5% for 2018 and at 7.2% for 2019. Growth in Brazil and Russia remains unchanged as well. Growth in Brazil is forecast at 1.1% in 2018 and 1.8% in 2019. Depending on the policy actions by the new government, as well as commodity price developments, the growth forecast for 2019 may change. Russia's growth remains at 1.6% in 2018 and is forecast at 1.7% in 2019, however, this is also dependent on political developments and commodity prices.

Underlying challenges continue, causing the risk to world economic growth to be skewed to the downside. The most important issues are ongoing trade tensions, monetary tightening, particularly by the US Fed, and mounting challenges in several emerging markets and developing economies. Moreover, Brexit-related uncertainties, fiscal issues in some EU Member Country economies and Japan's envisaged sales tax increase, are posing additional risks. The growth trend in 2H19 remains particularly uncertain as the fiscal stimulus in the US is expected to taper off, China's slow-down is forecast to continue, issues in the Euro-zone are expected to remain and India will most likely face lower growth levels.

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

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2018	3.7	2.3	2.9	0.8	1.9	1.3	6.5	7.5	1.1	1.6
Change from previous month	0.0	-0.1	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
2019	3.5	2.0	2.6	1.0	1.7	1.4	6.1	7.2	1.8	1.7
Change from previous month	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

OECD

OECD Americas

US

US economic growth has remained well supported, as final 3Q18 numbers appear strong and 4Q18 activity remains solid, albeit at a slightly lower level. Final GDP growth in 3Q18, as released by the Bureau of Economic Analysis, stood at 3.4% q-o-q at a seasonally-adjusted annualized rate (SAAR). Recent comments about a potential positive outcome in US-China trade negotiations could act as a stabilising force. At the latest G20 meeting, the US and China agreed on a 90-day suspension of a further rising of tariffs. Additional tariffs, if implemented as originally announced, may lift inflation in the US, with the consequence being the need for a further interest rate raise by the Fed. Another stabilising force may come from the expectation of a less aggressive and more gradual monetary tightening path by the Fed as inflation remains well contained. However, risks remain and the expectation of lower growth in 2019 has recently become more likely. After the Fed's December meeting, expectations were lowered that the Fed will raise interest rates three times in 2019. Although previous shut-downs of the federal government had a very limited economic impact, the current shut-down is the longest on record. Usually, rather than damage real economic activity, it lowers business and consumer sentiment. However, this time the length of the shut-down may now also be felt in real economic activity. This is now of even greater importance as budgetary issues, including the upcoming issue of the debt ceiling discussion in Congress, will probably aggravate political tensions. The suspension of the debt limit expires at the beginning of March. Another drag may still come from the ongoing trade issues, particularly with China. Despite the probability of more gradual monetary tightening, the two important sources of wealth for private households, the equity market and house prices, have both followed a weakening trend. With somewhat the fiscal stimulus plateauing in 2019 as well, this year's economic activity is forecast to taper off slightly, most probably affecting 2H19 growth.

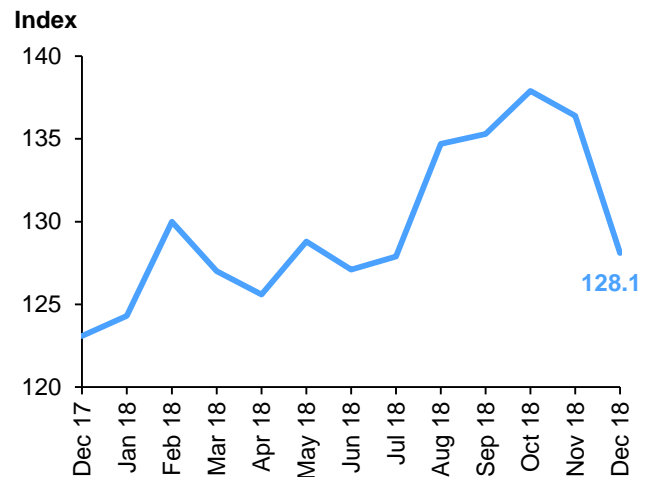
The development in the labour market continued positively in December. The **unemployment rate** rose to 3.9% but this is still a very good level. Average hourly earnings growth for the private sector also remained at a considerable rate of 3.2% y-o-y, constituting again the largest increase since 2009. Long-term unemployment fell again to stand at 20.5% in December, down from 20.7% in November, while the participation rate rose to the highest level in more than a year to stand at 63.1%. **Non-farm payrolls** increased by a considerable 312,000 in December, comparing to upwardly revised 176,000 in November.

Overall **inflation** retracted considerably, in line with falling oil-prices. Total yearly inflation stood at 1.9% y-o-y in December, compared to 2.2% y-o-y in November. December saw the lowest inflation level in 18 months, indicating a clear downward trend as it marks the fifth consecutive monthly decline. The important core inflation – excluding volatile items such as food and energy – stood at 2.2% y-o-y in December for the fifth month in a row, a healthy level and an indication of robust underlying economic development. The Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), stood at 1.8% y-o-y in November, compared to 2.0% in October and September, 2.2% in August and 2.4% in July. Considering these declining levels, the Fed is obviously facing less pressure to normalize interest rates.

The general economy's slowdown is also reflected in **consumer sentiment**, according to the index published by the Conference Board. The index retracted to 128.1 in December, compared to 136.4 in November and 137.9 in October. Retail sales grew by 4.2% y-o-y in November, compared to 4.8% y-o-y in October, with both numbers calculated on a nominal and seasonally adjusted basis.

Industrial production growth stood at 3.9% y-o-y in November, compared to 3.8% y-o-y in October, albeit lower than the very strong September level of 5.6% y-o-y.

Graph 3 - 1: US consumer confidence index

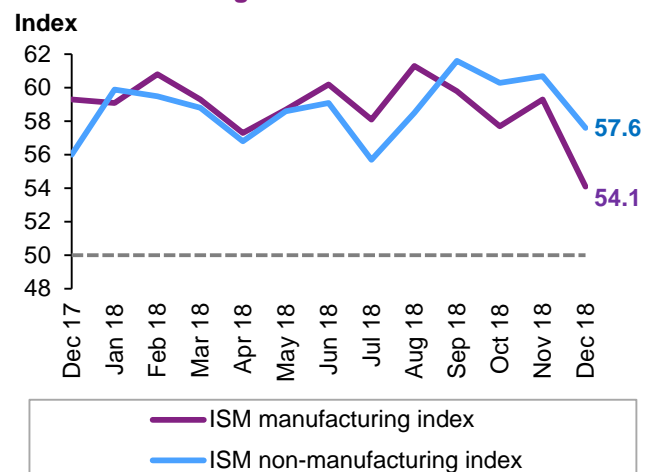


Sources: The Conference Board and Haver Analytics.

December's **Purchasing Managers' Index (PMI)**, as provided by the Institute of Supply Management (ISM), indicated a continued strong yet slowing dynamic in the manufacturing and services sector. The manufacturing PMI declined to 54.1, a considerable downward move when compared to 59.3 in November and 57.7 in October. The important index for the services sector fell to 57.6 in December, compared to 60.7 in November.

Given that the slowdown has been already taken into consideration, the 2019 **GDP growth forecast** remains at 2.6%. This is still very much supported by the fiscal stimulus, however, this is forecast to taper off in 2019, particularly in the second half of the year. The 2018 GDP growth forecast remains at 2.9%. While the government shut-down has added to the downside risks, trade-related issues remain important, particularly relations between the US and China. Moreover, uncertainties remain about the impact of monetary tightening, as well as domestic policy issues. Any of these disruptive areas could derail the growth dynamic very quickly.

Graph 3 - 2: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

Canada

Canada's economy is facing a slow-down in line with its most important trading partner, the US, and declining oil-prices, which are significant for an economy that has a large energy sector. 3Q18 GDP growth stood at 2.0% q-o-q SAAR, compared to 2.9% q-o-q SAAR in 2Q18. This slowing trend is probably recovering somewhat in 4Q18, as industrial production grew by 4.6% y-o-y in October and oil-prices rebounded. However, retail trade grew only by 0.6% y-o-y in October, compared to 3.6% y-o-y in September. This mixed development is raising the probability that the central bank will keep interest rates from rising quickly in the short-term. It kept interest rates unchanged at its latest January meeting. Falling crude oil prices have also led to a less accentuated inflation, which stood at 1.8% y-o-y in November. This is a sharp drop from the preceding months, when inflation was hovering around 2.5% y-o-y. Positive momentum is reflected in the latest PMI index for manufacturing, standing at a level of 53.6. This is a solid level and only somewhat lower when compared to the November level of 54.9 and almost matching the 53.9 in October.

Canada's growth dynamic remains unchanged, and its **GDP growth forecast** continues at 2.1% and 1.8% for 2018 and 2019, respectively.

OECD Asia Pacific

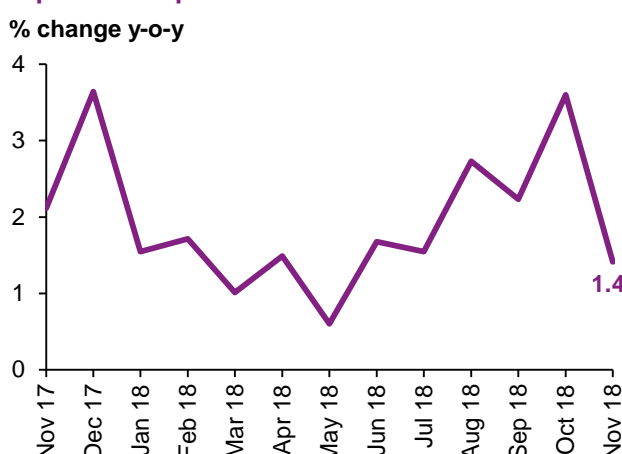
Japan

After some recovery in the past months, **Japan's economy** appears to be slowing again. Positively, the strong labour market appears to be bolstering domestic demand, but levels remain low. Investment is holding up well, while exports have slowed considerably. The growth trend in 3Q18 was also very much impacted by a weather related contraction. After already experiencing negative GDP growth in 1Q18, 3Q18 GDP fell by 2.5% q-o-q SAAR. Flooding in parts of Japan in July and the earthquakes in September may have accentuated the already low growth pattern in the Japanese economy. 4Q18 growth is expected to only somewhat compensate for these natural disasters. Hence, on a yearly average, Japan's economy continues to grow at a slow pace of just around 1%. While the very low unemployment and high industrial utilization rates are keeping domestic demand well supported, economic growth is at the same time also limited by those factors in the short term. Moreover, inflation has also fallen again, in line with falling energy prices, making it more likely that the BoJ will continue its accommodative monetary policies at least until the end of the year, when in the 4Q19 the envisaged sales-tax increase may dampen economic growth again. The BoJ remains focused on achieving an inflation rate of around 2%.

Inflation slowed considerably in November, in line with falling oil-prices. It retracted to stand at 0.9% y-o-y, compared to 1.4% y-o-y in October. Some support continues to come from the tight labour market as rising wages may support inflation. In November, monthly earnings rose by a high level of 2.6% y-o-y, compared to an already solid rise of 1.9% y-o-y in October. However, the wage level-driven core inflation, which excludes food and energy, stood at only 0.3% y-o-y in November, compared to 0.4% y-o-y in October. Given the labour market tightness, the unemployment rate remained at an extremely low level of 2.5% in November, a slight uptick from October, when it stood at 2.4%.

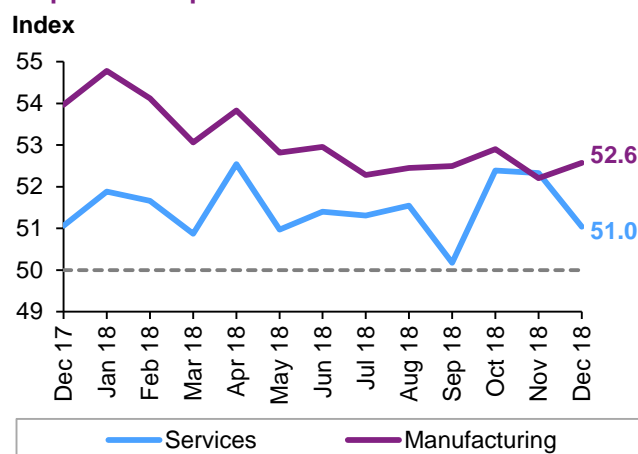
Along with other economic indicators, **export** growth slowed as well. After a strong rise of 8.2% y-o-y, non-seasonally adjusted in October, it slowed-down, showing only 0.1% y-o-y growth in November. The same slowing trend was seen for **industrial production**, which, after a strong rebound in October of 3.9% y-o-y growth, rose by only 1.1% y-o-y in November, in line with the lead indicator of manufacturing orders, which dropped by 5.4% y-o-y in September. Positively they point at a recovery in manufacturing as they rose by 8.9% y-o-y in October. **Domestic retail demand** mirrored the slowing trend in the Japanese economy, growing by only 1.4% y-o-y in November, after a rise of 3.6% y-o-y in October, and also compared to 2.2% in September.

Graph 3 - 3: Japan's retail trade



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

Graph 3 - 4: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

The latest December **PMI numbers** for both the manufacturing and the service sector are holding up well. The manufacturing PMI was almost unchanged, rising to 52.6 in December, comparing to 52.2 in November. The services sector PMI – the sector that constitutes around two-thirds of the Japanese economy – moved down slightly to stand at 51.0 in December, compared to 52.3 in November and 52.4 in October.

The considerable slow-down in 3Q18 GDP growth has led to a downward revision of the 2018 **GDP growth forecast**, now standing at 0.8%, compared to 1.0% in the past month, as some recovery is forecast in 4Q18. Also GDP growth for 2019 was revised down slightly to now stand at 1.0%, compared to 1.1% in the past month. However, it remains to be seen how and when the sales tax increase will be implemented. For the time being, it is envisaged to be introduced in 4Q19. Hence, the 2019 forecast assumes that the sales tax level will be increased from 8% to 10% in 4Q19.

South Korea

The **South Korean economy** is facing signs of a moderation in its growth dynamic, in line with its most important trading partners and its peer economies in Asia. Exports point at such a development, along with other indicators, as they grew by only 2.5% y-o-y in December, following 6.0% y-o-y in November. Industrial production retracted as well considerably to stand at only 0.2% y-o-y in November, compared to 1.1% y-o-y in October. Moreover, on the negative side, the latest **PMI number** for the manufacturing sector points to another declining trend. It remained almost unchanged in December standing at 49.8, compared to 48.6 in November and after 51.0 in October and 51.3 in September. Moreover, the prospect of increased trade protectionism could potentially pose some economic headwinds.

The **GDP growth** forecast for 2018 remains at 2.6%, with some risk skewed to the downside. Growth in 2019 indicates some further annual slowdown in line with developments in the OECD economies and China – its most important trading partner – and remains unchanged at 2.4%.

OECD Europe

Euro-zone

With more activity indicators from the 2H18 being released, the picture in the **Euro-zone** is of economic deceleration. Third quarter economic development was weakening and Germany and Italy even saw negative growth. A recovery in 4Q18 is forecast, but the slow-down in 2019 will probably become more accentuated, given ongoing challenges in Italy, the uncertainty about Brexit and a clearly weakening German economy. In this context it remains to be seen if the ECB will continue with its envisaged plan of monetary tightening. A continued accommodative monetary policy in combination with the ongoing improvements in the labour market could help to stabilise the declaration in 2019. But slowing global economic activity, also forecast for the large trading partners, the US and China, will impact the export driven economies of Germany and to some extent France. Moreover, ongoing elevated sovereign debt levels in some economies, particularly Italy, along with some weak areas in the banking sector will require constant monitoring.

The recent protests in France will also likely impact the short-term economic situation as it has led to higher spending on social welfare, increasing the budget deficit in France for 2019. Adding to uncertainties are the latest developments concerning Brexit, as political challenges for the UK are now very large. Financial markets had assumed that the remaining hurdles will be resolved before the UK's exit date in March 2019 or that at least an agreement on a transition period would be found. However, the latest parliamentary defeat of the government's exit-agreement with the EU means there is now more likelihood of negative consequences for the UK and the Euro-zone, particularly if no final deal on Brexit is agreed upon soon.

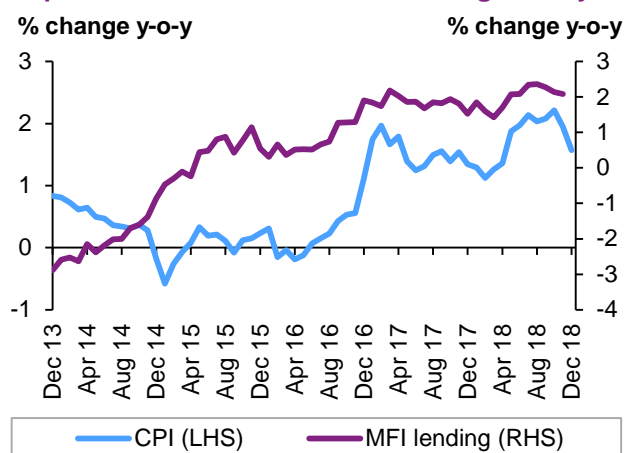
In the **labour market**, the unemployment rate in November declined further and moved below the 8% level for the first time in over a decade, to now stand at 7.9%. Nonetheless, the level of unemployment across the region differs widely among countries, with Germany having an unemployment rate of only 3.3% in November, while France is at 8.9%, Spain has improved to 14.7% and Greece is at 18.6%. Positively, almost all the region's economies exhibit an improving trend and there is still some upside in the peripheral economies. Italy also showed a positive trend in November as the unemployment rate moved down to 10.5% compared to 10.6% in October.

In line with improving labour market indicators, **retail trade** has continued to perform well so far this year. It picked up again in November, rising by 2.4% y-o-y, albeit this compares to a much higher level of 4.2% y-o-y in October. **Industrial production** fell considerably in November, declining by 3.2% y-o-y, compared to the already low growth in October, when growth stood at 0.9% y-o-y, and September, when growth was only 0.6% y-o-y. Manufacturing activity was particularly low in November, as it declined by 3.0% y-o-y. A decline in new orders in the manufacturing sector, a good lead indicator for future manufacturing activity, also

indicates a decelerating underlying growth trend in the sector. Manufacturing order growth declined by 0.7% y-o-y in October, compared to an already low growth of 0.2% y-o-y in September.

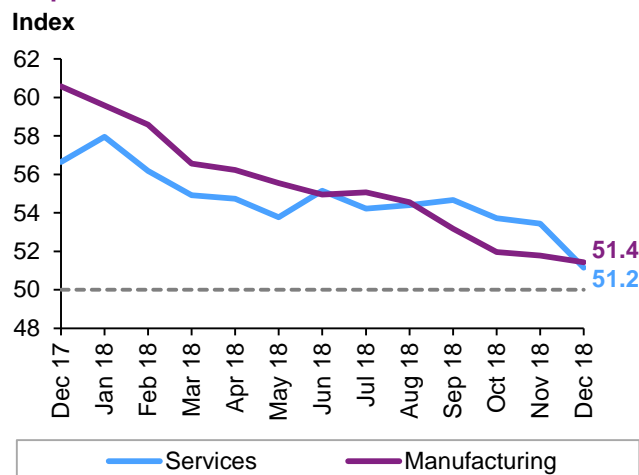
Inflation retracted again in line with falling oil-prices. This also may provide some breathing space for the ECB in its effort to normalise monetary policies. Total inflation stood at 1.6% y-o-y in December, falling for the third month in a row. 4Q18 inflation was still healthy, albeit the near-term development remains to be seen. 4Q18 inflation stood at 1.9% y-o-y, compared to 2.1% y-o-y in 3Q18. While this dynamic was largely due to rising energy prices, rising wage and income growth now also appear to have kicked in. Nevertheless, it remains to be seen, given the deceleration in the global economy and the recent drop in energy prices, whether this good development is a sustainable trend. Core inflation – the CPI, excluding energy and food – stood at 1.0% in December, unchanged from November. In general, it has been almost unchanged since January.

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



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

Graph 3 - 6: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

Although some areas of the Euro-zone's banking sector remain weak, the growth dynamic of the liquidity lines have shown stable growth in the past months. Developments in **lending activity** – as a motor for investments – remain an important element to monitor. The latest growth number now from November remained unchanged to stand at 2.1% y-o-y.

The Euro-zone's latest December **PMI indicators** generally point to a continuation of healthy but slowing underlying growth in the economy. The manufacturing PMI fell to stand at 51.4, compared to 51.8 in November. The important PMI for the service sector, which constitutes the largest sector in the Euro-zone, retracted to 51.2 in December, compared to 53.5 in November. The current level is again the lowest so far in 2018.

Given the confirmation of low GDP growth in 3Q18 and the expectation of a continuation of the decelerating trend, factors that were already taken into account in the previous month, the GDP growth forecast remains unchanged. **GDP growth in 2018** is forecast at 1.9%, while GDP growth for **2019** remains at 1.7%. Political uncertainties, the Brexit process, weakness in the banking sector, as well as monetary policies, remain important factors to monitor. Hence the economic growth risk remains tilted to the downside.

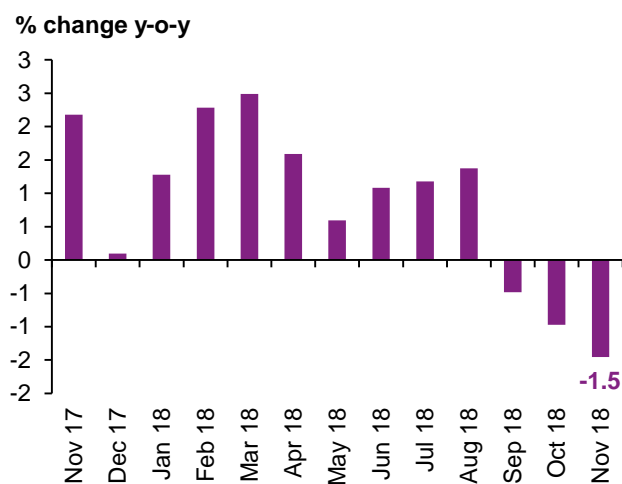
UK

With the significant defeat of the UK's Prime-Minister's EU-exit deal, near term developments remain very uncertain. A disorderly and hard **Brexit** cannot be ruled out. One particular sticking point remains the tricky question of the Irish border. A disorderly exit from the EU would certainly have major implications for the UK economy – and the EU – and the short-term economic impact would be largely negative. While there is still some limited time for finding a solution, the rising uncertainty is expected to impact 1Q19 economic activity and depending on the outcome over the coming weeks a further downward revision of 2019 GDP growth seems to be likely. According to the Bank of England, a disorderly break-up from the EU could have widely-felt and severe consequences. UK GDP could fall as much as 10.5% over a five-year period under the worst outcome of Brexit, compared with pre-referendum levels, and house prices could fall by up to 30%.

The Prime Minister will have now until next week to present a plan B. There is also the proposal by some EU members to extend the Article 50 exit date. However, EU parliamentary elections are also coming up in May and it remains to be seen for how long such an extension could be supported as it also raises legal and constitutional questions for the EU. If this uncertainty will continue then investments are likely to slow-down in the UK, business will continue to move their operations to elsewhere on the continent and consumer sentiment is also likely to decline. Inflation may continue to rise, given a weakening pound-sterling, and the Bank of England may be kept from raising interest rates in anticipation of a further economic slow-down.

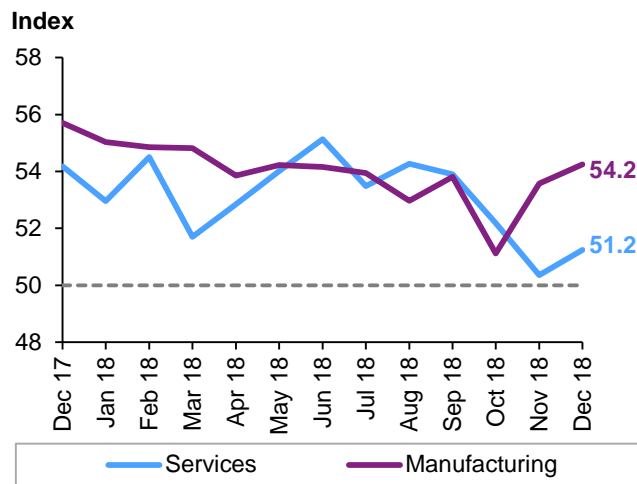
In the meantime, the latest indicators confirm a continued deceleration in the UK's economy, although this is counterbalanced to some extent by exports. **Industrial production** declined by 1.5% y-o-y in November, the third consecutive month of decline, **retail trade** in value terms continued to grow by 5.0% y-o-y in November, compared to 4.0% in October. However, despite this uptick a clear decelerating trend has become apparent in recent months. The weak pound sterling continues to support growth in exports, which rose by 5.5% y-o-y in November, comparing to 4.8% y-o-y in October and 1.1% y-o-y in September.

Graph 3 - 7: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Graph 3 - 8: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

The most recent December **PMI** lead indicators point to a mixed picture. While manufacturing may still benefit from the weak pound sterling, the service sector remains relatively weaker. The PMI for manufacturing rose to 54.2 in December, compared to 53.6 in November and 51.1 in October. The very important PMI of the services sector, which constitutes the majority of the UK's economy, recovered to 51.2 in December, comparing to 50.4 in November. Nevertheless, compared to 52.2 in October, 53.9 in September and 54.3 in August, this points at an obvious deceleration.

The **2018 GDP growth** estimate remains at 1.3%, unchanged from the previous month. For 2019, the Brexit development will be the most influential factor and it seems that the current uncertainty is likely to have a negative impact on the UK's economic growth. These developments will need close monitoring in the coming months. While the GDP growth forecast for **2019** remains unchanged, standing at 1.4%, the risk is now clearly skewed to the downside.

Non-OECD

BRICs

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2018-2019*

	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	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Brazil	1.1	1.8	3.8	4.4	-29.6	-42.9	-7.1	-5.9	80.3	83.5
Russia	1.6	1.7	2.9	4.5	92.0	91.0	1.6	1.6	10.7	8.8
India	7.5	7.2	4.3	4.7	-70.6	-73.2	-3.6	-3.3	49.6	48.3
China	6.5	6.1	2.1	2.8	28.5	21.7	-3.6	-4.1	18.8	21.5

Note: * 2018 = Estimate and 2019 = Forecast.

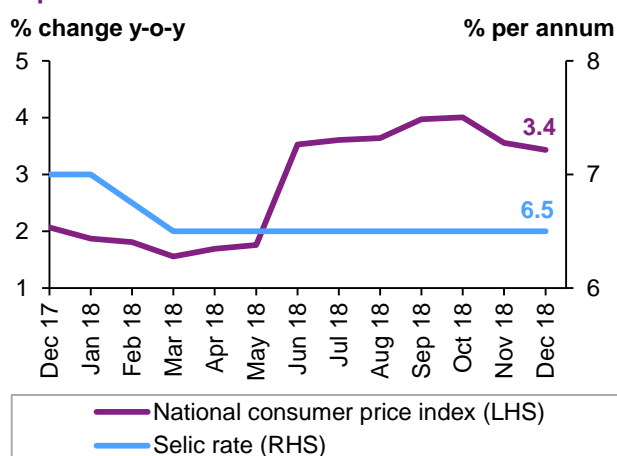
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, Oxford Economics and OPEC Secretariat.

Brazil

Brazil's trade surplus widened notably in December 2018 to \$6.6 billion, from \$5.0 billion in December 2017. It was the largest trade surplus since June 2017. Exports climbed 11% y-o-y to \$19.56 billion in December, primarily due to sales of primary goods, which increased by 34.6%. Iron ore exports increased by 20%, crude oil by 46%, and soybeans by 79%. Exports of semi-manufactured products rose 1.3%, while exports of raw sugar fell by 28%. By contrast, exports of manufactured products declined 2.4% mainly due to a drop in vehicle sales by 62%. The nation posted GDP growth of 1.3% y-o-y in 3Q18, up from 0.9% in the previous quarter. The increase in **private consumption** decelerated from 1.8% y-o-y in 2Q18 to 1.4% in 3Q18. **Government consumption**, on the other hand, increased by 0.3% y-o-y in 3Q18, after a 0.3% contraction in the previous quarter.

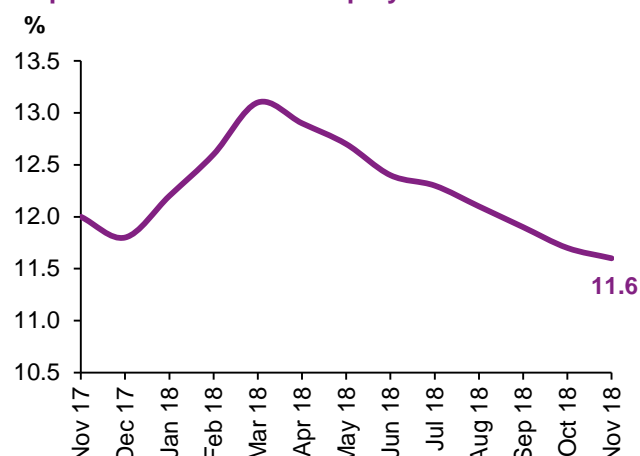
GFCF witnessed a notable improvement in 3Q18, growing by 7.8% y-o-y, which is its highest growth since 2Q13. **Exports** rose by 2.6% y-o-y in 3Q18, after declining by 2.9% in 2Q18, whereas **imports** jumped by 13.5% y-o-y in 3Q18, up from 6.5% in 2Q18.

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



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

Graph 3 - 10: Brazil's unemployment rate



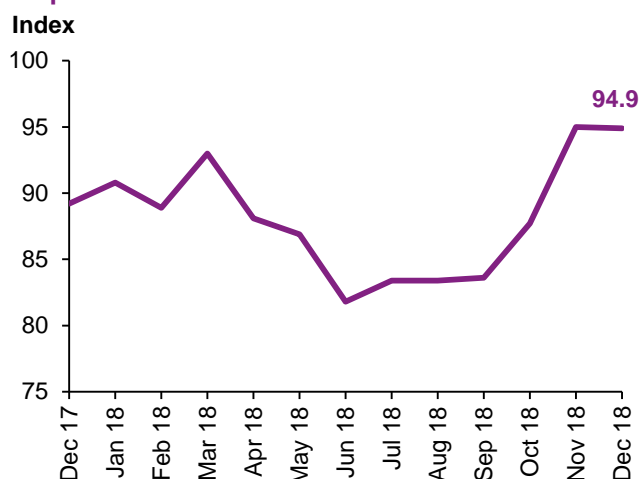
Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

In November, the **real** depreciated by 2.6% m-o-m, bringing the full 2018 year currency depreciation to 18%. **Inflation** eased in November to 3.6% y-o-y, from October's 4%, which was unchanged from September's rate of increase. At the beginning of 2018, inflation stood at 1.9% y-o-y. The central bank held its benchmark **interest rate** unchanged at 6.5% in December for the tenth month in a row. The unemployment rate fell to 11.6% in November, down from 11.7% in October and from 11.9% in September.

The **consumer confidence index** fractionally dropped in December to 94.9, from November's 95.0.

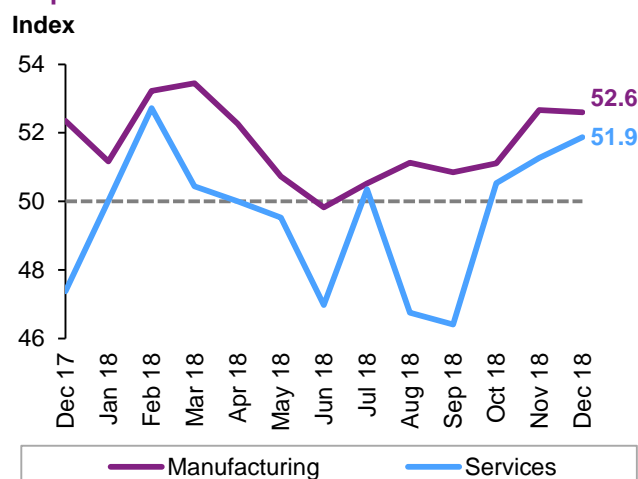
The IHS Markit Brazil **Manufacturing PMI** reading on December showed that Brazilian factories ended 2018 on a solid footing, producing goods at the sharpest pace in nine months in response to stronger sales. The upturn in demand was domestically driven, as shown by a renewed decline in new export orders. Other positive takeaways from the latest survey include back-to-back growth of input purchasing, softer inflationary pressures and the second-highest level of business sentiment in the series history. However, there was a renewed fall in jobs. The headline index posted 52.6 in December, broadly similar to November's eight-month high of 52.7, indicating a further strengthening of operating conditions across the sector. For the final quarter as a whole, the PMI average of 52.1 was the highest seen since 1Q18.

Graph 3 - 11: Brazil's consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 12: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

Brazil's **services sector** continued improving during December, according to the IHS Markit Brazil Services Business Activity Index. The index reached a ten-month high reading of 51.9 in December, up from November. This indicates a stronger rate of output expansion and contributed to the highest quarterly average since 4Q13. Amid reports of improved underlying demand, new client wins and the offering of additional services, sales growth picked up to the quickest level since last March. The rise in new orders was widespread across all five broad areas of the service economy, as was the case for business activity. Information and Communication led the upturn on both fronts. A strong degree of optimism was recorded at the end of the year. Companies suggested that a change in government, coupled with projects in the pipeline, improved consumer confidence and investment intentions should boost business activity in 2019. The level of positive sentiment was the third-highest registered since September 2017.

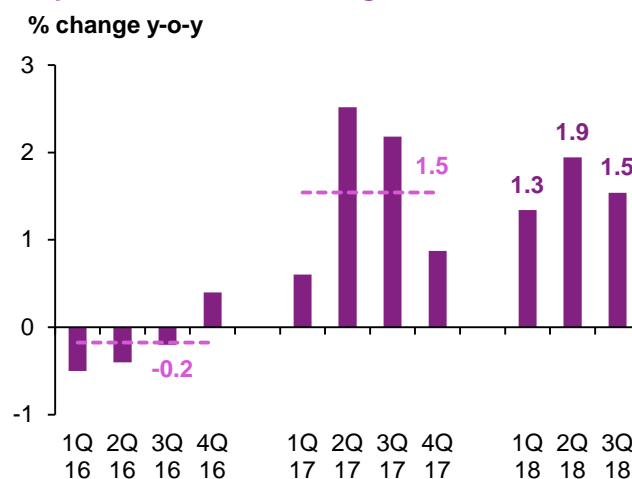
The slightly faster pace of **GDP growth** in 3Q18 together with improvements in the trade balance and in the manufacturing and services sectors, in addition to the inflation drop, are the main positive indications on the economy of Brazil over the past two months. Challenges for exports to Argentina have continued since May and intensified further in November, when exports dropped by 40% y-o-y. There is no change this month to Brazil's GDP. GDP is forecast to grow by 1.1% y-o-y in 2018 and 1.8% in 2019.

Russia

GDP grew by 1.5% y-o-y in 3Q18, up from a preliminary estimate of 1.3%, and follows a 1.9% expansion reported in 2Q18. Household consumption grew by 2.2% y-o-y in 3Q18, from 2.6% in 2Q18. Government consumption declined by 0.3% y-o-y in 2Q18, from a 0.6% growth in the previous quarter. GFCF accelerated in 3Q18 by 2.8% y-o-y, compared to a 1.0% increase in 2Q18. Exports rose by 4.3% y-o-y in 3Q18, down from 7.3% in 2Q18, whereas imports were largely unchanged in 3Q18 after growing by 4.8% y-o-y in 2Q18.

The **ruble** depreciated by 1.5% m-o-m in December, following a 0.6% depreciation in the previous month. On a y-o-y comparison, the ruble was 14.8% lower in December 2018 from its level a year earlier. Consumer price **inflation** in December posted 4.3% y-o-y, up from 3.8% in November and 3.6% in October.

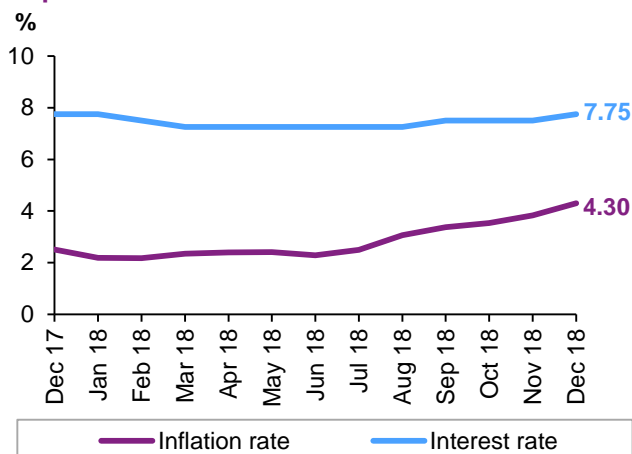
Graph 3 - 13: Russia's GDP growth



Sources: Federal State Statistics Service and Haver Analytics.

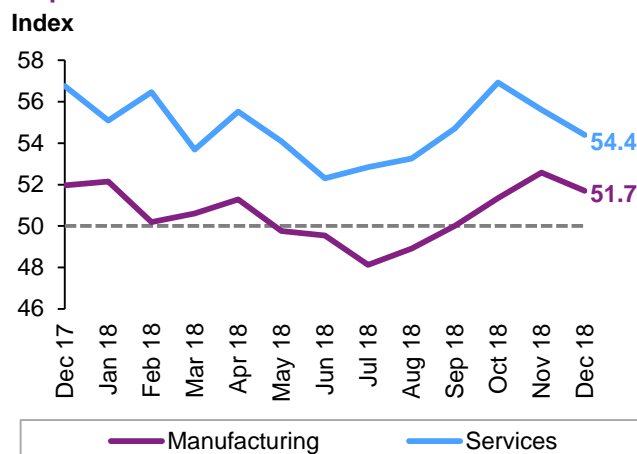
It was the highest inflation rate since June 2017 on the back of rising prices of food and services, while non-food inflation eased. In August, inflation surpassed 3% y-o-y for the first time in 12 months. As a result of accelerating inflation, the central bank increased its benchmark **one-week repo rate** in December to 7.75%, from and November's 7.50%.

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



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

Graph 3 - 15: Russia's PMIs

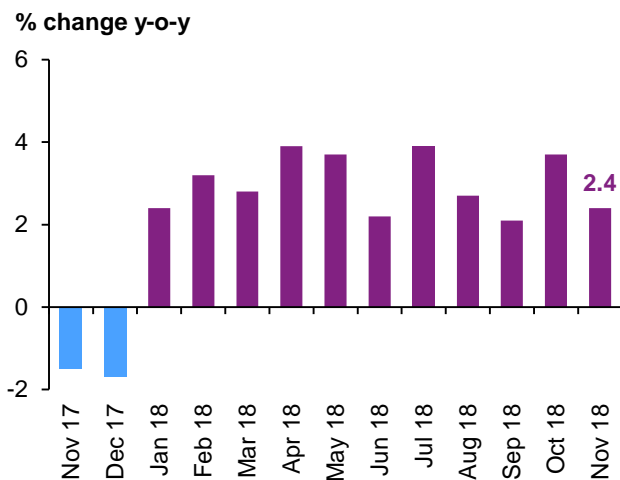


Sources: IHS Markit and Haver Analytics.

The IHS Markit Russia **manufacturing PMI** on December indicated a moderate improvement in the health of the Russian manufacturing sector and the third-strongest overall expansion in 2018. Growth was supported by solid upturns in production and new business. Panellists registered a further reduction in backlogs, partly due to a moderate increase in employment. The index registered 51.7 in December, down from 52.6 in November. December's figure was the third-highest in 2018 and brought to a close the strongest quarterly expansion since the third quarter of 2017. Output across the Russian goods producing sector increased at a solid rate in December, albeit slightly weaker than November. Where a rise was reported, surveyed firms linked this to greater new order volumes. New business continued to expand at a solid pace in December and at the second-fastest rate since January. **Industrial production** grew by 2.4% y-o-y in November versus 3.7% in October.

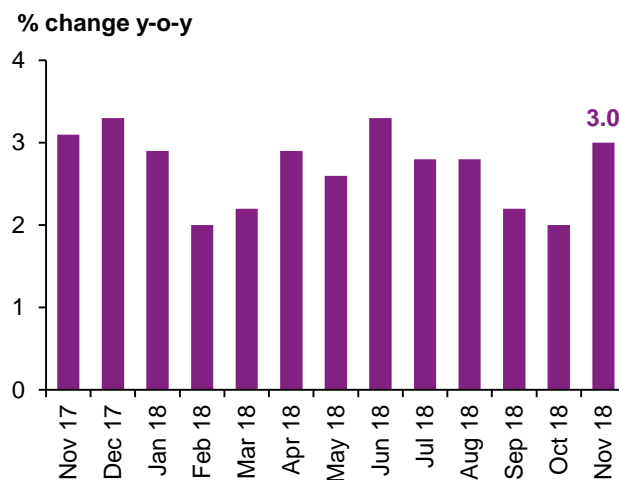
December's data pointed to continued improvement in business conditions in the **service sector**. The IHS Markit Russia Services Business Activity posted 54.4 in December, down from 55.6 in November but nonetheless indicating a solid expansion in business activity across the sector. The increase in output was attributed to greater new order inflows from both domestic and foreign clients. The final quarterly average for 2018 was the strongest in a year, despite the latest data signalling the slowest rise in business activity in four months. For the twentieth month in a row, **retail sales** continued their increasing streak in November. The rate of increase was 3.0% y-o-y, up from 1.9% in October.

Graph 3 - 16: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 17: Russia's retail sales



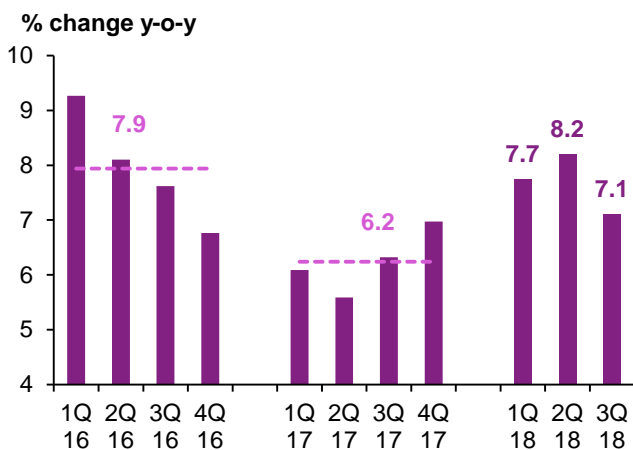
Sources: Federal State Statistics Service and Haver Analytics.

Russia's GDP growth forecasts point to 1.6% y-o-y in 2018 and 1.7% in 2019.

India

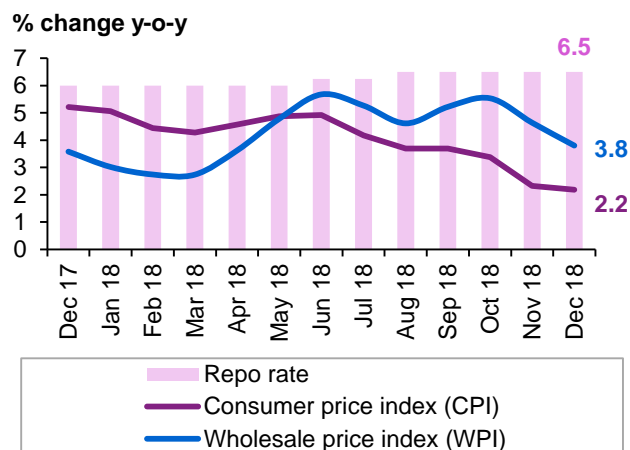
India's economy lost momentum in the 3Q18 and is forecast to slow further in 4Q18. India's inflation generally rose only modestly and remained within central bank comfort zones. This suggests that pressure to lift interest rates should ease over the next year. At the same time, the weaker oil price outlook will dampen inflationary pressure.

Graph 3 - 18: India's GDP growth



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

Graph 3 - 19: Repo rate and inflation in India



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

It seems a distinction can be made across current account deficit economies. In the post-election outlook, the cutback on public spending and investment, combined with persistent external pressures, will result in weaker domestic demand and investment and, ultimately, a slowdown in growth in 2019.

The Indian rupee continued to strengthen in December, reflecting the recent fall in global oil prices that should help contain India's current-account deficit in 4Q18 and the entirety 2019. However, it started weakening again in December, with investors' reacting to the news of slowing GDP growth and, more recently, a resignation by the former governor of the central bank to relax lending and support growth. While weaker oil prices may support the rupee from the sharp depreciation seen in temporarily in 3Q18, but it appears that the pressures on the currency will return in the coming months.

Robust growth and rising interest rates in the United States are expected to push up the value of the dollar well into the end of 2019, while actual and threatened tariff actions by the US administration will add to this upward pressure. In turn, the Indian current-account and fiscal deficits are expected to remain elevated in 2019. Combined, this will keep pressure on the Indian rupee, forcing the currency to depreciate throughout 2019.

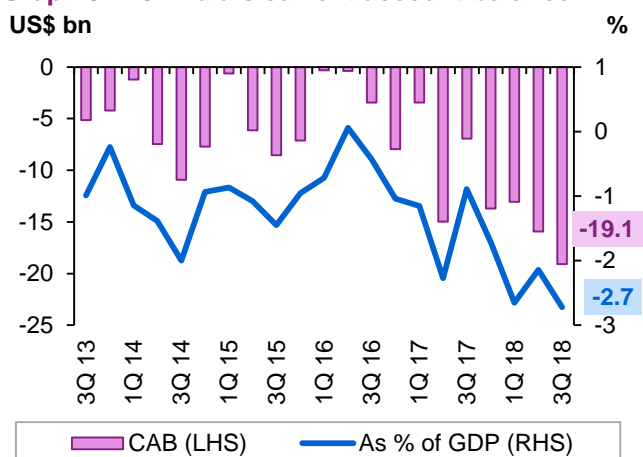
Direct tax rates for large enterprises are likely to remain unchanged until after the next general election (currently scheduled for 2Q19). In fact, easier tax rates for micro, small and medium enterprises are likely to be introduced. Since the implementation of the Goods and Services Tax (GST) in July 2017, which was aimed at simplifying intra-India trade, more than 500,000 new taxpayers have been registered. Following protests from various stakeholders and a resultant revision of tax brackets in November 2017, there is now broad-based consensus on the GST, although revisions remain possible.

India's **CPI inflation** declined to 2.33% in November 2018 from an upward revision of 3.38% in October. It is the lowest inflation rate since June of 2017 as food prices suffered their worst drop since the series began in 2012. The Reserve Bank of India (RBI) revised down its inflation forecasts to 2.7%-3.2% for the period October 2018-March 2019, amid lower food and fuel prices. India's **WPI** was 4.64% y-o-y in November 2018, slowing from a 5.28%. It was the lowest WPI inflation since August, as cost increased at a softer pace for fuel and manufactured products while prices of food declined further.

India's **trade deficit** widened to \$16.67 billion in November 2018 from \$15.1 billion y-o-y. **Exports** edged up an inadequate 0.8% to \$26.5 billion. **Imports** to India increased 4.3% y-o-y to \$43.17 billion in November of 2018, boosted by purchases of petroleum and crude.

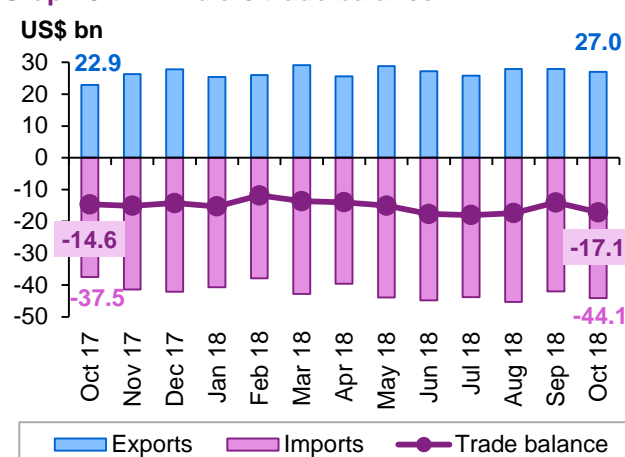
Despite oil prices declining, India's **current account deficit** widened sharply to \$19.1 billion, or 2.9% of GDP, in 3Q18, from \$6.9 billion, or 1.1% of GDP, in the same period of the previous fiscal year.

Graph 3 - 20: India's current account balance



Sources: Reserve Bank of India and Haver Analytics.

Graph 3 - 21: India's trade balance

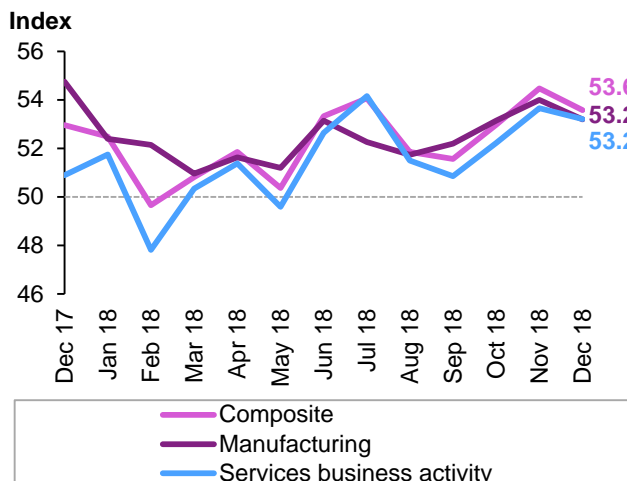


Sources: Ministry of Commerce and Industry and Haver Analytics.

The **Nikkei India Manufacturing PMI** dropped to 53.2 in December of 2018 from an 11-month high of 54.0 in the previous month. The latest figure was the second-largest in 2018 and contributed to the highest quarterly average since 3Q12. Output growth slowed, amid competitive pressures, labour issues and challenging public policies, and job creation weakened to a four-month low as companies were cautious about making hiring decisions ahead of next year's elections. Meanwhile, backlogs accumulated at the quickest pace since May and new orders went up at the second-quickest rate in 2018, with exports rising for the 14th straight month. With regard to prices, input cost inflation eased to a 34-month low, which translated

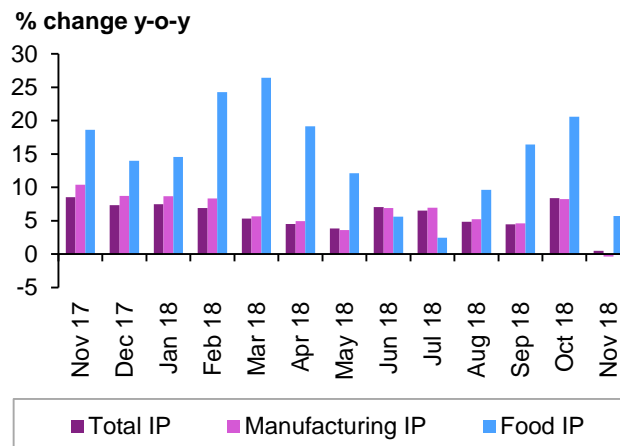
into broadly no changes in factory gate charges. Looking ahead, the level of confidence moderated from mid-quarter and was subdued in the context of historical survey data.

Graph 3 - 22: India's PMI



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 23: India's industrial production (IP) breakdown



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

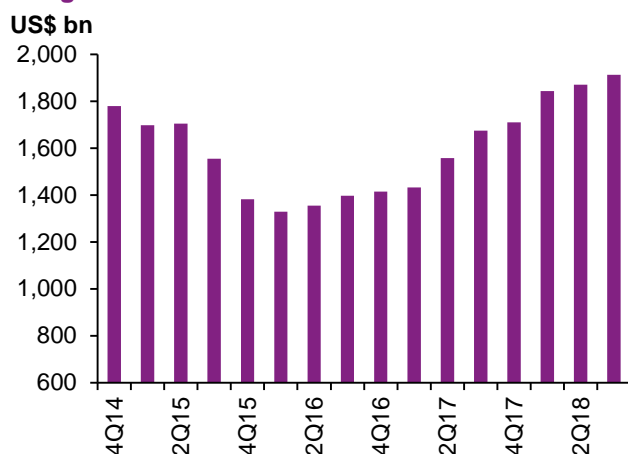
The **Nikkei India Services PMI** dropped to 53.2 in December 2018 from November's 4-month high of 53.7 while markets had estimated 52.5. New business rose at a softer pace, amid a stagnation in new export work. Meantime, employment growth accelerated at the second fastest pace since April, and the accumulation in backlogs eased to the weakest level in five months. On the price front, input price inflation slowed for the third straight month to the weakest inflation since May 2017. Factory gate charges meanwhile were little-changed, ending a 16-month period of increases. Business sentiment hit its highest in three months, supported by advertising efforts, new service offerings and predictions of an improvement in market conditions after the elections.

India's **GDP growth** is forecast for 2018 remains unchanged from last month's report, at 7.5% and 7.2% for 2019.

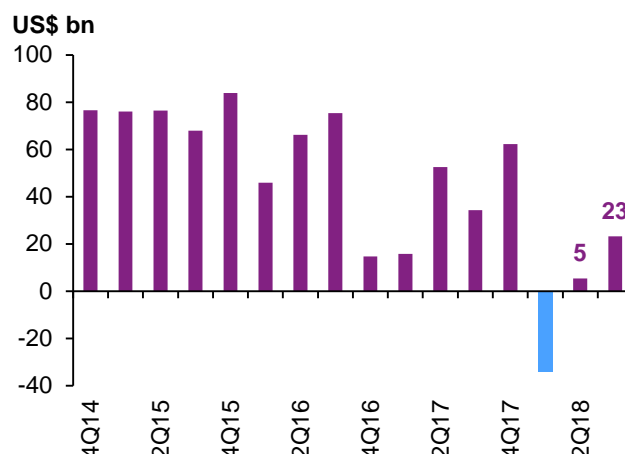
China

The Central Economic Work Conference (CEWC)¹ considered a mandate for more fiscal and monetary support in 2019 for China's economy, as downside risks on growth increases. However, the desire not to "overdo" it will continue to shape the extent of policy easing and it seems policymakers will aim for a floor for growth rather than a pick-up. Cutting taxes and fees on a larger scale, enhancing counter-cyclical adjustments, and substantially increasing the size of local government bonds are among the measures that were announced at the end of the conference. Also CEWC emphasized that structural policies require China's government to deepen reforms in areas like the state-owned enterprises (SOE) to create an environment of fair competition and encourage small and medium-sized enterprises to grow faster. Moreover, the CEWC highlighted the following key areas for additional investment: technological upgrading in manufacturing, 5G telecommunication networks, infrastructure construction for artificial intelligence, industrial internet, intercity transport, logistics, rural infrastructure and public service facilities.

¹ CEWC is an annual meeting held in the People's Republic of China, which sets the national agenda for the economy of China and its financial and banking sectors.

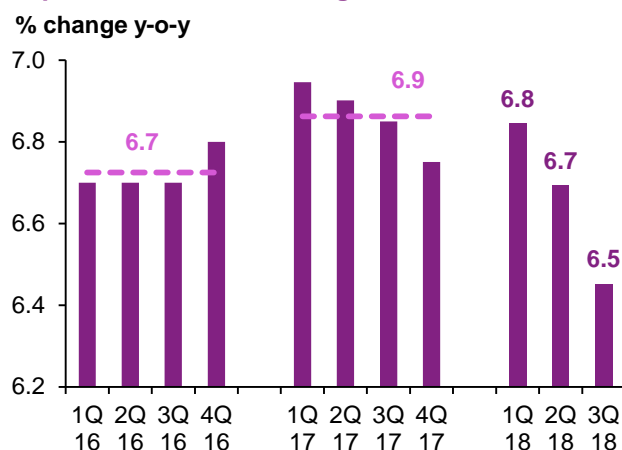
Graph 3 - 24: China's external debt in local and foreign currencies

Sources: State Administration of Foreign Exchange and Haver Analytics.

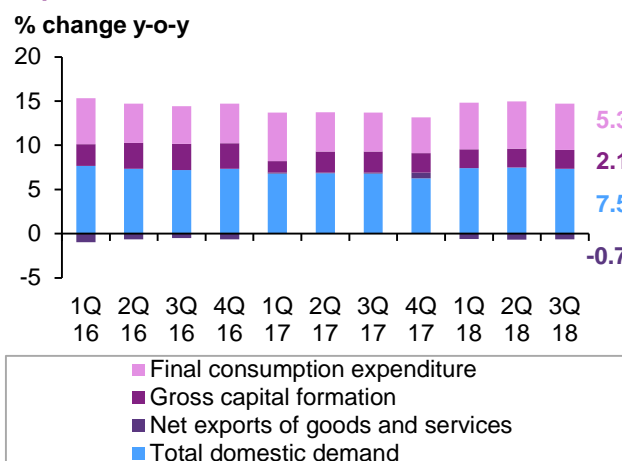
Graph 3 - 25: China's current account balance

Sources: State Administration of Foreign Exchange and Haver Analytics.

Chinese regulators estimate the world's second-largest economy could realize its annual GDP growth target of 6.5% as the year 2018 came to an end, with the per capita GDP approaching \$10,000. While acknowledging the pressure from an economic downturn and the complexities in the global economy, insiders attending the conference remained optimistic as it has given enough space for the country to fine-tune its economic policies in 2019. The gradual policy easing should help GDP growth bottom out in around 2Q19. The key downside risk is that credit growth does not pick up amid weak sentiment and a continued tight stance vis-à-vis shadow banking and local government debt.

Graph 3 - 26: China's GDP growth

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

Graph 3 - 27: China's GDP breakdown

Sources: China National Bureau of Statistics and Haver Analytics.

Given the ongoing trade dispute with the US, China's trade surplus is likely to continue to decline. This will put downward pressure on China's current account surplus. The Chinese government has stepped up efforts to ease foreign investment restrictions in sectors such as manufacturing and financing and improve the business environment for foreign companies. The Standing Committee of National People's Congress (NPC), China's top legislature, began the first review of a draft law on foreign investment on 23 December, according to reports in the Xinhua News Agency. According to the Minister of Justice, the basic law of foreign investment was listed on the 2018 legislation work programme. If adopted, the new draft law of foreign investment would replace the three existing laws on Chinese-foreign equity joint ventures, contractual joint ventures, and wholly foreign-owned enterprises. The draft foreign investment law seeks to provide a transparent, fair, stable, and expected environment for foreign investors. Compared with the earlier version that was published in 2015 for public comment by the MOC, this new version is likely to face less pushback thanks to a list of measures that the government has introduced over the past two years. These include the implementation of a negative list for foreign investment, as well as the switch from an approval-based system to a recording-based system for the registration of foreign enterprises. In November 2018, China's Ministry of

Commerce said the government will fully implement the foreign investment negative list by the end of March 2019.

China's current account surplus surged in the 3Q18 due to strong growth in primary income, but it is expected to decline due to the US-China trade dispute. China posted a current-account surplus of \$23.3 billion in the 3Q18, a fourfold- increase from the 2Q18. The significant improvement in the current account balance was mainly driven by a \$21 billion q-o-q increase in primary income. However, as a result of US-China trade tensions, the goods surplus decreased by \$2.8 billion q-o-q and the services deficit worsened by \$7.2 billion q-o-q. Direct investment was basically balanced in 3Q18.

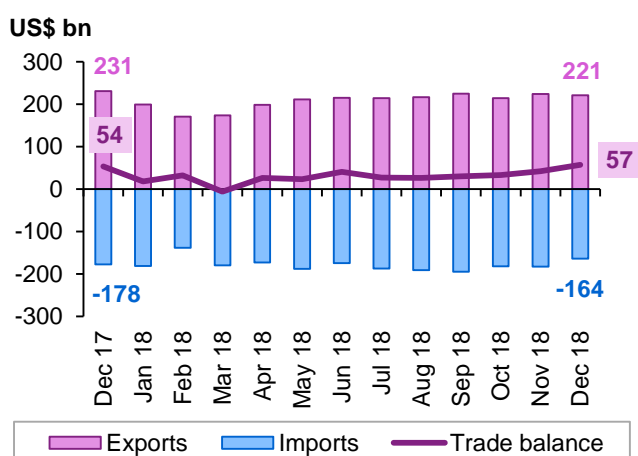
The People's Bank of China (PBOC) announced that it will cut the banking system's reserve requirement ratio (RRR) by 50 basis points on 15 January and 50 basis points on 25 January. The full reduction will bring the RRR down to 13.5% and 11.5% for large and small banks, respectively. This releases around CNY1.5 trillion (\$218 billion) of capital for Chinese banks. The PBOC simultaneously announced that it will not extend the medium-term lending facilities (MLF) maturing in the 1Q19. The Chinese authorities have undertaken multiple measures to boost banking sector liquidity in the past six months.

As the dollar index softened by around 1% against other major currencies in December, the dollar value of foreign-exchange reserves invested in non-dollar assets rose. According to the State Administration of Foreign Exchange (SAFE), China's foreign exchange regulator, China's foreign-exchange reserves rose by \$11 billion to reach \$3.0727 trillion at the end of December. SAFE attributed the gain to asset price and exchange rate changes. China's foreign-exchange reserves are expected to remain broadly stable over the coming months.

China's CPI inflation slowed to a six-month low of 1.9 % y-o-y in December 2018 from 2.2% in the previous month. The slowdown in inflation was mainly due to non-food prices, while food inflation remained at its lowest level in three months. **China's PPI** increased 0.9 % y-o-y in December 2018, much slower than a 2.7% rise in the previous month. It was the lowest producer inflation since September 2016.

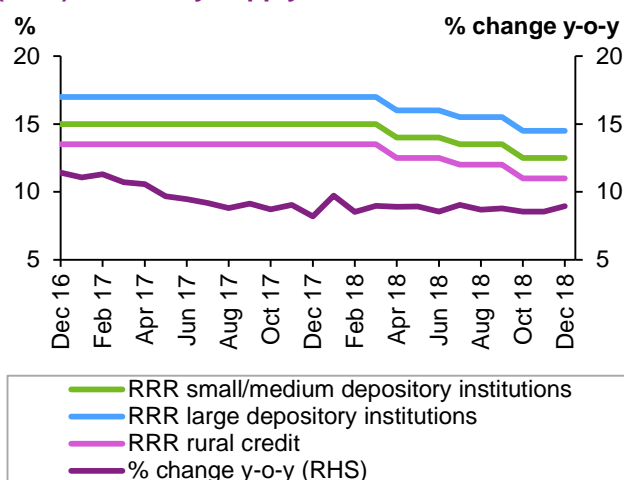
China's trade surplus widened to \$57.06 billion in December 2018 from \$53.85 billion y-o-y. It was the largest trade surplus since December 2015, as exports fell the most in two years and imports posted the largest drop since July 2016. For full year 2018, China posted a trade surplus of \$351.76 billion, the lowest since 2013, as exports increased 9.9%, its strongest performance in seven years, while imports were up 15.8%.

Graph 3 - 28: China's trade balance



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

Graph 3 - 29: China's reserve requirement ratio (RRR) vs. money supply



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

China's external debt in foreign currencies has been rising rapidly, and that's becoming an increasingly big issue for China and, potentially, the rest of world. China lists its outstanding external debt officially at \$1.9 trillion. When we compare outstanding debt amount with \$13 trillion China's economy, looks like it is not a major amount. But focusing on the headline number significantly understates the underlying risks. Short-term debt accounted for 62% of the total as of September 2018, according to official data, meaning that \$1.2 trillion will have to be rolled over 2019. Just as worrying is the speed of increase: total external debt

has increased 14% in the past year and 35% since the beginning of 2017. It seems China's foreign debt have to consider as a downward risk for 2019.

The **Official NBS Manufacturing PMI** fell to 49.4 in December 2018 from 50.0 in the previous month and below market consensus of 49.9.

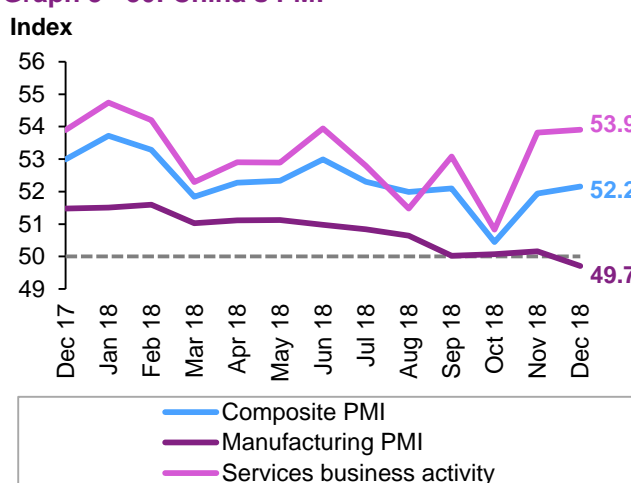
The **official Non-Manufacturing PMI** in China increased to 53.8 in December 2018 from a 15-month low of 53.4 in the previous month, with new orders rising the most in three months (50.4 vs 50.1 in November).

The **Caixin China Manufacturing PMI** fell unexpectedly to 49.7 in December 2018 from 50.2 in November. The latest reading pointed to the first contraction in the manufacturing sector since May 2017 and fell below 50 in December, the first time since February 2016, as new orders declined for the first time since June 2016 and new export business dropped for the ninth month in a row due to the trade frictions between China and the US. In addition, employment continued to fall, while production rose slightly after two months of stagnation. On the price front, input costs decreased for the first time since May 2017, with the rate of reduction being the fastest since February 2016. At the same time, reports of a general drop in market prices led firms to discount their output charges for the second consecutive month. Confidence towards the 12-month outlook for production edged up to a three-month high, but remained subdued overall amid softer client demand and restrictive national policies around production.

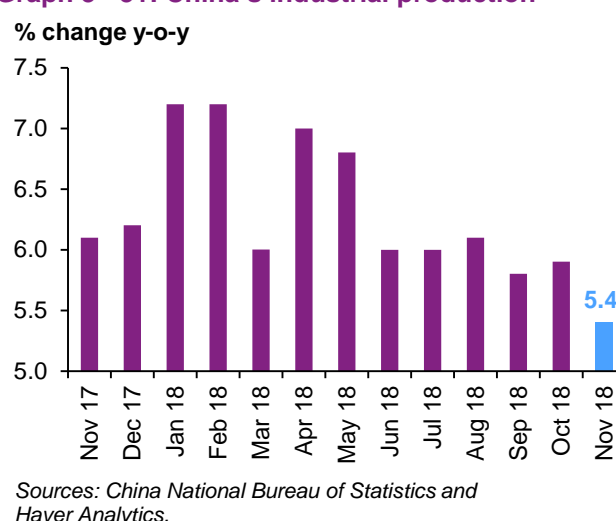
The **Caixin China General Services PMI** edged up unexpectedly to a 6-month high of 53.9 in December 2018 from 53.8 in the previous month, easily beating market expectations of 52.9. New orders increased modestly, the pace of job creation was only marginal, and new export business expanded at the fastest pace in six months as companies stepped up efforts to attract more orders from abroad. Meantime, unfinished business went up for the first time in four months, though only slightly. On the price front, operating expenses continued to increase solidly, with many firms linking the rise to higher raw material prices and salary costs; while selling prices went up a bit. Looking ahead, the level of positive sentiment towards the 12-month business outlook improved from November's recent low.

Weak Chinese PMI manufacturing data led to early-2019 falls in equity markets, continuing the adverse trend in late 2019.

Graph 3 - 30: China's PMI



Graph 3 - 31: China's industrial production



It seems the New Year has not brought about any reduction in tensions between the US and China. They remain locked in a trade tension and mentioned down side risk put the pressure to China's economy in the coming year.

In an effort to stimulate domestic spending, China's government aims to boost consumption by "accelerating the development of services sectors, including education, childcare, elderly care, medicare, culture and tourism"; "improving product quality and consumption environment"; and, as noted, reducing income taxes.

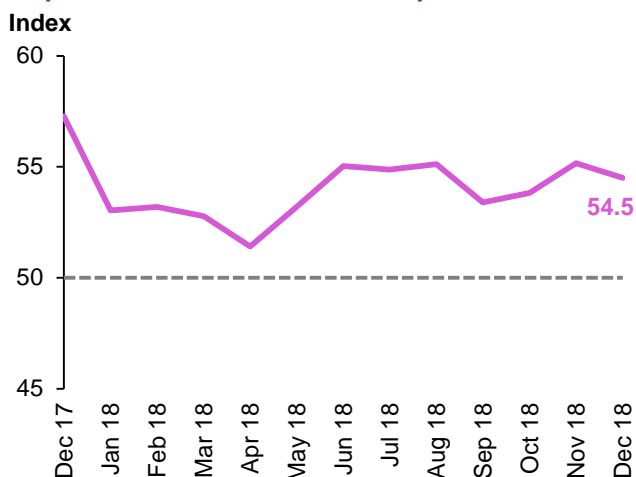
China's **GDP growth** was kept unchanged at 6.5% for 2018 and 6.1% for 2019.

OPEC Member Countries

Saudi Arabia

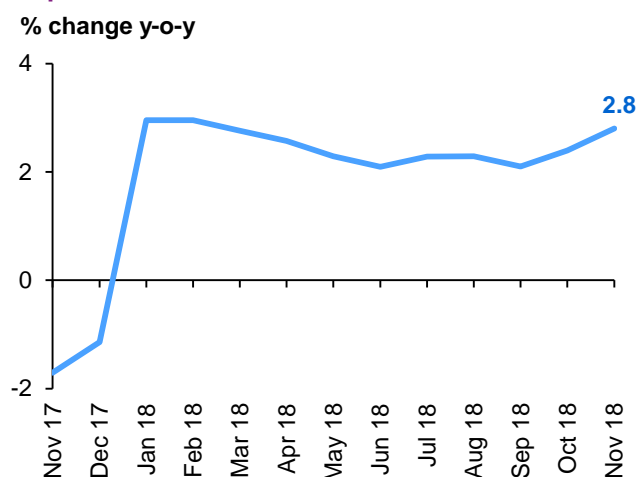
In **Saudi Arabia**, inflation stood at 2.9% y-o-y in November, up from 2.4% in October and 2.1% y-o-y in September. The country's total reserve assets amount to 1.89 trillion riyal in November 2018, unchanged from October. The Emirates NBD Saudi Arabia PMI fell to 54.5 in December from 55.2 in November. The renewed dip in the headline index following November's 2018 high confirms this year as the weakest in the series, averaging 53.8 as compared to an annual average of 58.0 over the previous eight years. Business optimism remains strong in Saudi Arabia, and the future output index climbed to the highest reading in five years. 53.8% of respondents expect that output will be higher in 12 months' time, with no firms expecting deterioration in conditions.

Graph 3 - 32: Saudi Arabia's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 33: Saudi Arabia's inflation

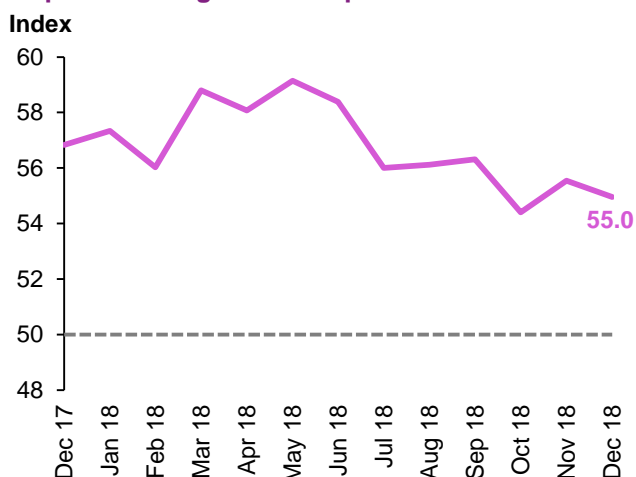


Sources: General Authority for Statistics and Haver Analytics.

Nigeria

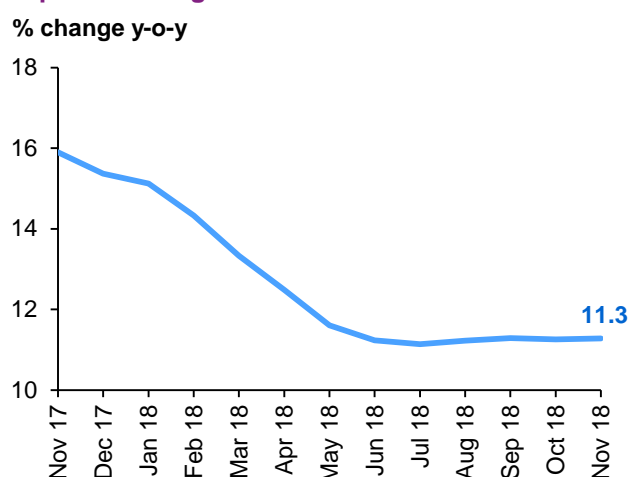
In **Nigeria**, inflation remained stable in November at 11.3% y-o-y, similar to rate registered in October. Inflation still higher the central bank's upper-limit target of 9%. The final month of 2018 saw sustained marked expansion in the Nigerian private sector. Output and new orders continued to rise strongly, albeit at weaker rates than seen earlier in the year.

Graph 3 - 34: Nigeria's composite PMI



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

Graph 3 - 35: Nigeria's inflation



Sources: National Bureau of Statistics and Haver Analytics.

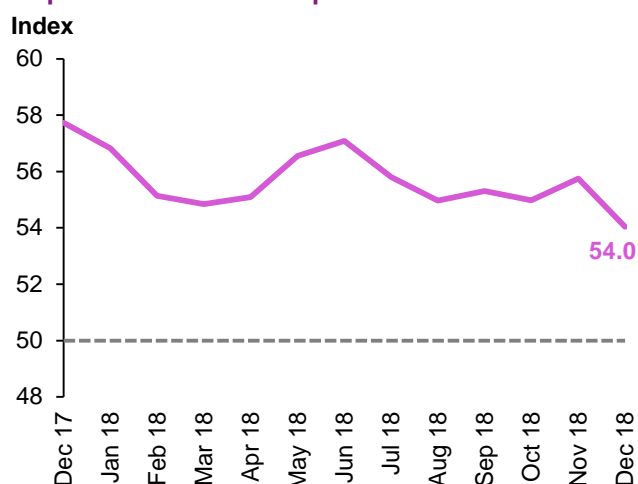
Purchase price inflation gathered pace during December, leading to the fastest rise in output prices in almost two years. The Stanbic IBTC Bank Nigeria PMI stood at 55.0 in December, down from 55.5 in November.

Both output and new orders continued to rise sharply, albeit at weaker rates than were seen earlier in 2018. In both cases, panellists indicated that growth was driven by improvements in customer demand. Firms responded to strong customer demand by raising their purchasing activity at a sharp and accelerated pace in December.

The United Arab Emirates (UAE)

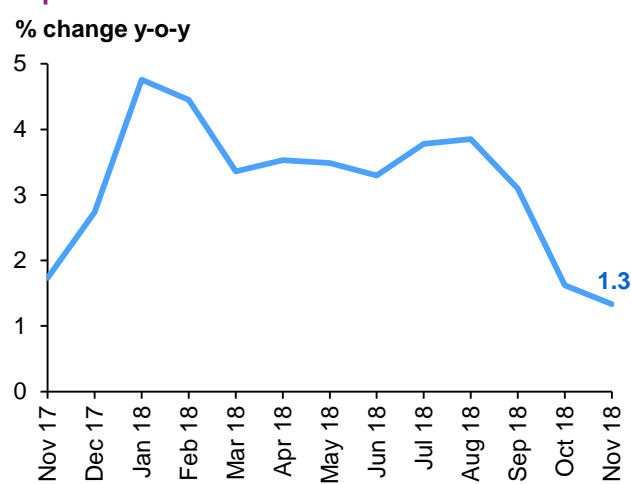
In the **UAE**, consumer price inflation notably eased in October and November 2018, to 1.6% y-o-y and 1.3%, respectively, from 3.1% in September. Prices decreased in the categories of food, textile and clothing, housing, water, electricity and gas, furniture and household goods, transportation, communications, recreation and cultural goods and services, education, and restaurants and hotels. The Emirates NBD UAE PMI dipped from 55.8 in November to 54.0 in December. This marked the slowest pace of expansion in the non-oil private sector since October 2016, and has weighed on the 2018 average, which finished the year at 55.5, from 56.1 in 2017. Output fell from 60.1 to 58.8 and new orders from 61.0 to 58.3.

Graph 3 - 36: UAE's composite PMIs



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 37: UAE's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Although the PMI remains in expansionary territory, the subcomponents of the survey suggest that this is continuing to come at a cost to businesses' margins, albeit to a lesser degree than seen in November.

Other Asia

Indonesia

Indonesia posted a trade deficit \$2.1 billion in November 2018, swinging from a \$0.2 billion surplus in the same month a year earlier. It was the second straight month of trade deficit and the largest since July 2013, as exports dropped while imports increased. Imports rose by 11.7% y-o-y to \$16.9 billion in November, following an upwardly revised 24% rise in the prior month. Purchases of non-oil and gas went up by 8.8% to \$14.0 billion while those of oil and gas surged by 28.6% to \$2.84 billion. Exports fell by 3.3% y-o-y to \$14.8 billion and after an upwardly revised 4.2% growth in the prior month. Exports of non-oil and gas products dropped by 4.1% to \$13.5 billion while those of oil and gas rose by 5.8% to \$1.37 billion. Growth in Indonesian manufacturing activity accelerated in December, to signal a positive end to the year. While the quarterly average for the final three months of 2018 was the weakest since the start of the year, other PMI indicators pointed to a brightening outlook for the sector in 2019. The headline Nikkei Indonesia Manufacturing PMI rose from 50.4 in November to 51.2 in December, indicating a modest improvement in the health of the sector. Despite stronger growth in December, the average PMI reading over the fourth quarter was the joint-weakest for the year, similar to 1Q18. December data brought signs of an improvement in demand conditions. Having declined in the previous two months, total new business rose at the end of the year, driven by stronger domestic demand. Higher overall sales encouraged manufacturing firms in Indonesia to expand production in the latest survey period. Output increased for a fifth straight month and at the fastest rate since May. The resumption of production activity previously disrupted by inclement weather also contributed to higher output.

Africa

Egypt

In **Egypt**, the pound exchange rate vs the dollar was stable in during October – December 2018, depreciating by only 0.1%. The Egyptian pound depreciated by 0.6% in the full year of 2018, compared to 3.0% appreciation in 2017. Inflation notably eased from 15.6% y-o-y in November to 11.1% in December, registering its lowest reading since May 2016. Inflation averaged at 14.7% in 4Q18. The central bank's inflation target for 4Q18 is 13%, with 16% as upper limit and lower limit of 10%. Total external debt continued to increase in 2Q18. It reached \$92.6 billion in 2Q18, from \$88.2 billion in the previous quarter, registering a 17.2% y-o-y increase. Unemployment rate stood at 10.0% in 3Q18, rising from 9.9% in 2Q18. The Emirates NBD Egypt PMI climbed to 49.6 in December, compared to 49.2 the previous month. While this is still short of the neutral 50.0 level which delineates contraction and expansion in the non-oil private sector, it is nevertheless a four-month high for the index, and there are other factors within the survey data which suggest that the Egyptian economy will begin 2019 in a relative position of strength. The annual average PMI scores have improved from 46.0 in 2016, to 47.5 in 2017 and 49.5 this year, and indications are that this improvement will continue in 2019. While output weakened at a more rapid pace in December than in November – 48.8 from 49.2 – new orders showed the highest reading since August. There was also an increase in firms' purchasing activity, with the index recording its highest reading since May.

Latin America

Argentina

The economy of **Argentina** shrank by 3.5% y-o-y in 3Q18, from a 4.0% contraction in 2Q18. Private consumption dropped by 4.3% y-o-y in 3Q18, from a 0.4% growth in the previous quarter. Government consumption also decreased by 5.1% y-o-y in 3Q18, from a 2.6% contraction in the previous quarter. GFCF suffered the sharpest drop of 11.1% y-o-y in 3Q18, following growth of 2.9% in 2Q18. In 3Q18, both of exports and imports dropped. Exports decelerated by 5.9% y-o-y in 3Q18, slower than 2Q18's drop of 8.0%, while imports switched from 2.9% y-o-y expansion in 2Q18, to 9.9% contraction in 3Q18. The monthly economic activity volume index on October showed a drop of 3.8% y-o-y, compared to a 5.9% contraction in September. Contractions noticed in the sectors of mining and quarrying, manufacturing, construction, wholesale and retail trade, hotels and restaurants, transportation and communication, financial intermediation, public administration and defence, and education.

Transition region

Czech Republic

In **Czech Republic**, the IHS Markit Czech Republic Manufacturing PMI fell to 49.7 in December, from 51.8 in November, indicating a fractional contraction in operating conditions across the goods-producing sector. A key contributing factor behind the deterioration in the overall health of the sector was a further decline in new business. Manufacturing firms registered a solid fall in new orders in December, with the rate of contraction accelerating to the quickest in six years. Meanwhile, inflationary pressures eased slightly in December. Rates of both input price and output charge inflation softened to the slowest since August 2017. Business confidence remained muted in December, with firms reporting concerns surrounding global trade tensions and lower client demand. The degree of optimism was the second-lowest in six years, behind November's recent low. GDP grew by 2.5% y-o-y in 3Q18, from 2.7% in the previous quarter due to slower pace of growth in household consumption, GFCF, and exports alongside higher increase in imports.

World Oil Demand

For **2018**, **world oil demand** growth was kept unchanged at 1.50 mb/d with total oil demand standing at 98.78 mb/d. This is despite an upwardly revised 3Q18, amid strong demand growth in the US counterbalanced by a downward revision to oil demand data in 4Q18, due to slower-than-expected oil requirements in OECD Asia Pacific and Other Asia.

Oil demand growth in the **OECD** region was revised marginally higher in 2018 due to better-than-expected data in OECD Americas, particularly in 3Q18, amid strong light distillate and diesel fuel performances in line with healthy petrochemical and industrial sectors. This was offset by a downward revision to OECD Asia Pacific due to weaker-than-expected oil demand in the petrochemical sector.

In the **non-OECD** region, oil demand growth was revised slightly lower in 2018, mainly reflecting slower momentum in Other Asia. Lower-than-expected demand from India during the month of November, due to slower construction activity, impacted demand for diesel fuel.

In **2019**, world oil demand is forecast to increase by 1.29 mb/d, unchanged from last month report, to average 100.08 mb/d of total global demand.

In the **OECD** region, oil demand is anticipated to add 0.25 mb/d to 2018 total oil requirement as OECD Americas increase the most amid steady NGL and middle distillate requirements.

In the **non-OECD** region, oil demand is projected to rise by 1.04 mb/d with lesser Chinese oil demand growth as compared with 2018; however, this will be counterbalanced by healthy gains in oil requirements in Latin America and the Middle East as compared to 2018 estimates.

World oil demand in 2018 and 2019

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

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17 Growth	%
Americas	25.06	25.20	25.40	25.73	25.64	25.49	0.44	1.75
of which US	20.27	20.57	20.64	20.88	20.78	20.72	0.45	2.20
Europe	14.30	13.95	14.19	14.73	14.46	14.33	0.04	0.25
Asia Pacific	8.06	8.54	7.65	7.70	8.26	8.04	-0.02	-0.30
Total OECD	47.42	47.69	47.24	48.16	48.36	47.87	0.45	0.95
Other Asia	13.24	13.55	13.84	13.38	13.93	13.68	0.43	3.25
of which India	4.53	4.83	4.74	4.40	4.99	4.74	0.21	4.59
Latin America	6.51	6.35	6.48	6.81	6.47	6.53	0.02	0.31
Middle East	8.17	8.19	7.96	8.40	7.90	8.11	-0.06	-0.73
Africa	4.20	4.35	4.32	4.27	4.38	4.33	0.13	3.01
Total DCs	32.13	32.44	32.60	32.86	32.68	32.64	0.52	1.61
FSU	4.70	4.66	4.65	4.94	5.01	4.82	0.12	2.45
Other Europe	0.72	0.73	0.69	0.73	0.82	0.74	0.03	3.48
China	12.32	12.28	12.84	12.65	13.07	12.71	0.39	3.18
Total "Other regions"	17.74	17.68	18.18	18.32	18.90	18.27	0.53	2.99
Total world	97.29	97.80	98.02	99.35	99.94	98.78	1.50	1.54

Note: * 2018 = Estimate.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 4 - 2: World oil demand in 2019*, mb/d

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18	
							Growth	%
Americas	25.49	25.46	25.64	26.01	25.90	25.76	0.26	1.03
of which US	20.72	20.82	20.85	21.14	21.02	20.96	0.24	1.15
Europe	14.33	13.98	14.19	14.75	14.47	14.35	0.02	0.13
Asia Pacific	8.04	8.53	7.61	7.68	8.23	8.01	-0.03	-0.34
Total OECD	47.87	47.98	47.44	48.44	48.61	48.12	0.25	0.53
Other Asia	13.68	13.91	14.21	13.75	14.31	14.05	0.37	2.70
of which India	4.74	5.03	4.93	4.58	5.18	4.93	0.19	4.05
Latin America	6.53	6.39	6.53	6.87	6.52	6.58	0.05	0.81
Middle East	8.11	8.25	8.01	8.47	7.96	8.17	0.06	0.74
Africa	4.33	4.46	4.43	4.37	4.48	4.44	0.11	2.45
Total DCs	32.64	33.01	33.19	33.46	33.27	33.23	0.59	1.80
FSU	4.82	4.75	4.74	5.03	5.11	4.91	0.09	1.87
Other Europe	0.74	0.75	0.71	0.75	0.84	0.76	0.02	2.69
China	12.71	12.61	13.18	12.99	13.42	13.05	0.34	2.67
Total "Other regions"	18.27	18.11	18.63	18.77	19.37	18.72	0.45	2.46
Total world	98.78	99.10	99.26	100.67	101.25	100.08	1.29	1.31

Note: * 2018 = Estimate and 2019 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

OECD

OECD Americas

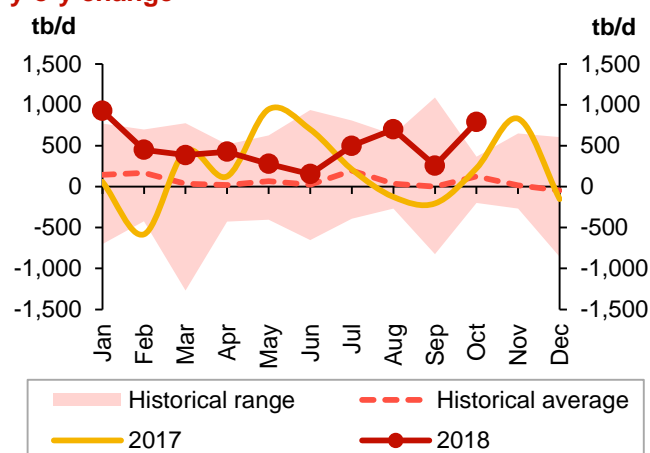
In 2018, **OECD Americas oil demand** is estimated to have increased by 0.44 mb/d over the previous year, to average 25.49 mb/d. For 2019, oil demand in the region is forecast to grow by 0.26 mb/d y-o-y, to average 25.76 mb/d.

US

October 2018, the month with the most recent available monthly **US oil demand** data, shows a sharp increase in oil requirements of around 3.9%, or 0.78 mb/d y-o-y, following 12 months of successive gains and showing the third-largest rise during the last twelve months. The strong October oil demand gains were essentially determined by a hike in diesel fuel demand, notably for the industrial sector, as well as requirements for the petrochemical sector, notably naphtha and liquid hydrocarbons at the lighter end of the barrel.

On the other hand, gasoline demand continued to shrink during October 2018 y-o-y, despite ongoing growth in the economy. Factors contributing to this decline included higher fuel price levels compared with the same month last year, a drop in vehicle sales and fewer miles travelled. Overall oil demand gains during October 2018 were also partly offset by shrinking jet/kerosene and residual fuel oil

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



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

requirements, the latter mainly as a result of fuel substitution.

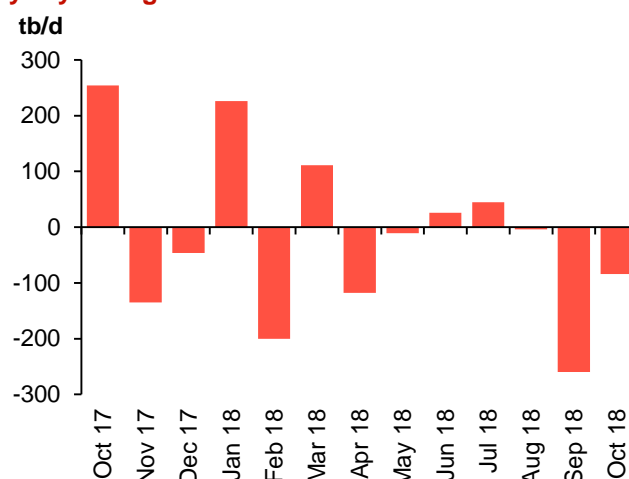
With data for 10 months in 2018, US oil demand seems to be growing solidly, in line with the general economic growth in the country.

Preliminary weekly data for November and December 2018 appear to further extend the existing positive overall picture. Gasoline demand is likely to remain in decline, while healthy crude production and petrochemical activity support gains in NGLs/LPG as well as diesel fuel usage.

Jet/kerosene demand increased during November 2018, but is expected to decline during December 2018, y-o-y.

The outlook for 2019 US oil demand depends on the development of the US economy, with risks being balanced as compared to last month's projections.

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



Source: US Energy Information Administration.

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

	<u>Oct 18</u>	<u>Oct 17</u>	<u>Change 2018/17</u> <u>tb/d</u>	<u>%</u>
LPG	2,778	2,396	382	15.9
Naphtha	267	216	51	23.6
Gasoline	9,273	9,357	-84	-0.9
Jet/kerosene	1,666	1,752	-86	-4.9
Diesel oil	4,378	4,011	367	9.1
Fuel oil	305	323	-18	-5.6
Other products	2,398	2,226	171	7.7
Total	21,065	20,281	783	3.9

Sources: US EIA and OPEC Secretariat.

Mexico

In **Mexico**, November 2018 oil demand declined. Gains in demand for jet/kerosene continue to have been more than offset by shrinking demand for all other main petroleum categories, notably gasoline, diesel fuel and residual fuel oil, mainly as a result of substitution with other energy commodities.

With data for 11 months in 2018, Mexican oil demand continues to decline as compared to the same period in 2017. Year-to-date in November, LPG, jet/kerosene and diesel fuel usage saw gains over the period, which were outweighed by shrinking demand in the remaining main petroleum product categories.

Mexican oil demand is expected to grow only slightly in 2019, with risks being skewed to the downside as compared to last month's projections, primarily depending on the country's economy and the degree of fuel substitution with other energy commodities.

Canada

Canada's oil demand in October 2018 showed a slight increase as compared to the same month a year ago. Demand for all the main petroleum product categories rose y-o-y, with the exception of declining LPG and naphtha demand. The strongest gains occurred for gasoline, diesel fuel and residual fuel oil.

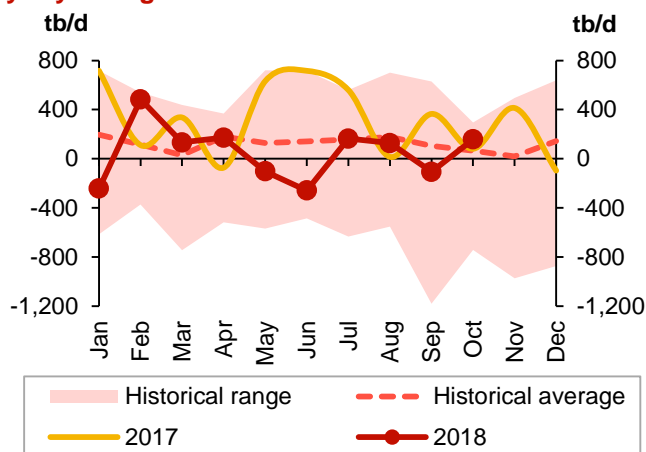
2019 projections for Canada's oil demand are unchanged from those in the previous month's report and foresee a slight growth y-o-y. Risks are relatively balanced towards the upside and downside.

OECD Europe

OECD Europe oil demand is estimated to have increased by 0.04 mb/d in 2018 y-o-y, and forecast to grow by 0.02 mb/d in 2019.

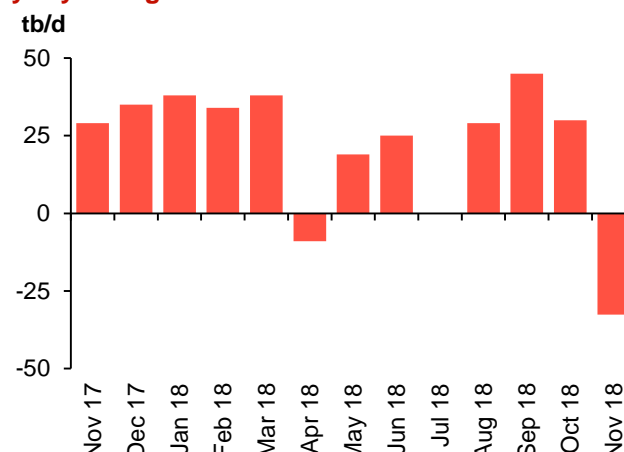
European oil demand turned positive in October 2018, following declining oil requirements for September 2018 y-o-y. October 2018 oil demand was in the positive y-o-y in France, the UK, Spain and a number of additional countries in line with the economic developments in the region. Nevertheless, October 2018 oil demand was sluggish in Germany as a result of low naphtha requirements in addition to declining gasoline and diesel fuel demand for the road transportation and industrial sectors. Strong declines were also observed during October 2018 in Turkey with losses mostly impacting diesel fuel demand. Preliminary data for November 2018 indicates a drop of approximately 0.28 mb/d y-o-y in the European Big 4 oil consumers with oil demand in Germany, France and the UK appearing to decline, while Italy saw an increase.

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



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

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



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

According to provisional figures from the European Automobile Manufacturer's Association (ACEA), European auto sales declined by 8% y-o-y in November 2018 for the third consecutive month.

The outlook for the region's oil demand in 2019 remains unchanged as compared to last month's projections and foresees 2019 oil demand growth expectations lower than those observed in 2018, as some of the positive effects during the current year and the previous three years will most likely weaken further.

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

	Nov 18	Nov 17	Change 2018/17	
			tb/d	%
LPG	437	480	-43	-8.9
Naphtha	586	672	-86	-12.8
Gasoline	1,129	1,111	18	1.6
Jet/kerosene	771	747	24	3.2
Diesel oil	3,240	3,414	-174	-5.1
Fuel oil	264	257	7	2.6
Other products	642	664	-22	-3.4
Total	7,069	7,345	-276	-3.8

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

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

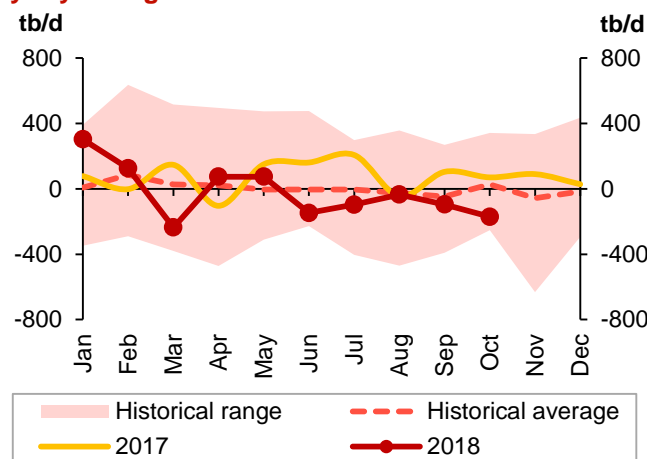
OECD Asia Pacific

OECD Asia Pacific oil demand fell by 0.02 mb/d in 2018 and is expected to decline again in 2019 by 0.03 mb/d.

Japan

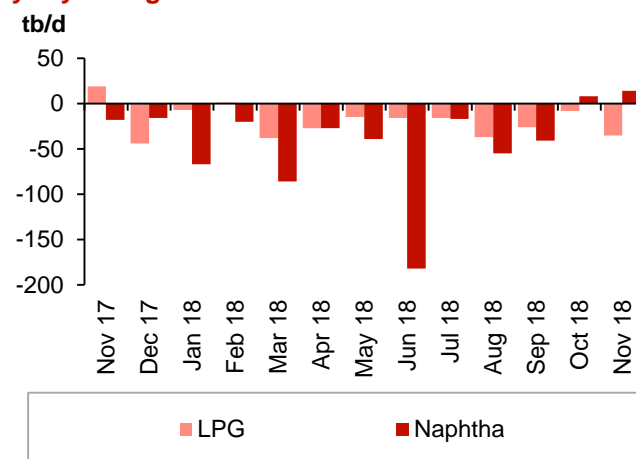
According to preliminary data from the Japanese Ministry of Economy Trade and Industry (METI), **Japanese oil demand** decreased sharply by 0.26 mb/d in November 2018 y-o-y. This monthly decrease was the largest during the last five months and the ninth in a row.

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



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

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



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

Demand for the majority of the main petroleum product categories fell, particularly for LPG, gasoline, jet/kerosene, diesel as well as residual fuel oil for electricity generation. In general, the usage of fossil fuels for electricity generation decreased in November 2018 y-o-y amid weather that was warmer than the same month in 2017 and the historical norm. Some gains were seen in the demand for naphtha, as well as for industrial diesel.

Risks for 2019 Japanese oil demand remain skewed towards the downside as a result of fuel substitution and the economic forecast.

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

	<u>Nov 18</u>	<u>Nov 17</u>	<u>Change 2018/17</u> <u>tb/d</u>	<u>%</u>
LPG	373	408	-35	-8.6
Naphtha	840	826	14	1.7
Gasoline	846	891	-45	-5.0
Jet/kerosene	485	630	-145	-23.0
Diesel oil	830	838	-8	-0.9
Fuel oil	228	264	-36	-13.7
Other products	379	383	-4	-1.2
Total	3,981	4,240	-259	-6.1

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

South Korea

October 2018 saw a strong y-o-y drop in **South Korea's oil demand**, particularly driven by sluggish petrochemical feedstock demand with naphtha requirements falling by a remarkable 0.15 mb/d, or 11.3%, as a result of maintenance and expansion activities in some petrochemical plants in the country. Moreover,

LPG, gasoline, diesel and residual fuel oil demand also remained in negative territory y-o-y, while, during the same month, jet/kerosene demand increased slightly, partly offsetting the overall losses. With available data up to October 2018, y-t-d oil demand increased slightly with the bulk of gains seen for LPG, naphtha and jet/kerosene. The outlook for South Korean oil demand during 2019 is positive, mainly as a result of optimistic expectations for the country's economy.

Australia

In **Australia**, with available data up to October 2018, y-t-d oil demand appears strong, showing growth of 0.04 mb/d, or 3.6%, with overwhelming gains seen for diesel.

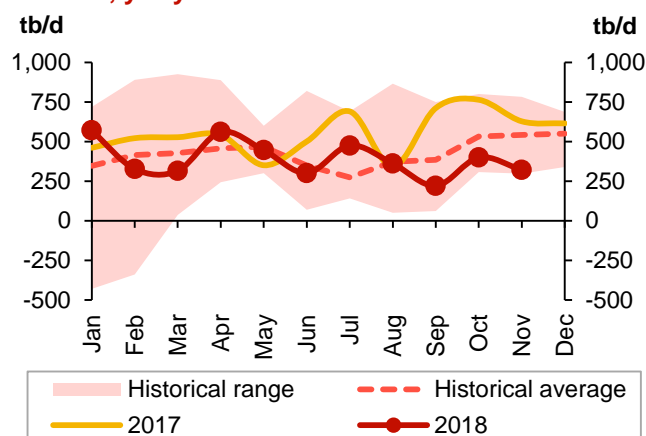
Non-OECD

China

In **China**, November 2018 oil demand increased by around 0.42 mb/d, driven by decent gains across the barrel with the exception of diesel fuel, which declined. Oil demand was largely characterized by better-than-anticipated performances from gasoline, jet/kerosene and naphtha, mainly as a result of expansions in the petrochemical sector and air travel data.

Gasoline demand surged, in line with increased driving and despite dwindling car sales. According to China's passenger car association and Haver Analytics, sales of passenger cars reached 21.2 million units in November, lower by 20% y-o-y. Sport Utility Vehicles (SUVs) posted declines of around 21% y-o-y, marking the fifth consecutive monthly decrease. Declines were more profound in the Multi-Purpose Vehicle (MPV) segment, which dropped by nearly 34% y-o-y.

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



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

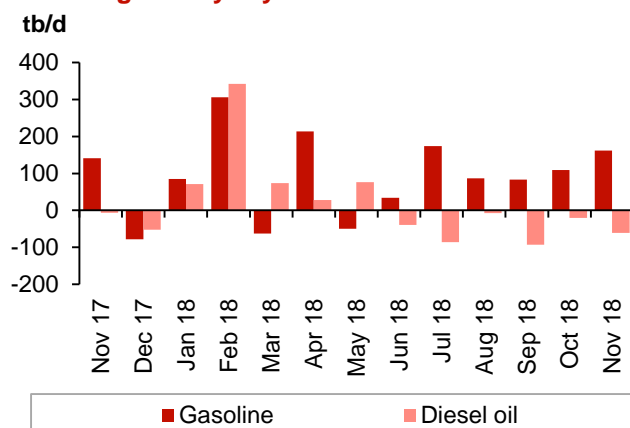
Jet/kerosene saw solid growth during the month of November, rising by 10% y-o-y, much in line with jet/kerosene globally, which was supported by improvements in the aviation sector. Fuel oil gained some ground, adding about 81 tb/d, or 18%, y-o-y as bunker fuel requirements provided support to the product.

On the other hand, diesel fuel consumption was largely flat, decreasing by a mere 0.3% y-o-y, reflecting the slower momentum seen in the manufacturing and construction sectors.

Going forward in 2019, oil demand growth in China is foreseen at slightly lower levels, as economic development is assumed to marginally ease. Furthermore, a continuation of the fuel quality programmes targeting fewer emissions as well as ongoing fuel substitution with natural gas and coal are also assumed in the 2019 projections. Gasoline and LPG are assumed to lead product growth to support vehicle sales and growing petrochemical sector.

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

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

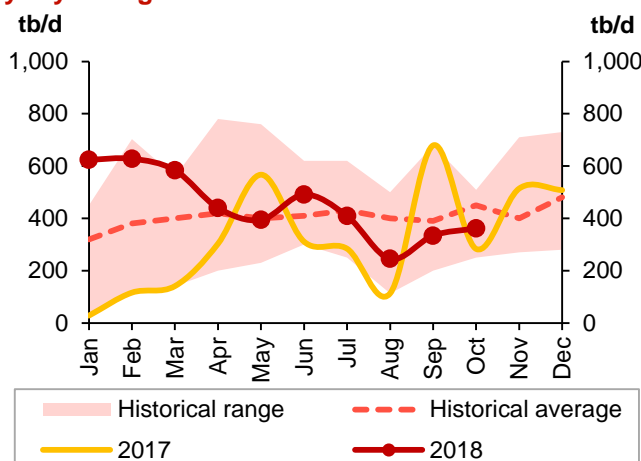


Sources: Facts Global Energy, China OGP (Xinhua News Agency), Argus Global Markets, JODI, National Bureau of Statistics, China and OPEC Secretariat.

Other Asia

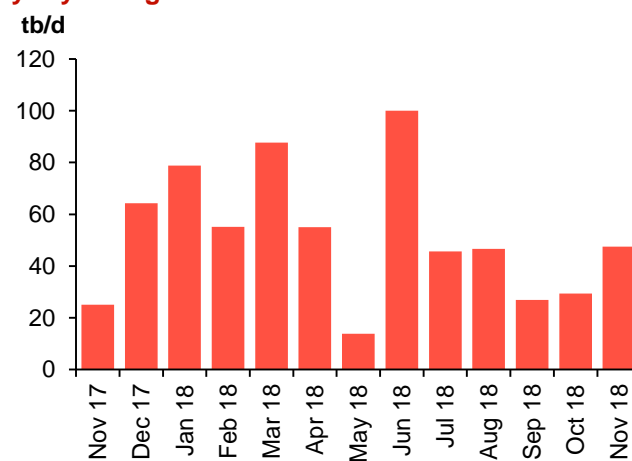
Other Asia's oil demand is estimated to grow at a rate of 0.43 mb/d in 2018 and forecast to increase by 0.37 mb/d in 2019. In 2019, Other Asia's oil demand growth is projected to rise at a healthy pace amid solid economic growth projections, but slower than in 2018. Within the region, India is foreseen to be the major contributor to growth and other countries in the region – such as Indonesia, Thailand, Singapore and the Philippines – are also projected to gain momentum. Light distillate products – which include LPG, naphtha and gasoline – will lead oil demand growth next year.

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



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

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



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

India

India's oil demand declined in November 2018 for the first time since March 2017, when cash limitations, following the demonization, stalled consumer spending. Product demand declined by 87 tb/d, or around 2%, y-o-y, primarily due to slower diesel requirements and an upward revision to November 2017 data.

On a year-to-date basis, with data from January to November 2018, oil demand in India showed a strong increase of around 0.21 mb/d compared with the same period in 2017. Solid growth in macroeconomic indicators, a steady monsoon season and the stabilizing impacts of government programmes introduced in recent years have impacted oil demand growth positively during the current year.

For November 2018, total product consumption reached 4.87 mb/d, with diesel fuel taking the lion's share of around 1.89 mb/d of total demand. Diesel was the major source of decline as the product dropped by nearly 0.1 mb/d, or 5%, y-o-y. The contraction in demand for diesel fuel resulted from slowing construction activity and a general decrease in overall economic activity.

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

	Nov 18	Nov 17	Change 2018/17 tb/d	%
LPG	795	862	-67	-7.8
Naphtha	320	290	30	10.3
Gasoline	590	543	48	8.8
Jet/kerosene	288	289	-1	-0.4
Diesel oil	1,885	1,981	-96	-4.9
Fuel oil	275	296	-21	-7.2
Other products	715	694	21	3.1
Total	4,869	4,956	-87	-1.8

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

World Oil Demand

On the other hand, gasoline demand increased in November, consistent with the positive growth trends seen since the beginning of the year and despite slower economic momentum. Gasoline growth of 48 tb/d y-o-y, or around 9%, was a result of increasing preferences for gasoline-driven vehicles, both two and four-wheelers, as well as improved road connectivity and the festival season during the month of November. Two-wheeler sales increased by around 7.1% y-o-y in November and by 10.7% year-to-date (from the period of April to November). Conversely, passenger car sales registered declines, dropping by around 1% y-o-y in November. LPG demand declined for the first time since July 2013, dropping by 67 tb/d, or 8% y-o-y, with total consumption at 0.8 mb/d. The decline was attributed to price fluctuations prompting lower stocking by distributors.

For 2019, India is still projected to be the main contributor to growth in the Other Asia region as demand is expected to pick up in 1Q19 and onward. Demand for oil products is projected at around 0.2 mb/d in 2019, mainly driven by middle distillates and gasoline.

Indonesia

In **Indonesia**, the latest available data for October 2018 shows rising demand for most products with gasoline and diesel leading the gains by 11 tb/d and 6 tb/d y-o-y, respectively. This resulted in total consumption reaching 1.60 mb/d, increasing by around 28 tb/d, or 2%, y-o-y.

Taiwan

In **Taiwan**, the latest available data from the month of October 2018 indicates decreasing oil requirements by 34 tb/d, or 3%, y-o-y. The bulk of the decline appeared to come from fuel oil, gasoline and naphtha as slower demand emerged from the industrial and transportation sectors.

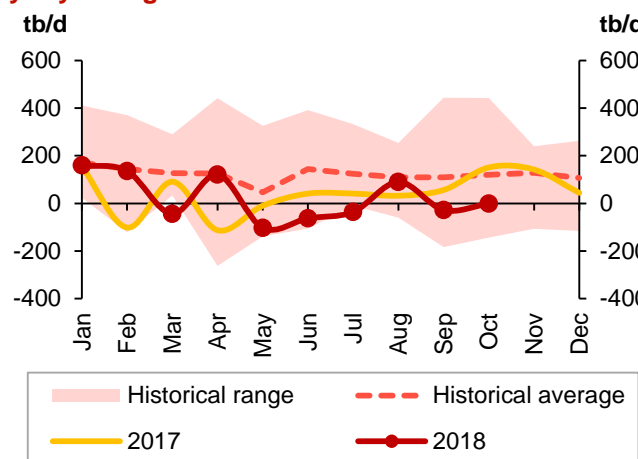
Latin America

Latin American oil demand growth is expected to be at 20 tb/d in 2018 and at 50 tb/d in 2019. Looking ahead, oil demand growth in Latin America in 2019 is expected to improve from the levels seen in 2018, driven by an improved economic outlook in addition to a lower base line of comparison. Brazil is projected to be the main contributor to growth, with diesel oil and gasoline showing higher growth potential in fuelling the industrial and transportation sectors.

Brazil

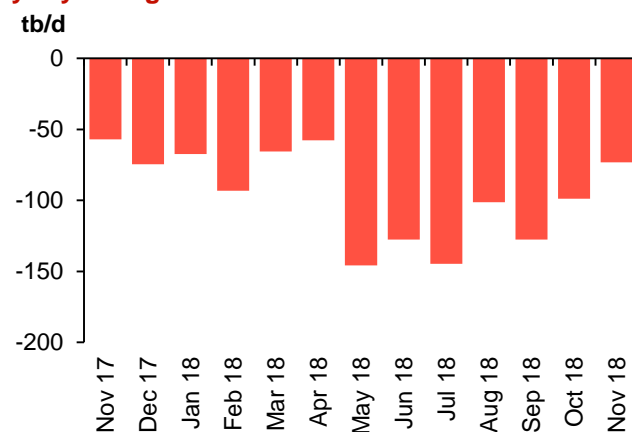
In **Brazil**, November 2018 oil demand growth was positive for the second consecutive month, increasing from last year's levels by 43 tb/d, or more than 2.0% y-o-y, largely as a result of overall higher demand for ethanol over gasoline.

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



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

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



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

Gasoline consumption decreased during the month by 73 tb/d, or around 10.0% y-o-y, mainly as the product was more expensive than ethanol, inducing drivers with flex fuel engines to take advantage of price differences between the two products. Gasoline retail prices were at 4.59 Reais/liter in November 2018.

Ethanol, on the other hand, recorded considerable gains y-o-y, increasing by a sharp 0.13 mb/d, or around 40%, y-o-y in percentage terms as a result of more competitive pricing. Ethanol prices reached 2.92 Reais/litre in November mainly in response to a higher supply of sugar cane. Diesel demand edged higher, up by 20 tb/d, or 2% y-o-y, as a result of some improvement in economic conditions on the one hand and a lower base of comparison, on the other. Fuel oil demand saw the largest share of losses, dipping by around 38 tb/d, a decrease of around 33% y-o-y, as a result of an ease in industrial production output and slower power generation demand.

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

	Nov 18	Nov 17	Change 2018/17 tb/d	%
LPG	230	230	0	-0.2
Naphtha	147	145	2	1.4
Gasoline	648	721	-73	-10.2
Jet/kerosene	123	118	5	4.2
Diesel oil	993	973	20	2.1
Fuel oil	76	114	-38	-33.1
Other products	487	360	127	35.4
Total	2,703	2,660	43	1.6

Note: * = Inland deliveries.

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

Argentina

In **Argentina**, October 2018 recorded declines in oil requirements for the second consecutive month as industrial fuels weakened. However, gasoline and jet/kerosene were broadly flat, to slightly increasing, with gasoline rising by 7% y-o-y and jet/kerosene by 3% y-o-y.

Ecuador

In **Ecuador**, oil demand was higher during the month of October 2018 as most products recorded steady gains. Industrial and transportation fuels, primarily fuel oil, gasoline and jet/kerosene gained as much as 22%, 13% and 14%, y-o-y, respectively, while naphtha offset some of the gains to decline by 31% y-o-y.

Table 4 - 8: Ecuador's oil demand, tb/d

	Nov 18	Nov 17	Change 2018/17 tb/d	%
LPG	39	35	4	11.4
Naphtha	9	13	-4	-30.8
Gasoline	76	67	9	13.4
Jet/kerosene	8	7	1	14.3
Diesel oil	100	89	11	12.4
Fuel oil	39	32	7	21.9
Other products	21	22	-1	-4.5
Total	292	265	27	10.2

Sources: JODI and OPEC Secretariat.

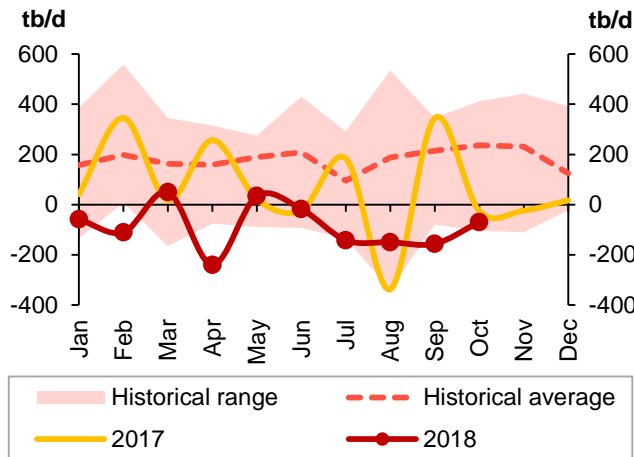
Middle East

For 2018, **Middle East oil demand** is estimated to record a decline of 60 tb/d, while, in 2019, it is projected to increase by 60 tb/d.

Saudi Arabia

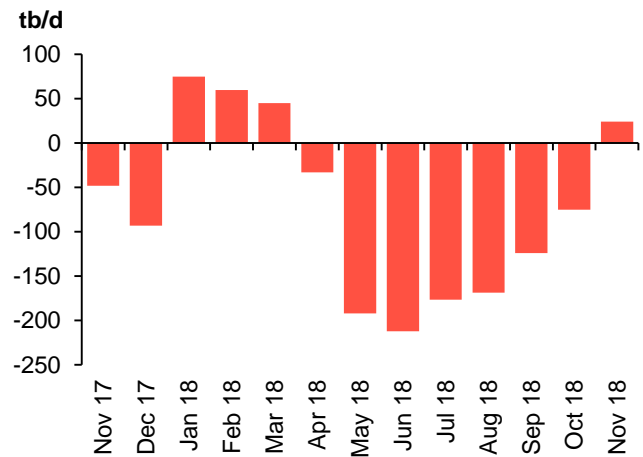
In **Saudi Arabia**, oil demand weakened in November 2018 by 59 tb/d, or 3%, y-o-y, marking the eighth consecutive monthly decline. Total product consumption sunk as low as 2.10 mb/d. Year-to-date, oil demand dropped sharply in 2018 with a y-t-d decline of 0.16 mb/d compared with the same period in 2017.

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



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

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



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

In November 2018, mixed product performances were observed with the lighter part of the barrel posting some gains, while the middle of the barrel declined. Diesel fuel requirements shed 34 tb/d, or 6%, y-o-y on the back of slower construction activity and efficiency gains across various sectors. At the bottom of the barrel, crude oil for power generation was unusually higher y-o-y, rising by 24 tb/d, while fuel oil was largely flat y-o-y, despite seasonally lower requirements for air conditioning usage.

Generally, the new policies of reducing subsidies for electricity in the residential and industrial sectors were a major factor in reducing consumption levels in Saudi Arabia in 2018. However, consumption of LPG was higher by around 10 tb/d, on the back of higher demand in the petrochemical sector.

Iraq

In **Iraq**, November 2018 oil demand growth accelerated at a healthy pace with oil demand increasing by 0.13 mb/d, or 22%, y-o-y. Oil demand has been increasing at a healthy rate since June 2018, as demand for fuel oil boosted growth. All product categories registered positive growth with fuel oil rising the most at 0.14 mb/d to satisfy power generation requirements and jet/kerosene added 20 tb/d in November in line with improvements in passenger travel data. Total product demand reached 0.75 mb/d in November.

In 2019, oil demand growth is expected to gain momentum over the levels experienced in 2018 mainly as a result of the predicted improvement in the economy. On the other hand, geopolitical concerns, substitution towards other fuels, as well as subsidy reduction policies are assumed to limit demand growth potential. Transportation fuels – gasoline and diesel oil – are anticipated to be the products leading oil demand growth.

World Oil Supply

Non-OPEC oil supply growth in 2018 – including the State of Qatar – was revised up by 0.05 mb/d from the previous MOMR and is now estimated at 2.61 mb/d, for an average of 62.06 mb/d. The main reason for this revision was upward adjustments to historical production data in the US, Canada, Russia and China, as well as a higher supply forecast for 4Q18 by 0.19 mb/d, mainly for the US. The expected y-o-y growth of 2.20 mb/d in the US, along with higher production in Canada, Russia, Kazakhstan, Qatar, other OECD Europe and Ghana will support non-OPEC supply growth in 2018, while Mexico, Norway and Vietnam will show the largest declines.

Non-OPEC oil supply growth in 2019 was revised down by 0.06 mb/d, mainly due to a downward revision in Canada's supply forecast, to stand at 2.10 mb/d for an average of 64.16 mb/d for the year. The US, Brazil, Russia, the UK, Australia and Ghana are the main drivers for next year's growth, while Mexico and Norway are expected to see sizeable declines, along with a minor decline in Canada. The 2019 non-OPEC supply forecast is faced with many uncertainties, including changes in the intensity of drilling and completion in the US shale industry, bottlenecks in the transportation of oil in the Permian Basin and Western Canada, as well as the realization of final investment decisions (FIDs) regarding projects in other non-OPEC countries.

OPEC NGLs in 2018 and 2019 are expected to grow by 0.04 mb/d and 0.11 mb/d, yet at lower average levels of 4.98 mb/d and 5.09 mb/d, respectively, following the exit of Qatar from OPEC.

Non-OPEC supply preliminary data in December, including OPEC NGLs, showed an increase of 0.40 mb/d m-o-m to average 68.44 mb/d, higher by 3.24 mb/d y-o-y. However, preliminary data indicates that global oil supply decreased in December by 0.35 mb/d m-o-m to average 100.02 mb/d.

In December 2018, **OPEC crude oil production** decreased by 751 tb/d to average 31.58 mb/d, according to secondary sources.

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

Region	2018	Change 2018/17	2019	Change 2019/18
OECD Americas	23.86	2.37	25.37	1.51
OECD Europe	3.76	-0.07	3.77	0.01
OECD Asia Pacific	0.41	0.02	0.46	0.05
Total OECD	28.03	2.32	29.61	1.58
Other Asia	3.52	-0.09	3.46	-0.05
Latin America	5.17	0.02	5.50	0.34
Middle East	3.21	0.07	3.23	0.02
Africa	1.52	0.04	1.57	0.05
Total DCs	13.41	0.03	13.76	0.35
FSU	14.29	0.24	14.44	0.16
Other Europe	0.12	-0.01	0.12	0.00
China	3.97	0.00	3.95	-0.02
Non-OPEC production	59.81	2.58	61.88	2.07
Processing gains	2.25	0.04	2.28	0.03
Non-OPEC supply	62.06	2.61	64.16	2.10

Note: * 2018 = Estimate and 2019 = Forecast.

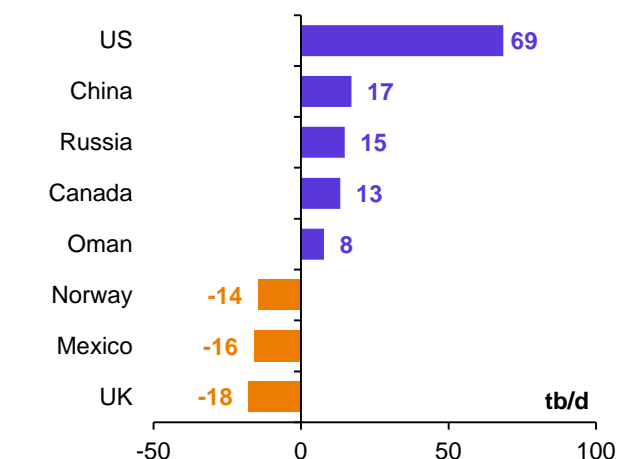
Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Monthly revisions to non-OPEC supply growth forecast

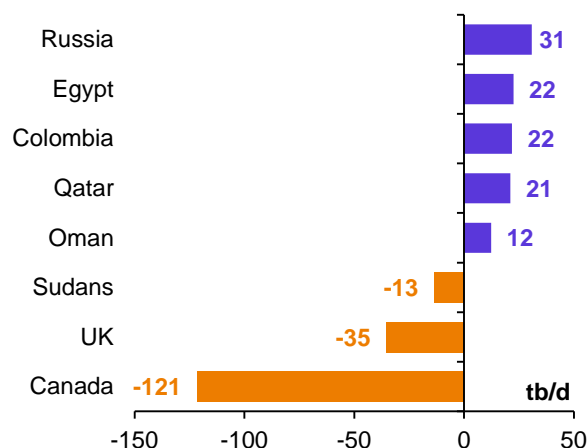
The **non-OPEC oil supply growth forecast for 2018** was revised up by 0.05 mb/d to average 2.61 mb/d. On a country-by-country basis, the expected annual growth in the US, China, Russia, Canada and Oman was revised up, mostly in 4Q18, while the annual oil supply growth forecasts for the UK, Mexico, Norway and Kazakhstan were revised down, based on the latest data for December (**Graph 5 - 1**).

Graph 5 - 1: MOMR Jan 19/Dec 18 revisions in 2018* annual supply changes



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

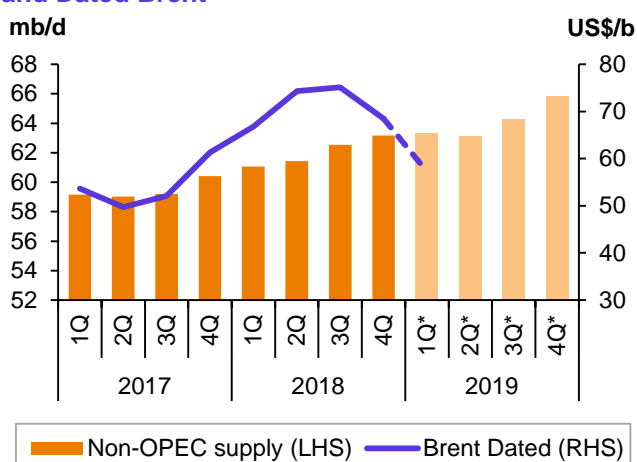
Graph 5 - 2: MOMR Jan 19/Dec 18 revisions in 2019* annual supply changes



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

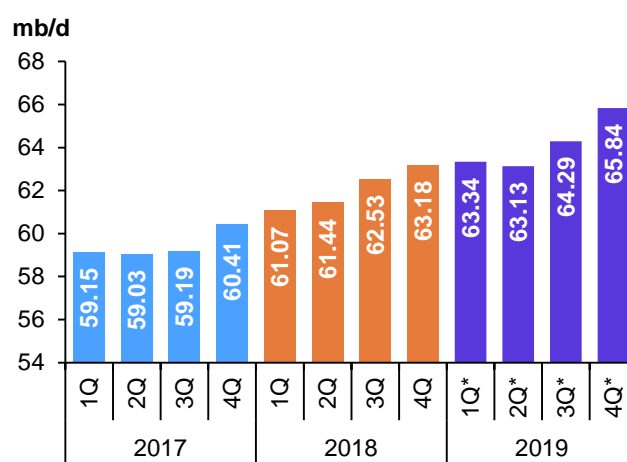
Monthly revisions to **non-OPEC oil supply growth for 2019**, as seen in **Graph 5 - 2**, indicate upward adjustments for Russia, Egypt, Colombia, Qatar, Oman and Azerbaijan, while annual oil supply forecasts, mainly for Canada, by 121 tb/d, the UK and the Sudans were revised down based on the latest data for December 2018. As a result, the y-o-y growth forecast for non-OPEC supply in 2019 was revised down by 0.06 mb/d to average 2.10 mb/d.

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



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

Graph 5 - 4: Non-OPEC quarterly oil supply



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

Non-OPEC oil supply in 2018 and 2019

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

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17	
							Growth	%
Americas	21.49	22.93	23.35	24.53	24.61	23.86	2.37	11.03
of which US	14.40	15.53	16.22	17.17	17.48	16.61	2.20	15.29
Europe	3.83	3.92	3.73	3.63	3.77	3.76	-0.07	-1.78
Asia Pacific	0.39	0.40	0.38	0.42	0.44	0.41	0.02	4.49
Total OECD	25.71	27.25	27.46	28.58	28.81	28.03	2.32	9.02
Other Asia	3.61	3.60	3.55	3.45	3.47	3.52	-0.09	-2.61
Latin America	5.15	5.15	5.20	5.10	5.23	5.17	0.02	0.32
Middle East	3.13	3.16	3.21	3.22	3.24	3.21	0.07	2.29
Africa	1.48	1.51	1.52	1.55	1.49	1.52	0.04	2.55
Total DCs	13.38	13.41	13.47	13.32	13.43	13.41	0.03	0.24
FSU	14.05	14.10	14.14	14.33	14.57	14.29	0.24	1.67
of which Russia	11.17	11.14	11.18	11.44	11.61	11.35	0.17	1.56
Other Europe	0.13	0.12	0.12	0.12	0.12	0.12	-0.01	-4.58
China	3.97	3.94	4.00	3.94	3.99	3.97	0.00	-0.12
Total "Other regions"	18.15	18.17	18.25	18.39	18.68	18.37	0.22	1.24
Total non-OPEC production	57.24	58.83	59.19	60.29	60.93	59.81	2.58	4.50
Processing gains	2.21	2.25	2.25	2.25	2.25	2.25	0.04	1.67
Total non-OPEC supply	59.45	61.07	61.44	62.53	63.18	62.06	2.61	4.39

Note: * 2018 = Estimate.

Non-OPEC supply includes Qatar.

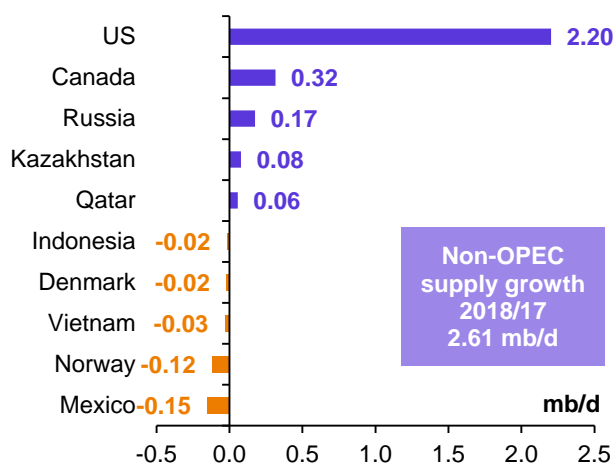
Source: OPEC Secretariat.

OECD

Total **OECD oil supply** in 2018 is expected to grow by 2.32 mb/d to average 28.03 mb/d. This has been revised up by 31 tb/d since the last MOMR. OECD Americas is forecast to see an increase of 2.37 mb/d y-o-y to average 23.86 mb/d, while oil supply in OECD Europe will show a contraction of 0.07 mb/d to average 3.76 mb/d (of which 3.02 mb/d is from the North Sea) after a downward revision by 37 tb/d. Supply from OECD Asia Pacific is expected to grow by 0.02 mb/d y-o-y to average 0.41 mb/d.

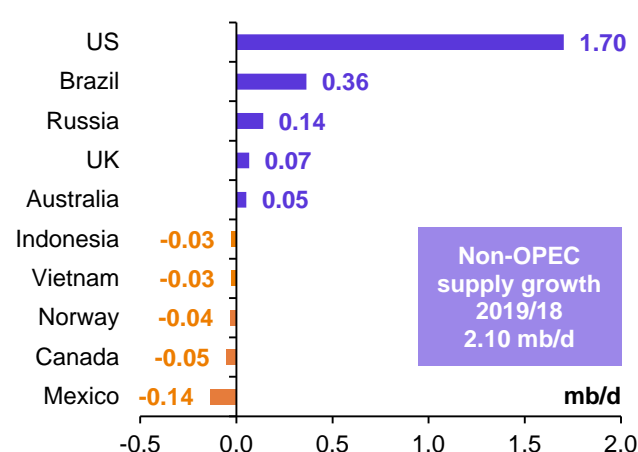
Yearly growth of 1.58 mb/d is forecast for OECD oil supply in 2019 to average 29.61 mb/d. OECD Americas, OECD Europe and OECD Asia Pacific all are expected to grow next year by 1.51 mb/d, 0.01 mb/d and 0.05 mb/d to average 25.37 mb/d, 3.77 mb/d and 0.46 mb/d, respectively.

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



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

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



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

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

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18 Growth	%
Americas	23.86	24.60	24.76	25.61	26.51	25.37	1.51	6.34
of which US	16.61	17.60	17.85	18.50	19.27	18.31	1.70	10.26
Europe	3.76	3.81	3.62	3.71	3.94	3.77	0.01	0.28
Asia Pacific	0.41	0.44	0.45	0.47	0.49	0.46	0.05	13.28
Total OECD	28.03	28.84	28.84	29.79	30.94	29.61	1.58	5.62
Other Asia	3.52	3.49	3.44	3.46	3.46	3.46	-0.05	-1.53
Latin America	5.17	5.37	5.42	5.51	5.73	5.50	0.34	6.51
Middle East	3.21	3.22	3.22	3.24	3.24	3.23	0.02	0.73
Africa	1.52	1.52	1.53	1.59	1.62	1.57	0.05	3.17
Total DCs	13.41	13.59	13.60	13.80	14.05	13.76	0.35	2.64
FSU	14.29	14.53	14.36	14.38	14.51	14.44	0.16	1.09
of which Russia	11.35	11.54	11.40	11.50	11.50	11.49	0.14	1.23
Other Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.00	-1.08
China	3.97	3.99	3.94	3.93	3.95	3.95	-0.02	-0.41
Total "Other regions"	18.37	18.64	18.41	18.42	18.58	18.51	0.14	0.75
Total non-OPEC production	59.81	61.07	60.86	62.02	63.57	61.88	2.07	3.46
Processing gains	2.25	2.28	2.28	2.28	2.28	2.28	0.03	1.25
Total non-OPEC supply	62.06	63.34	63.13	64.29	65.84	64.16	2.10	3.38

Note: * 2018 = Estimate and 2019 = Forecast.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

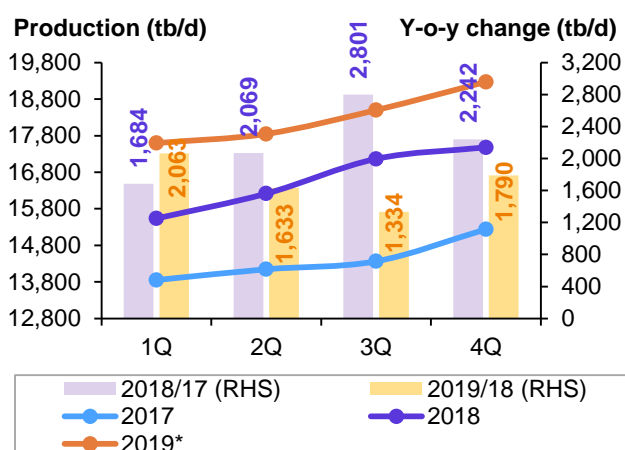
OECD Americas

US

US crude oil output (including lease condensate) in October showed an increase of 0.08 mb/d to average 11.54 mb/d compared with growth of 0.13 mb/d in September. US crude oil output in October was higher by 1.83 mb/d, or 19%, y-o-y.

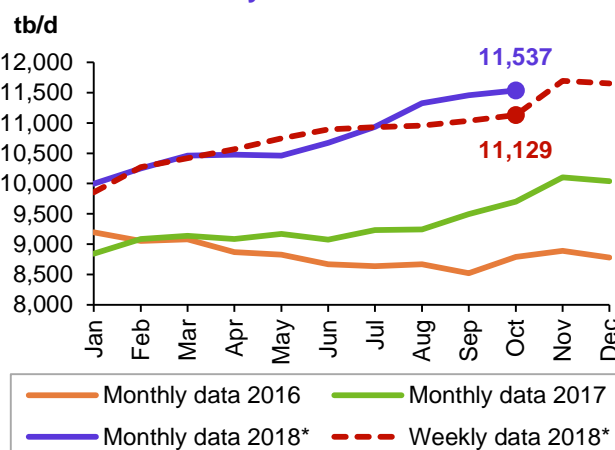
With regard to production by US state, the main m-o-m increase came from North Dakota (PADD 2) at 31 tb/d to average 1,369 tb/d – mainly from the prolific Williston Basin in the Bakken shale, from New Mexico by 33 tb/d to average 772 tb/d – mainly from the Eagle Ford, and from the state of Texas at 18 tb/d to average 4.70 mb/d. Crude oil output in Colorado, Oklahoma and Alaska also increased m-o-m in October, while oil output from the Gulf of Mexico (GoM) declined by 29 tb/d compared to a month earlier to average 1.74 mb/d and was lower by 178 tb/d from its peak in August 2018.

Graph 5 - 7: US quarterly liquids supply



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

Graph 5 - 8: US monthly crude oil production in 2016-2018 vs. weekly forecast in 2018

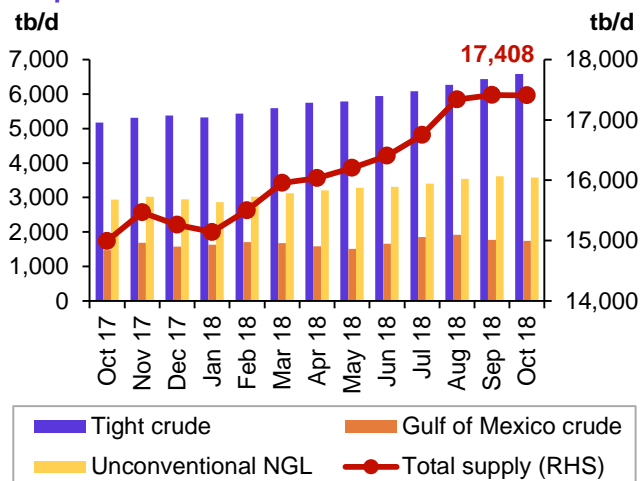


Note: * 2018 = Estimate.
Sources: US EIA and OPEC Secretariat.

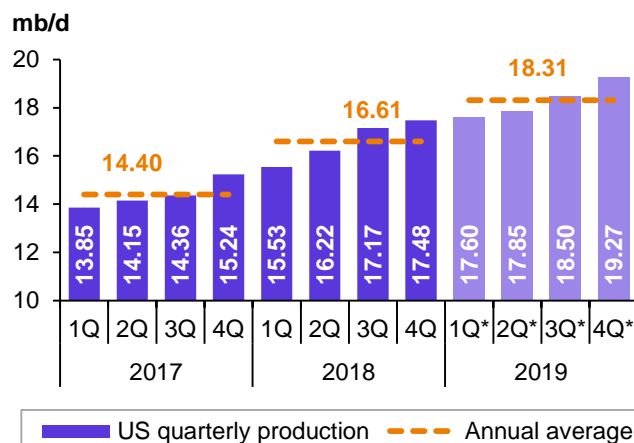
Oil production in GoM dropped by 178 tb/d within two consecutive months since its peak in August as the region was affected mainly by shut-in production due to tropical storm Gordon as well as the less-affected production due to Hurricane Michael. However, oil production in October was higher by 0.27 mb/d y-o-y. Oil production from GoM is likely to grow by 0.05 mb/d to average 1.73 mb/d in 2018, with similar growth expected for next year, following production ramp-ups coming from Big Foot, which started up in November, as well as from Shell's Appomattox project.

US crude oil production increased by 1.55 mb/d in the first three quarters of 2018 to average 10.76 mb/d y-o-y. In the first nine months of 2018, approximately 58% of total crude oil output in the US, at an average of 6.2 mb/d, came from shale plays, mainly from the Permian Basin in Texas, which amounted to approximately 2.75 mb/d. Total output at the Permian Basin, including conventional oil, reached 3.7 mb/d in the middle of 4Q18, exceeding pipeline capacity in the region.

US liquids output in October (excluding processing gains) showed a steady production level at an average of 17.41 mb/d compared with a month earlier, up by 2.42 mb/d y-o-y. According to the EIA, m-o-m US liquids supply growth in October was supported by growth in crude oil production of 0.08 mb/d, while NGL output showed a decline of 51 tb/d m-o-m to 4.58 mb/d. The output of other non-conventional liquids, mainly biofuels, is estimated to have decreased m-o-m by 34 tb/d to 1.29 mb/d.

Graph 5 - 9: US monthly liquids supply by key component

Source: US EIA and OPEC Secretariat.

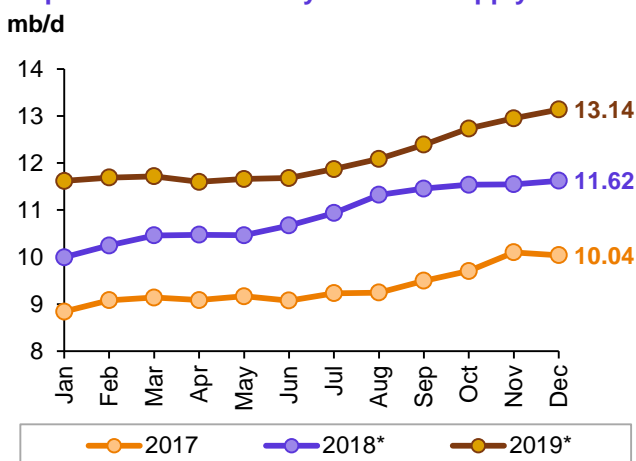
Graph 5 - 10: US total liquids supply quarterly

Note: * 1Q19-4Q19 = Forecast.

Sources: US EIA and OPEC Secretariat.

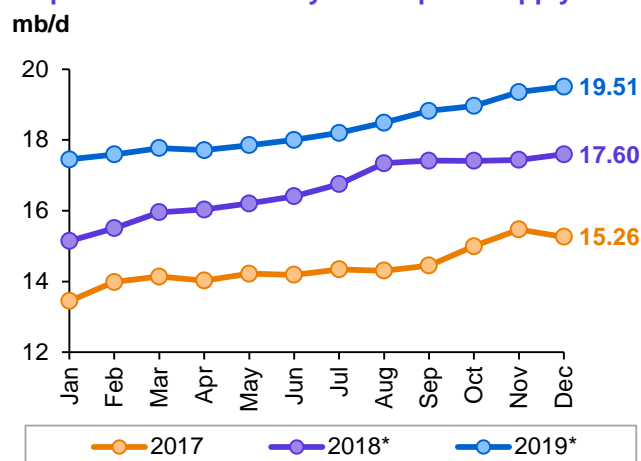
US liquids supply in 2018 is expected to grow by 2.20 mb/d to average 16.61 mb/d, revised up by 69 tb/d from the previous MOMR, following a re-assessment of the production estimate for 4Q18 by 281 tb/d.

Consequently, the US liquids supply forecast for 2019 rose to average 18.31 mb/d. Nevertheless, y-o-y growth was kept unchanged at 1.70 mb/d for the next year, in line with last month's MOMR.

Graph 5 - 11: US monthly crude oil supply

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

Graph 5 - 12: US monthly total liquids supply

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

US tight crude output in October 2018 is estimated to have grown by 0.15 mb/d m-o-m to average 6.58 mb/d, an increase of 1.41 mb/d y-o-y, according to preliminary shale and tight play oil production estimates. Crude output from shale and tight formations through horizontal wells in the Permian Basin was up by 86 tb/d in October m-o-m to average 3.11 mb/d, followed by an increase of 12 tb/d m-o-m at Eagle Ford to average 1.26 mb/d. Oil output in the Niobrara play was up by 7 tb/d to average 0.47 mb/d, while m-o-m growth of 34 tb/d was seen in the Bakken play to average 1.37 mb/d. Tight crude output in other shale plays increased by a total of 14 tb/d m-o-m in October to average 0.38 mb/d.

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

	<u>2016</u>	<u>2017</u>	<u>Change</u> <u>2017/16</u>	<u>2018*</u>	<u>Change</u> <u>2018/17</u>	<u>2019*</u>	<u>Change</u> <u>2019/18</u>
Tight crude	4.24	4.71	0.47	6.23	1.52	7.40	1.17
Gulf of Mexico crude	1.60	1.68	0.08	1.73	0.05	1.78	0.05
Conventional crude oil	2.99	2.96	-0.03	2.94	-0.02	2.92	-0.02
Unconventional NGLs	2.58	2.77	0.19	3.27	0.50	3.70	0.43
Conventional NGLs	0.93	1.01	0.08	1.10	0.09	1.15	0.05
Biofuels + Other liquids	1.27	1.27	0.00	1.33	0.06	1.36	0.03
US total supply	13.61	14.40	0.80	16.61	2.20	18.31	1.70

Note: * 2018 = Estimate and 2019 = Forecast.

Sources: US EIA, Rystad Energy and OPEC Secretariat.

On a yearly basis, US tight crude for 2018 is forecast to grow by 1.52 mb/d to average 6.23 mb/d, revised up by 0.04 mb/d from last month's assessment. Tight crude production from the Permian Basin is expected to grow by 0.90 mb/d y-o-y to reach an average of 2.81 mb/d. The Permian's share of US tight crude growth in 2018 would be around 45%. It is worth pointing out that y-t-d (January-October), tight crude production from the Bakken shale play in North Dakota increased by 0.19 mb/d y-o-y to average 1.23 mb/d. In the same period, tight oil output in the Permian, Eagle Ford and Niobrara-Codell plays increased, respectively, by 0.88 mb/d to average 2.72 mb/d, by 0.10 mb/d to average 1.18 mb/d and by 0.10 mb/d to average 0.43 mb/d.

Table 5 - 5: US tight crude production growth

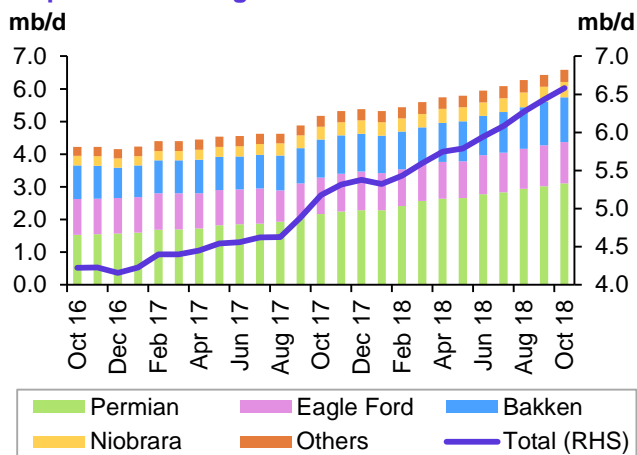
<u>Shale play</u>	<u>2017</u>		<u>2018*</u>		<u>2019*</u>	
<u>tb/d</u>	<u>Production</u>	<u>Y-o-y</u> <u>change</u>	<u>Production</u>	<u>Y-o-y</u> <u>change</u>	<u>Production</u>	<u>Y-o-y</u> <u>change</u>
Permian tight	1.91	0.45	2.81	0.90	3.41	0.60
Bakken shale	1.06	0.03	1.26	0.20	1.48	0.22
Eagle Ford shale	1.09	-0.08	1.20	0.11	1.32	0.12
Niobrara shale	0.34	0.04	0.46	0.12	0.57	0.11
Other tight plays	0.31	0.02	0.50	0.19	0.62	0.12
Total	4.71	0.47	6.23	1.52	7.40	1.17

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

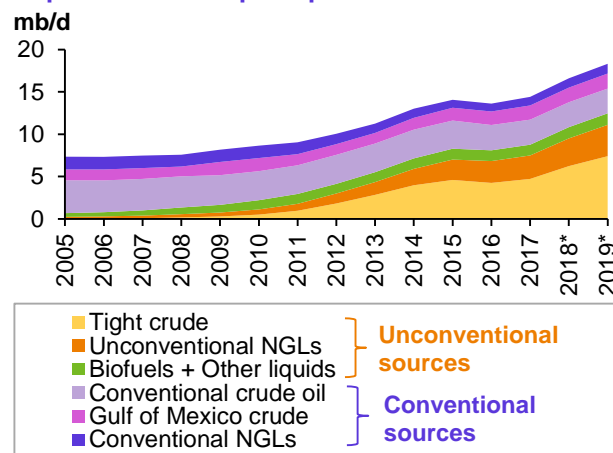
Y-o-y growth in US tight crude for 2019 will occur at a slower pace of 1.17 mb/d to average 7.40 mb/d, which is 0.35 mb/d less than the estimate for 2018, due to fundamental constraints, mainly limited pipeline capacity to transfer Permian oil to the USGC. Tight crude production from the Permian Basin is likely to grow by 0.60 mb/d to average 3.41 mb/d, which is 33%, or 0.30 mb/d, less than expected for 2018. In North Dakota, production growth from the Bakken shale is expected at 0.22 mb/d to average 1.48 mb/d, while an increase of 0.12 mb/d from the Eagle Ford shale is also anticipated to reach an average 1.32 mb/d. For the Niobrara and other shale regions, y-o-y growth of 0.11 mb/d to average 0.57 mb/d and 0.12 mb/d to average 0.62 mb/d is forecast, respectively.

Graph 5 - 13: US tight crude breakdown



Sources: US EIA and OPEC Secretariat.

Graph 5 - 14: US liquids production breakdown



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

US oil rig count

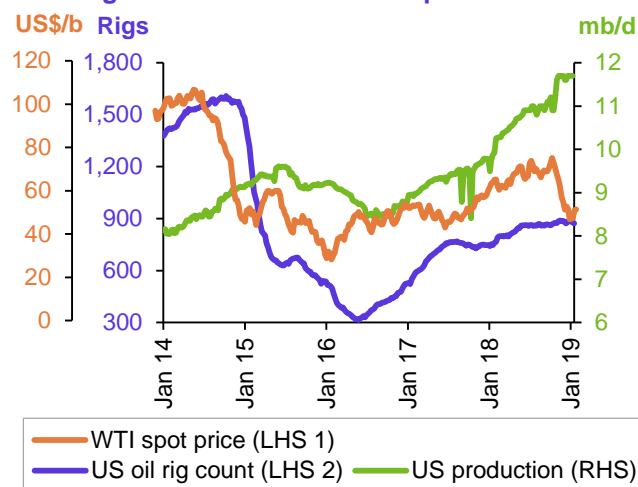
The **total US oil and gas rig count** remained unchanged at 1,075 rigs w-o-w for the week ending 11 January 2019. However, the total US oil and gas rig count added 136 units y-o-y.

Concerning the **oil and gas split**, while 4 units were added in gas fields to reach 202 rigs, oil rigs decreased by 4 units m-o-m to reach 873 rigs. The corresponding y-o-y increase for oil rigs was 121 units, or 16.1%.

Regarding the **drilling trajectory**, the number of horizontal rigs (active in oil and gas fields) was up by 3 units m-o-m to reach 948 rigs.

On a **monthly average**, by **basin**, the oil rig count in the Permian Basin was down by 5 units in December 2018, m-o-m to average 487 rigs. While in the Eagle Ford region, the number of oil rigs added was 2 units m-o-m to average 71 rigs, the Williston Basin oil rig count declined by 1 unit to 55 rigs in December compared to a month earlier.

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



Sources: Baker Hughes, US EIA and OPEC Secretariat.

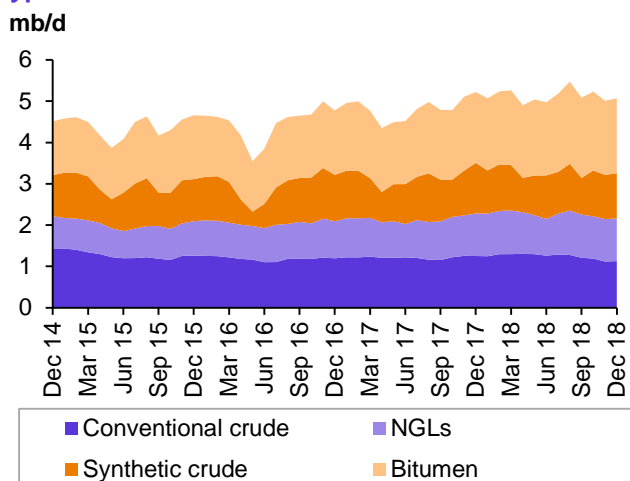
Canada

Canada's liquids supply declined by 0.39 mb/d in September m-o-m to average 5.12 mb/d, following a m-o-m increase of 0.29 mb/d in August. Nevertheless, September output was higher by 0.29 mb/d y-o-y. The main reason for the m-o-m decline was due to the drop in oil sands production by 0.29 mb/d to average 2.87 mb/d. Oil sands production is expected to increase by more than 0.14 mb/d in 2H18 compared to 1H18. Similarly, conventional crude oil production decreased by 67 tb/d m-o-m to average 1.21 mb/d. Canadian NGLs also declined m-o-m by 32 tb/d in September to average 1.04 mb/d.

Preliminary indications for October show a production rise of 0.15 mb/d compared with September. While oil sands output increased, conventional crude as well as NGL production is likely to decline.

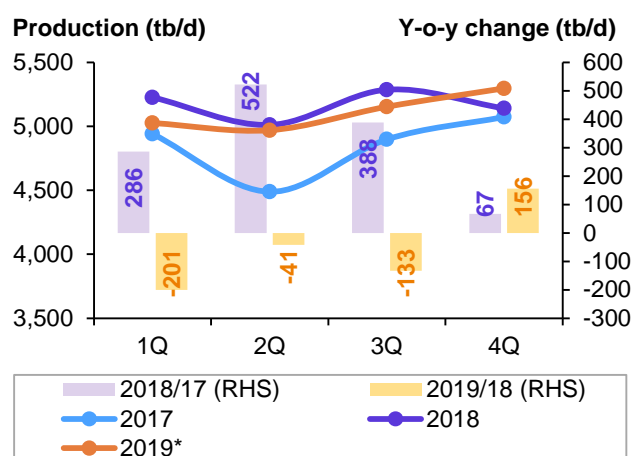
Canada's liquids supply in 2018, following an upward revision of 53 tb/d in 3Q18, is now expected to increase by 0.32 mb/d y-o-y to average 5.17 mb/d, revised up by 13 tb/d compared with the previous month's assessment. Canada has been the fourth-largest oil producer in the world since 2015.

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



Source: OPEC Secretariat.

Graph 5 - 17: Canada's quarterly liquids supply

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

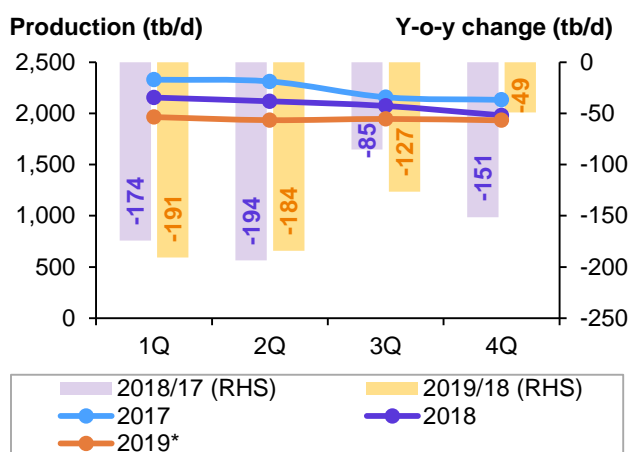
Following recent price discounts for Western Canada Select (WCS) against US WTI to stand at \$29/b and \$23/b for Canadian Light Sweet, the government of Alberta has mandated a cut in WCS crude production to address the storage shortage. The state's oil production is to be reduced by an initial 325 tb/d, or nearly 9% of overall averaged output that was achieved in August-October 2018, until 16 mb are cleared from Alberta's oil inventories. The mandate is effective as of January 2019 and only applies to companies with production greater than 10 tb/d. Cuts will then drop to 95 tb/d until year-end 2019, aligned to when the Enbridge Line 3 pipeline is expected to come into service. This decision was made for the short term, while the medium and longer term are to see support from partial upgrading of infrastructure and pipelines, along with investment in the addition of 120 tb/d of rail car capacity.

As a result, for next year, Canada's liquids supply is expected to see an average of 5.11 mb/d, representing a drop of 0.05 mb/d y-o-y for the first time in recent years.

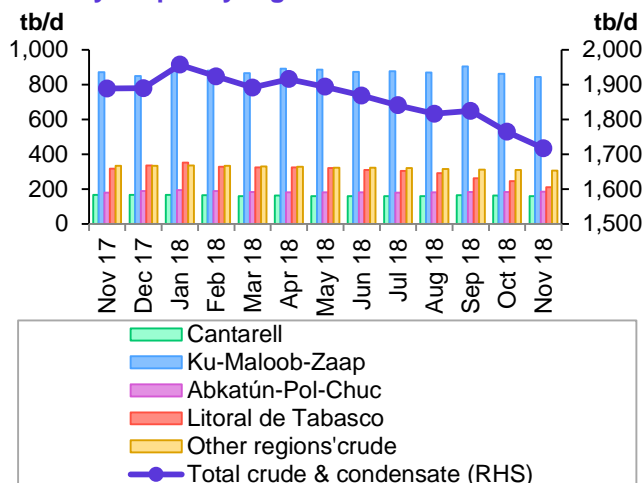
Mexico

Mexico's liquids supply in 2018 is expected to decline by 0.15 mb/d to average 2.08 mb/d, revised down by 16 tb/d compared to last month's assessment. Weak crude oil production in November showed a drop of 47 tb/d m-o-m to average 1.72 mb/d, mainly in light crude, as well as declining NGL output by 7 tb/d m-o-m, causing a downward revision. Average liquids output in November was down by 54 tb/d m-o-m to average 1.94 mb/d, lower by 0.18 mb/d y-o-y.

Graph 5 - 18: Mexico's quarterly liquids supply

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

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



Sources: Pemex and OPEC Secretariat.

Mexico's oil supply in 2019 is estimated to decline by 0.14 mb/d to average 1.94 mb/d, revised up by 7 tb/d. The 2019 supply forecast is based on the continuation of annual natural declines as well as outages during maintenance.

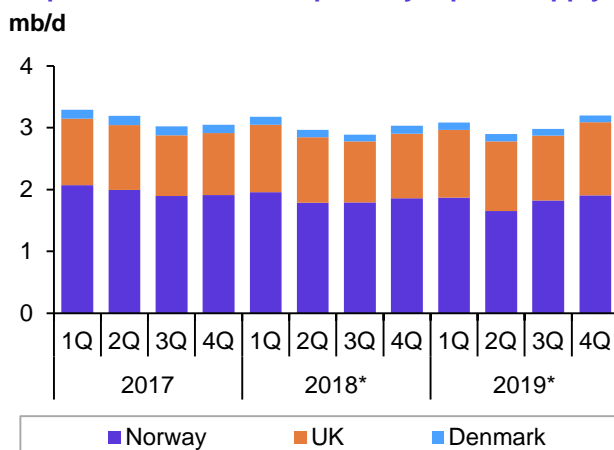
OECD Europe

OECD Europe's preliminary oil supply was down by 0.01 mb/d m-o-m in November to reach 3.77 mb/d and lower by 0.07 mb/d y-o-y.

The region's oil supply in 2018 is expected to reach 3.76 mb/d, indicating a y-o-y contraction of 0.07 mb/d. While production in Norway and Denmark is expected to decline to average 1.85 mb/d and 0.12 mb/d, respectively, oil supply in the UK and Other OECD Europe is likely to grow slightly by 0.02 mb/d and 0.05 mb/d, respectively.

For 2019, oil supply is expected to see slight growth of 0.01 mb/d with an increase of 0.07 mb/d for the UK, while production is likely to decline in other countries of the region.

Graph 5 - 20: North Sea quarterly liquids supply



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

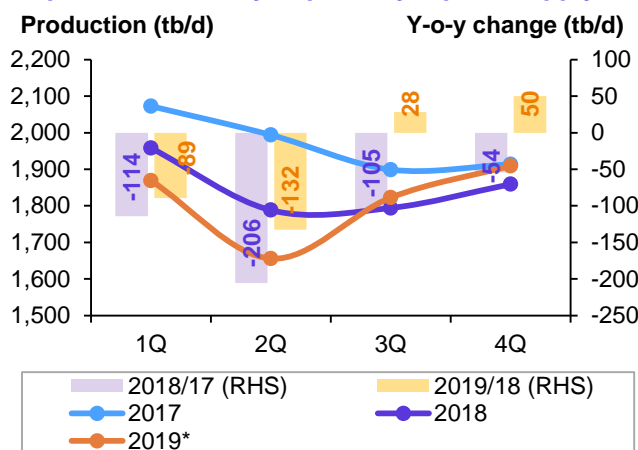
Norway

Norway's oil supply in 2018 is estimated to decline by 0.12 mb/d y-o-y to average 1.85 mb/d due to limited new field start-ups, and revised down by 14 tb/d from the previous MOMR. Preliminary production figures for November 2018 show average daily production at 1.88 mb/d of crude, NGLs and condensate, higher by 12 tb/d y-o-y, yet 4% below NPD forecasts due to the shutdown of the Sture oil terminal following the return of production from maintenance. Total liquids output for the first eleven months of 2018 was at 1.85 mb/d, showing a decline of 0.12 mb/d or 6% y-o-y.

In November, crude oil and condensate output was up by 18 tb/d m-o-m to average 1.50 mb/d, higher by 9 tb/d y-o-y. NGL output in November also increased by 5 tb/d m-o-m to average 0.38 mb/d, which is 3 tb/d higher than November 2017 output.

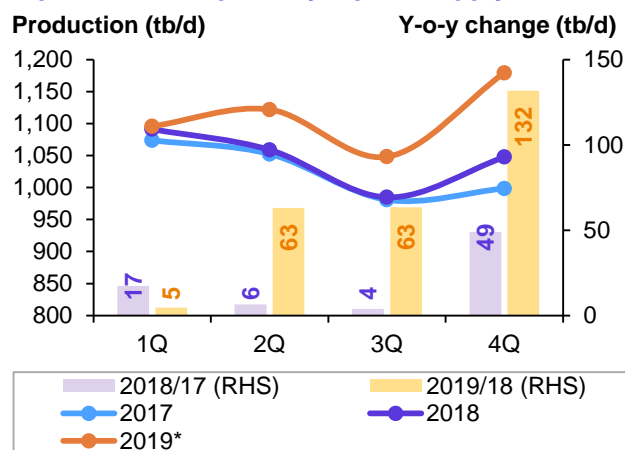
For 2019, a mild contraction of 0.04 mb/d is anticipated y-o-y to see average supply at 1.81 mb/d with decline rates offsetting new capacity additions.

Graph 5 - 21: Norway's quarterly liquids supply



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

Graph 5 - 22: UK quarterly liquids supply



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

UK

UK oil supply in 2018 is projected to rise by 0.02 mb/d y-o-y to average 1.05 mb/d. UK liquids production in November 2018 was down by 0.04 mb/d m-o-m to average 1.03 mb/d, 0.07 mb/d lower than in November 2017, following reduced output due to heavy maintenance and unexpected outages. The main outage was a shutdown at the 0.14 mb/d Buzzard field on 19 November owing to pipe corrosion with the field offline until 17 December. Nevertheless, preliminary production data in December indicates a m-o-m recovery of 0.02 mb/d, possibly due to the return of production at the Buzzard field. The y-t-d (Jan-Nov) total liquids output grew by only 0.01 mb/d y-o-y to average 1.05 mb/d. The supply growth forecast in 2018 was thus revised down by 18 tb/d, following weaker-than-expected output for 4Q18. Overall, UK production was lower than expected in 2018, owing to accelerating decline rates as well as unforeseen outages, particularly at the Buzzard field.

However, for 2019, following the production start-up at the giant Clair Ridge project west of the Shetland region offshore UK on 23 November, UK liquids supply is forecast to reach an average of 1.11 mb/d, adding 0.07 mb/d y-o-y. Clair Ridge is the second phase of development of the Clair field, 75 kilometres west of Shetland. According to BP, Clair Ridge has an estimated seven billion barrels of hydrocarbons, and the project has been designed to recover an estimated 640 mb of oil with production expected to ramp up to a peak level of 120 tb/d of oil. Moreover, production ramp-ups at the Catcher field, Western Isles, Beryl, Mariner and Quad 204 WoS will also support UK oil supply in 2019.

Developing Countries (DCs)

Total developing countries' (DCs) oil supply for 2018 is expected to reach an average of 13.41 mb/d (with Qatar added to the non-OPEC Middle East region), revised up by 18 tb/d, while y-o-y growth was revised down by 5 tb/d to 0.03 mb/d. Oil supply growth in Africa was revised down by 9 tb/d to show y-o-y growth of 0.04 mb/d, coming from Egypt, Ghana and Africa others.

For 2019, growth of 0.35 mb/d is anticipated for DCs due to ongoing field development in Latin America, particularly Brazil, to average 13.76 mb/d, with increases in Latin America, the Middle East and Africa, while Other Asia is forecast to decline.

Table 5 - 6: Developing countries' liquids supply, mb/d

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
2017	13.24	13.35	13.45	13.46	13.38	-0.15
2018*	13.41	13.47	13.32	13.43	13.41	0.03
2019*	13.59	13.60	13.80	14.05	13.76	0.35

Note: * 2018 = Estimate and 2019 = Forecast.

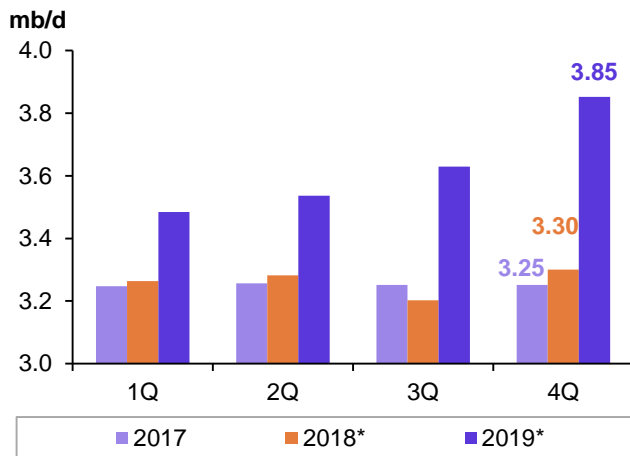
Source: OPEC Secretariat.

Latin America

Brazil

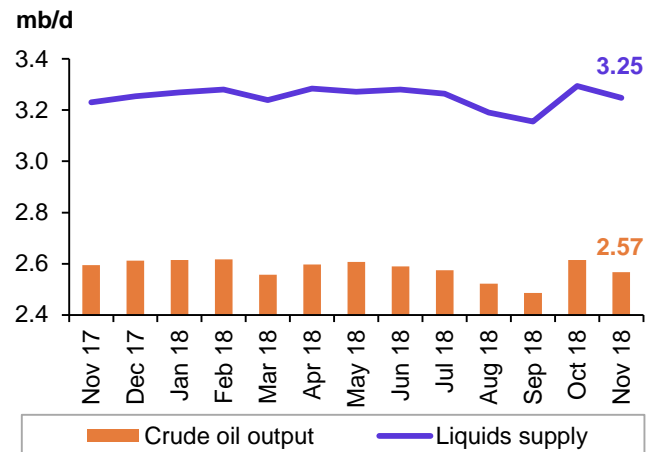
Brazil's crude oil output fell by 47 tb/d to average 2.57 mb/d in November, which is 28 tb/d lower y-o-y, the seventh consecutive month of y-o-y declines. The low production in November was again due to the result of maintenance affecting output at FPSO Cidade de Ilhabela and Mero, which are drilling in the Santos Basin, and also at two other platforms in the Campos Basin. Hence, average crude oil output during Jan-Nov 2018 declined by 46 tb/d y-o-y. Nevertheless, preliminary crude oil production data saw a further jump of 108 tb/d in December to average 2.68 mb/d, the highest figure since June 2017. Liquids supply in November declined by 43 tb/d m-o-m to average 3.25 mb/d, including 0.58 mb/d of biofuels and 0.1 mb/d of NGLs. Brazilian average oil supply y-t-d (Jan-Nov) remained unchanged at 3.25 mb/d y-o-y, while liquids supply in 2018 will grow by only 0.01 mb/d y-o-y to average 3.26 mb/d.

Graph 5 - 23: Brazil's quarterly liquids supply



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

Graph 5 - 24: Brazil's monthly liquids supply



Source: OPEC Secretariat.

Oil production could rise substantially next year if the delayed floating production storage and offloading (FPSO) vessels and other scheduled facilities come on line on time in 2019. Liquids supply is expected to rise by 0.36 mb/d to average 3.63 mb/d in 2019, mainly coming from the new FPSOs starting up production, such as P-69 FPSO in the Santos Basin's Lula field, which started production in late October. Petrobras was due to begin production from the P-68 platform in the Berbigao field by the end of 2018, but this was delayed to 1Q19. The firm began producing from the 150 tb/d P-75 FPSO at the Buzios pre-salt field — in the Transfer of Rights region of the Santos Basin — in early November 2018. Petrobras expects Buzios to reach 360 tb/d by the end of 2019. The Transfer of Rights regime gives Petrobras the exclusive rights to explore and produce up to five billion barrels of oil equivalent in the Santos Basin.

According to Petrobras, P-75 is the fourth platform to start production in 2018 after the FPSO Cidade Campos dos Goytacazes in the Tartaruga Verde field, the P-69 in the Lula field and the P-74 in the Búzios field. These platforms, together with P-67, which is already located in the Lula field, and P-76, which should go to the Búzios field in December, will conclude the six systems planned for this year in Brazil, contributing to the increase of Petrobras' production in line with its 2018-2022 Business and Management Plan.

FSU

FSU oil production in 2018 is estimated to have grown by 0.24 mb/d to average 14.29 mb/d, revised up by 8 tb/d from the previous forecast. Oil production in Russia and Kazakhstan has increased by 0.17 mb/d and 0.08 mb/d to average 11.35 mb/d and 1.81 mb/d, respectively. Azeri oil production is expected to remain stagnant y-o-y at 0.80 mb/d, while oil supply from FSU others is estimated to have declined by 0.02 mb/d to average 0.32 mb/d.

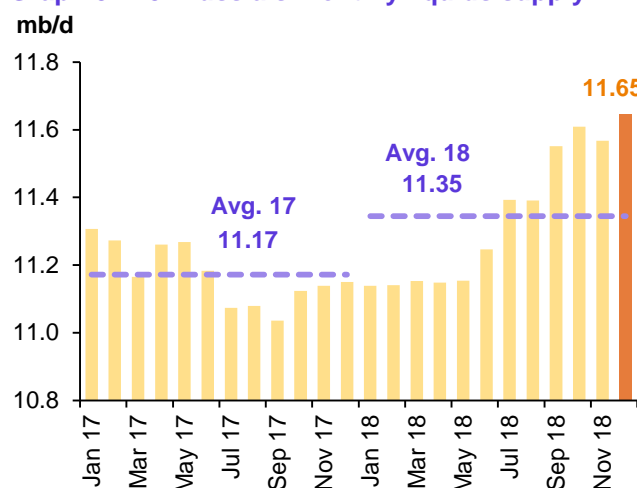
For 2019, FSU oil supply is forecast to increase by 0.16 mb/d to average 14.44 mb/d. Oil supply in Russia and Kazakhstan, based on running projects' ramp ups and assuming annual natural declines and voluntary downward adjustments, is expected to increase by 0.14 mb/d and 0.04 mb/d, while Azeri supply will remain unchanged at 0.80 mb/d compared to a year ago.

Russia

Russia's preliminary liquids supply stood at 11.65 mb/d in December, higher by 0.08 mb/d m-o-m, yet up by 0.5 mb/d y-o-y. Oil supply hit a new post-Soviet record at 11.65 mb/d in December 2018, according to secondary sources. Consequently, Russia's oil supply for 4Q18 has been revised up by 59 tb/d to average 11.61 mb/d, and is thus expected to average 11.35 mb/d for 2018, representing y-o-y growth of 0.17 mb/d.

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

Graph 5 - 25: Russia's monthly liquids supply



Sources: Nefta Compass and OPEC Secretariat.

However, Russian oil supply in 1H19 is expected to be adjusted down to average 11.47 mb/d, compared to the production level of October 2018. As a result, Russian oil supply in 2019 is likely to grow by 0.14 mb/d to average 11.49 mb/d.

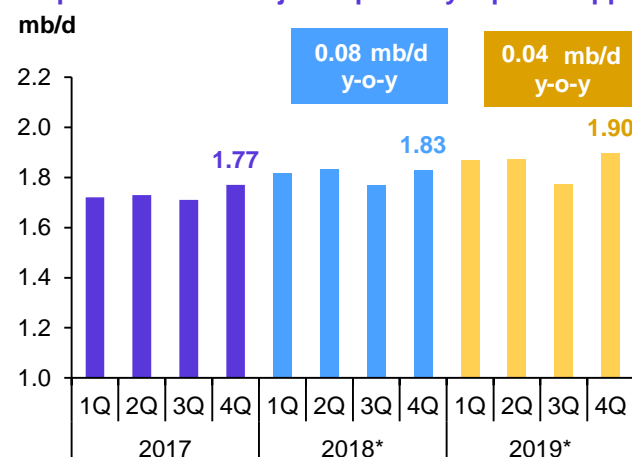
Caspian

Azerbaijan

Azerbaijan's liquids output increased by 0.03 mb/d m-o-m to average 0.83 mb/d in November, following an increase of 25 tb/d in crude oil production and a 2 tb/d rise in condensate production. Preliminary crude oil production data indicates a drop of 27 tb/d in December to 0.71 mb/d due to production being temporarily offline at the ACG complex, the same as in October. Azerbaijan's oil supply in the first 11 months of the year grew by a minor 4 tb/d to average 806 tb/d, compared to the same period in 2017, according to secondary sources, while according to data from the Energy Ministry, Azerbaijan produced a daily average of 792.6 tb/d of crude oil and condensate in 2018, up 2% y-o-y.

The country's liquids supply for 2018 is estimated to remain unchanged at 0.80 mb/d and continue at the same annual level in 2019. Liquids production in Azerbaijan is forecast to decrease by 20 tb/d to average 0.79 mb/d in 1H19, while for 2H19, an average of output at 0.81 mb/d is anticipated. As a result, Azeri oil supply in 2019 will remain unchanged at an average of 0.80 mb/d. Any increase in Azeri production is likely to come from condensate being produced in Shah Deniz and other gas-condensate fields.

Graph 5 - 26: Azerbaijan's quarterly liquids supply

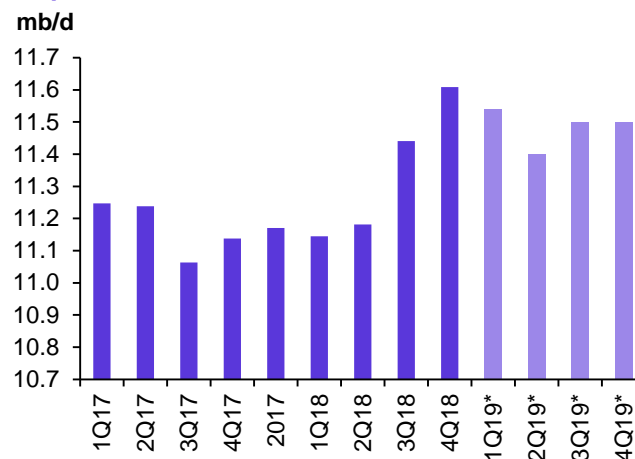


Note: * 2018 = Estimate and 2019 = Forecast.
Source: OPEC Secretariat.

Kazakhstan

In **Kazakhstan**, the November liquids output increased by 0.20 mb/d to average 1.91 mb/d due to new record production levels both in the Tengiz field at 0.62 mb/d and in the giant Kashagan field in the Northern Caspian at 0.3 mb/d. As in the last MOMR, oil output from Tengiz declined to 0.47 mb/d due to maintenance. According to officials of the North Caspian Operating Co (NCOC), oil output at the Kashagan field is set to exceed the target level of 370 tb/d after an equipment upgrade in 2019. While Kazakhstan recently agreed to adjust down their production by 45 tb/d and keep the level at approximately 1.86 mb/d in 1H19, oil production in 1H19 is forecast marginally higher at 1.87 mb/d. As a result, oil production in 2018 is estimated to grow by 0.08 mb/d to average 1.81 mb/d, and, for the current year, it is expected to reach 1.85 mb/d, representing y-o-y growth of 0.04 mb/d.

Graph 5 - 27: Kazakhstan's quarterly liquids output



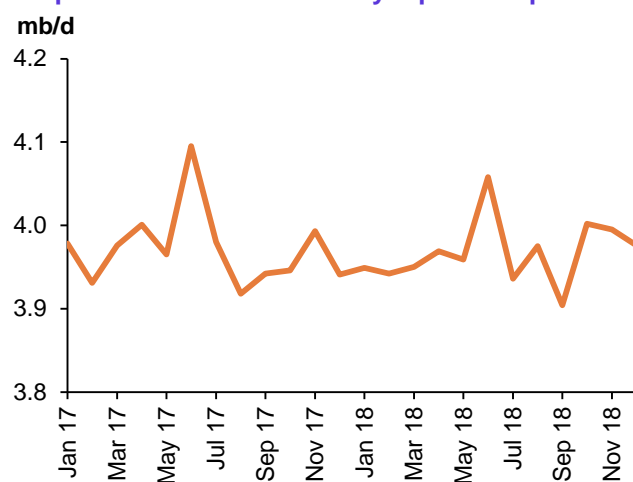
Note: * 1Q19 - 4Q19 = Forecast.
Source: OPEC Secretariat.

China

China's liquids production in November remained unchanged m-o-m at 4.00 mb/d, higher by 10 tb/d y-o-y, while crude oil output declined by 10 tb/d m-o-m to average 3.78 mb/d, representing a y-o-y decline of 41 tb/d. Crude oil output in November, despite a production recovery in the South China Sea, was affected by maintenance and a typhoon. According to secondary sources, while oil production from the onshore Daqing mature field surprisingly increased by 30 tb/d in November 2018, oil output from Xinjiang and Changqing declined. Year-to-date in November, China's liquids output declined by 8 tb/d y-o-y to average 3.97 mb/d.

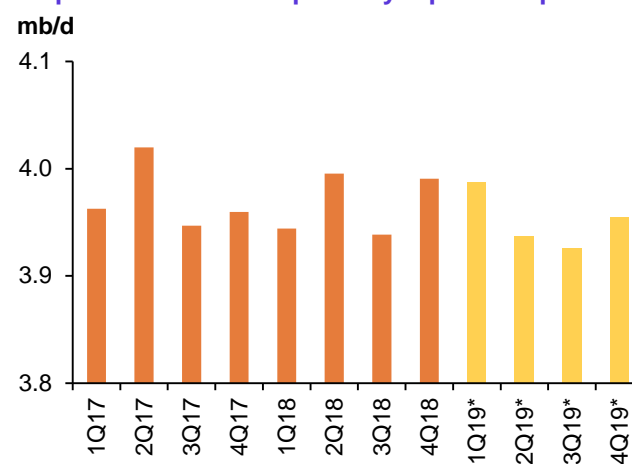
China's oil supply in 2018 is estimated be broadly stagnant at 3.97 mb/d, with a potential mild contraction of 0.01 mb/d compared to last year's decline of 0.12 mb/d, owing to increased investment and drilling activity. For 2019, oil supply is expected to experience a mild contraction of 0.02 mb/d to average 3.95 mb/d.

Graph 5 - 28: China's monthly liquids output



Source: OPEC Secretariat.

Graph 5 - 29: China's quarterly liquids output



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

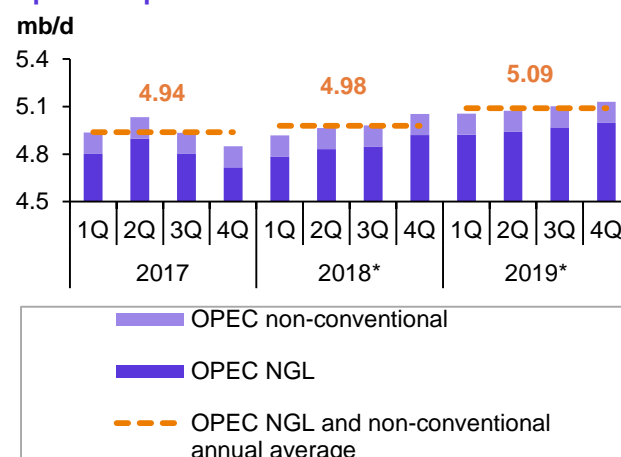
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids for 2018 were adjusted down by 1.36 mb/d from the December MOMR – now excluding output from Qatar – to average 4.98 mb/d. This includes an estimated 4.85 mb/d of NGLs and 0.13 mb/d of non-conventional liquids. Y-o-y growth in 2018 now stands at 0.04 mb/d.

For 2019, OPEC NGLs and non-conventional liquids are forecast to grow by 0.11 mb/d and average of 5.09 mb/d.

Preliminary production data in November and December 2018 shows output at 5.05 mb/d, higher by 0.20 mb/d y-o-y.

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



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

Table 5 - 7: OPEC NGL + non-conventional oils, mb/d

	<u>2016</u>	<u>2017</u>	<u>Change</u> <u>17/16</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018*</u>	<u>Change</u> <u>18/17</u>	<u>2019*</u>	<u>Change</u> <u>19/18</u>
Total OPEC	4.81	4.94	0.12	4.92	4.96	4.98	5.05	4.98	0.04	5.09	0.11

Note: * 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, **total OPEC-14 preliminary crude oil production** averaged 31.58 mb/d in December, a decrease of 751 tb/d over the previous month. Crude oil output decreased mostly in Saudi Arabia, Libya, IR Iran and UAE, while production rose in Iraq.

Table 5 - 8: OPEC crude oil production based on secondary sources, tb/d

	<u>2017</u>	<u>2018</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Dec/Nov</u>
Algeria	1,043	1,038	1,026	1,059	1,054	1,057	1,056	1,051	-5
Angola	1,634	1,507	1,493	1,472	1,501	1,515	1,500	1,490	-10
Congo	252	318	324	320	320	321	310	329	18
Ecuador	530	521	519	528	522	521	522	524	1
Equatorial Guinea	133	125	127	124	118	124	121	108	-13
Gabon	200	186	182	184	184	185	170	197	26
Iran, I.R.	3,813	3,560	3,818	3,603	3,010	3,330	2,928	2,769	-159
Iraq	4,446	4,556	4,481	4,634	4,665	4,654	4,626	4,714	88
Kuwait	2,708	2,746	2,707	2,797	2,775	2,753	2,772	2,800	29
Libya	817	955	889	892	1,048	1,118	1,100	928	-172
Nigeria	1,658	1,722	1,653	1,705	1,750	1,760	1,739	1,750	11
Saudi Arabia	9,954	10,307	10,114	10,422	10,734	10,637	11,021	10,553	-468
UAE	2,915	2,984	2,873	2,982	3,225	3,177	3,283	3,218	-65
Venezuela	1,911	1,339	1,388	1,249	1,178	1,206	1,181	1,148	-33
Total OPEC	32,017	31,863	31,594	31,969	32,085	32,358	32,328	31,578	-751

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

Source: OPEC Secretariat.

Table 5 - 9: OPEC crude oil production based on direct communication, tb/d

	<u>2017</u>	<u>2018</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Dec/Nov</u>
Algeria	1,059	1,041	1,025	1,066	1,067	1,070	1,068	1,063	-5
Angola	1,632	1,478	1,477	1,475	1,440	1,457	1,417	1,445	28
Congo	263	327	328	329	332	332	334	328	-6
Ecuador	531	517	516	524	516	514	515	520	4
Equatorial Guinea	129	120	124	118	112	108	119	111	-8
Gabon	210	..	185	191	..	209	210	..	..
Iran, I.R.	3,867	..	3,804	3,789	..	..	..	..	..
Iraq	4,469	4,410	4,360	4,460	4,460	4,460	4,455	4,465	10
Kuwait	2,704	2,737	2,704	2,784	2,755	2,733	2,730	2,802	72
Libya	..	..	..	..	..	..	..	..	..
Nigeria	1,536	1,605	1,526	1,611	1,671	1,635	1,579	1,797	218
Saudi Arabia	9,959	10,317	10,128	10,399	10,790	10,642	11,093	10,643	-450
UAE	2,967	3,001	2,876	2,998	3,285	3,270	3,336	3,250	-86
Venezuela	2,035	1,516	1,523	1,451	1,469	1,433	1,464	1,511	47
Total OPEC	..	..	..	..	..	..	..	..	..

Notes: .. Not available.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

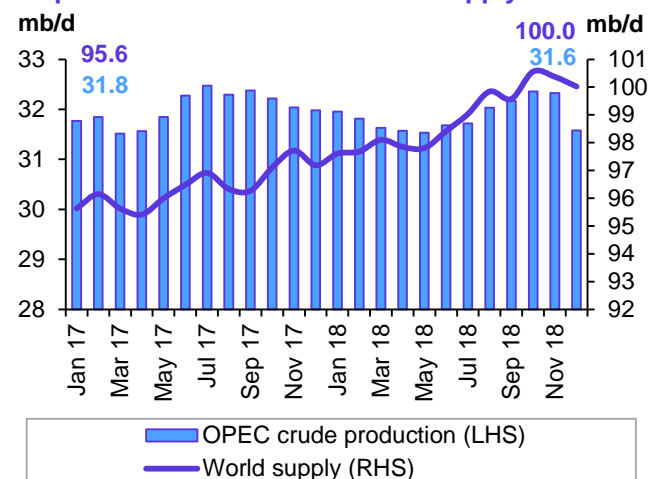
World oil supply

Preliminary data indicates that **global oil supply** decreased by 0.35 mb/d to average 100.02 mb/d in December 2018, compared with the previous month.

An increase in non-OPEC supply (including OPEC NGLs) of 0.40 mb/d compared with the previous month was mainly driven by OECD Americas. Along with a decline in OPEC crude oil production of 751 tb/d in December, this equates to a total increase in global oil output of 2.83 mb/d y-o-y.

The **share of OPEC crude oil in total global production** declined by 0.6% to 31.6% in December compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 31: OPEC and world oil supply



Source: OPEC Secretariat.

Product Markets and Refinery Operations

Product markets globally suffered losses, with pressure stemming mainly from weaker diesel and kerosene cracks attributed to strong middle distillate stock builds, and ample supplies, as refineries increased throughput in December. Although naphtha markets showed positive performance, the support was insufficient to provide a lift to refining margins and offset supply side pressure from the middle and bottom of the barrels, as well as the negative impact of seasonally lower gasoline demand.

Refinery margins

US refinery margins saw losses as product stocks rose, pressured by seasonally lower gasoline demand and tampered heating oil requirements, as winter weather in December was warmer than average.

Moreover, US Gulf Coast (USGC) refinery throughputs ramped up in December in line with seasonal trends to a three-month high in anticipation of the spring maintenance season. This led to higher product output, further exacerbating product markets.

Despite the decline on a monthly basis, margins remained at healthy levels and continued to show strong y-o-y gains.

US refinery margins for WTI averaged \$13.53/b in December, down by \$2.21 m-o-m but up by \$3.52 y-o-y.

Refinery margins in **Europe** lost ground during December, shadowing a rise in ARA inventories, which fuelled bearish sentiment in the regional market and drove product prices downward. High refinery runs reported in the first half of the month led to high product output which — coupled with strong inflows from Russia, the US and the Middle East — weighed on European product markets.

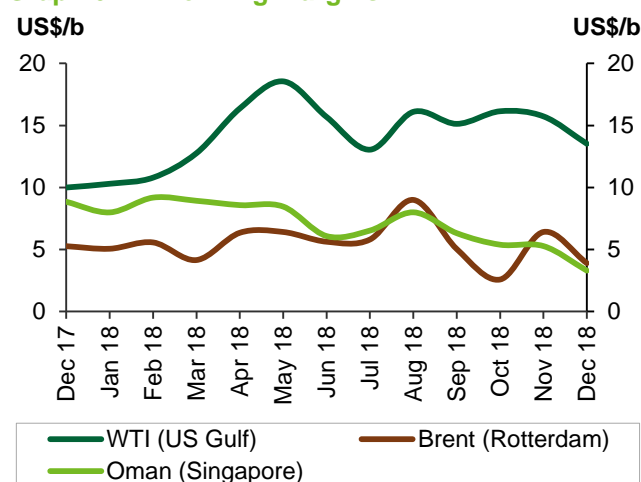
Product flow restrictions along the Rhine River finally eased as water levels rose sharply after a long period of limited barge loadings. Consequently, product trade flows have returned to normal, allowing product stock recovery and access to inland markets such as Germany and Switzerland.

Refinery margins for Brent in Europe averaged \$3.90/b in December, down by \$2.51 compared with a month earlier and by \$1.37 y-o-y.

Asian refinery margins declined due to lower-than-expected heating space requirements, and higher product supplies attributed to the release of additional Chinese export quotas amid an already oversupplied product market environment.

On a positive note, gasoline cracks gained traction, keeping losses to significantly lower levels compared with the sharp fall witnessed in previous months. Moreover, the naphtha market in Asia was the only exception across the barrel to resist the gravity pull, showing considerable gains in cracks, supported by favourable economics over LPG as petrochemical feedstock. These bullish developments capped losses, preventing further weakening in the Asian product market. Refinery margins for Oman in Asia lost \$1.98 m-o-m to average \$3.30/b in December, which was lower by \$5.55 y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

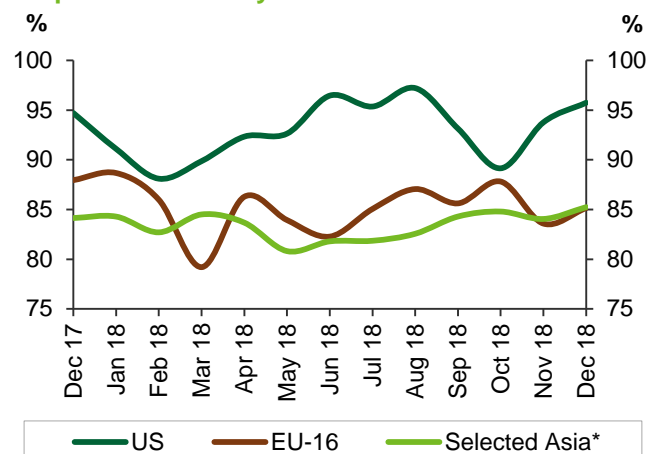
Refinery operations

In the **US**, refinery utilization rates increased in December to average 95.74%, which corresponds to a throughput of 17.81 mb/d. This represented a rise of 2.0 pp and 460 tb/d, respectively, compared with the previous month. Y-o-y, the December refinery utilization rate was up by 1.0 pp, with throughputs showing a rise of 253 tb/d.

European refinery utilization averaged 85.15%, corresponding to a throughput of 10.59 mb/d. This is a m-o-m rise of 1.6 pp and 190 tb/d, respectively. On a y-o-y basis, utilization rates decreased by 2.8% while throughput was slightly up by 11 tb/d.

In **selected Asia** — comprising Japan, China, India and Singapore — refinery utilization rates declined, averaging 85.25% in December, corresponding to a throughput of 22.13 mb/d. Compared with the previous month, throughputs were up by 1.2 pp and by 360 tb/d. Meanwhile, y-o-y they were up by 1.1 pp and 214 tb/d.

Graph 6 - 2: Refinery utilization rates



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

Product markets

US market

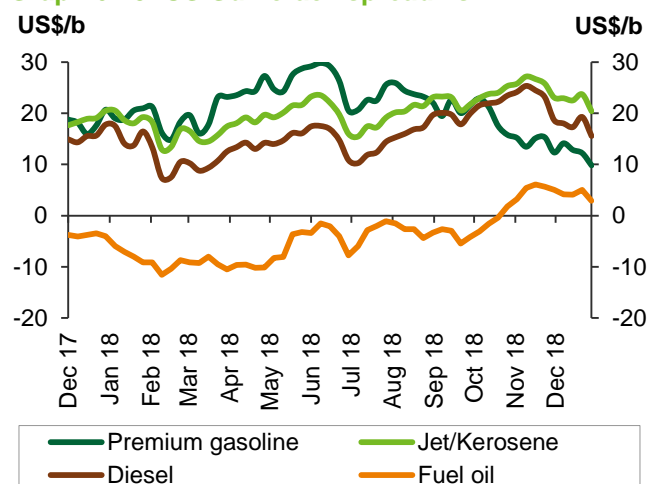
The **US gasoline** market weakened in line with inventory level movements amid seasonally lower demand. Gasoline inventory levels rose by 22 tb after two consecutive months of decline.

Additional pressure emerged from extra bearish sentiment in the market, as refinery throughput rose in the US, lending more support to gasoline inventory levels.

In December, gasoline prices dropped further for the 7th consecutive month since May 2018, reaching \$62.29/b, down by \$8.66 m-o-m, positioned at a \$5.23 discount vs gasoil.

In December, the US gasoline crack spread against WTI averaged \$12.78/b, down by \$1.43 m-o-m and \$5.21/b y-o-y.

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



Sources: Argus Media and OPEC Secretariat.

The USGC **jet/kerosene** market lost ground, pressured by strong stock builds and high product availability. The US jet/kerosene crack spread against WTI averaged \$22.87/b, down by \$3.02 m-o-m but up by \$3.81 y-o-y.

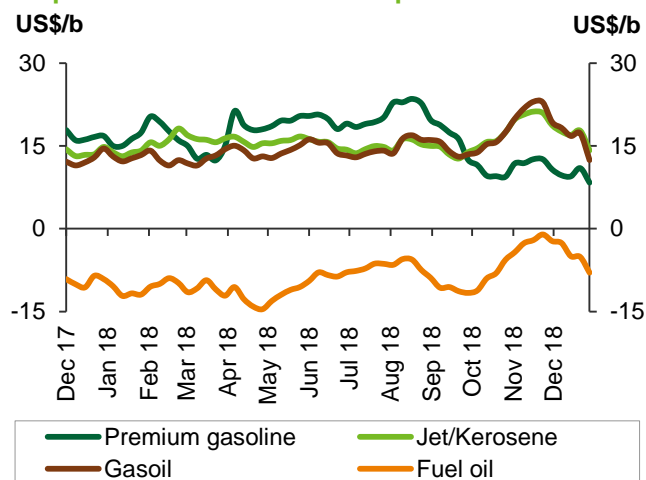
US **gasoil** crack spreads against WTI backtracked, as product availability increased, attributed to higher refinery throughput amid lacklustre heating oil demand, as winter temperatures in the US remained above average. The US gasoil crack spread against WTI averaged \$18.01/b, down by \$5.21 m-o-m but up by \$2.35 y-o-y.

US **fuel oil** crack spreads against WTI in December underwent a downward correction on the back of a supply recovery after a fuel oil shortage registered in the previous month due to refinery turnarounds. In addition, falling WTI crude prices further contributed to negative performance, keeping fuel oil cracks under increased pressure. In December, the US fuel oil crack spread against WTI averaged \$4.42/b, down by \$1.02 m-o-m but up by \$8.32 y-o-y.

European market

The **gasoline crack spreads** in Rotterdam reversed trends and weakened after the strong rebound witnessed the previous month. Seasonally lower demand, along with limited exports to the US and West Africa, led to a 30% rise in ARA gasoline stock levels. This development has further pressured gasoline prices, which dropped by \$9.20/b over the month, in addition to a steep fall recorded the previous month. The downward trend in gasoline prices, if sustained, could favour an opening in arbitrage opportunities should there be a pickup in interregional demand in the near term. The gasoline crack spread against Brent averaged \$10.62/b in December, down by \$1.50 m-o-m and \$5.64 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

The **jet/kerosene** crack spreads against Brent declined over the month, shadowing to a lesser extent negative performance witnessed in the European gasoil market. Pressure came from a lengthening domestic balance as jet fuel arrivals in Northwest Europe kept the region well supplied. A \$2.42 discount of US vs European gasoil provided an arbitrage opening into NW Europe, contributing to market oversupply. The Rotterdam jet/kerosene crack spread against Brent averaged \$17.84/b, down by \$2.60 m-o-m and by \$4.34 y-o-y.

European **gasoil** crack spreads against Brent suffered a sharp fall, losing all ground recovered the previous month, due to supply-side pressure, despite solid domestic demand. Robust supplies from the US and Russia resulted in a jump in gasoil imports averaging 910 tb/d in December, 82% higher compared with November.

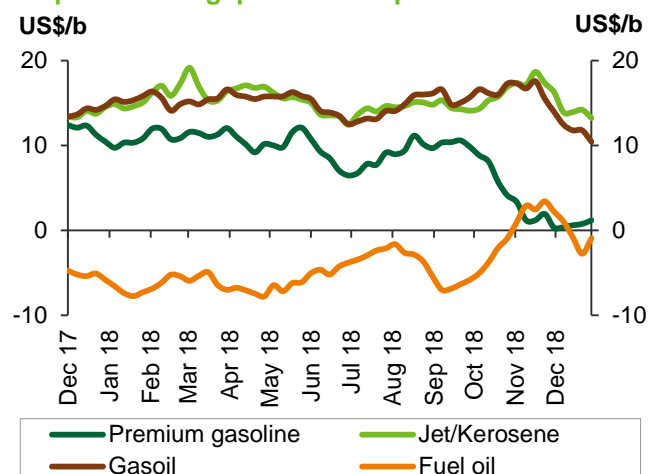
On a wider spectrum, the European gasoil market in Rotterdam continued to show positive y-o-y performance, reaching the second-highest level in 12 months, ending the year on a strong positive note. The gasoil crack spread against Brent averaged \$17.63/b, which was lower by \$4.06 m-o-m but higher by \$5.21 y-o-y.

At the bottom of the barrel, **fuel oil 3.5%** continued to be pressured by bearish fundamentals, owing to higher volume deliveries from Russia to the Northwest Europe region, which rose by 48% m-o-m. This led to a decline in prices and exerted pressure on fuel oil cracks. Additional bearishness came from unfavourable arbitrage economics due to high freight rates, which kept fuel exports to Singapore limited in December. In Europe, fuel oil cracks averaged minus \$8.08/b in December, losing \$2.13 m-o-m, but gaining \$4.85 y-o-y.

Asian market

The **Asian gasoline 92 crack spread** against Dubai lost some ground, despite exhibiting a trend reversal from a sharp three-month drop witnessed since September. This weakening is attributed to strong regional gasoline output amid slower-than-expected demand in China, keeping inventories in Singapore well supported. An uptick in gasoline exports from the region lent some buoyancy to cracks and provided much-needed traction to prevent an extension of the steep declining trend. However, this support proved insufficient to completely offset losses and induce solid gains. Looking forward, gasoline cracks appear set on track and well-positioned for bulls, should the current arbitrage window remain open. Moreover, expectations of higher demand in the upcoming Chinese new year holidays help make a solid case for some upside potential in the near term. The Singapore gasoline crack spread against Oman averaged 69¢/b, down by a hefty 44¢ m-o-m and by \$10.96 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus Media and OPEC Secretariat.

Singapore light **distillate naphtha crack spreads** recovered from the slump witnessed the previous month and rose to show the strongest positive performance across the barrel in Asia. Supporting factors behind this development include favourable economics over LPG, which positioned naphtha as the preferred regional feedstock for the petrochemical sector, amid tightening balance. The Singapore naphtha crack spread against Oman averaged minus \$5.16/b, having risen by \$3.62 m-o-m, though declining by \$8.76 y-o-y.

At the middle of the barrel, **jet/kerosene crack spreads** in Asia continued to trend downwards, as space heating fuel demand was lower than expected and inventory levels remained well supported. In addition, release of the last 2018 batch of Chinese export quotas contributed to added deliveries to Singapore in December, further exacerbating pressure on the Asian jet/kerosene market. The Singapore jet/kerosene crack spread against Oman averaged \$13.88/b, down by \$3.30 m-o-m but marginally up by 4¢ y-o-y.

The Singapore **gasoil crack spread** declined in December, pressured by slower regional demand, reduced construction activity in China and lower import requirements from India, as demand there in December was lower y-o-y. Another bearish factor was increased Chinese export quotas in December, which largely contributed to high gasoil inventory levels in the region. The Singapore gasoil crack spread against Oman averaged \$12.57/b, down by \$3.69 m-o-m and by \$1.57 y-o-y.

The Singapore **fuel oil crack spread** came down from multi-month record highs registered a month earlier. This poor performance was attributed to the arrival of record volumes in Singapore, and loss of demand for the power generation sector in Pakistan. In addition, the Singapore fuel oil premium encouraged inflows compared with those seen in other regions, while depressing demand from the bunker sector due to higher prices. Singapore fuel oil cracks against Oman averaged minus 85¢/b, down by \$3.34 m-o-m but up by \$4.45 y-o-y.

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

<u>Event</u>	<u>Time frame</u>	<u>Asia</u>	<u>Europe</u>	<u>US</u>	<u>Observations</u>
IMO 2020	2019	<p>↑ Some positive impact on product markets (short-term)</p> <p>↓ Weaker high sulphur fuel crack spreads</p>	<p>↑ Some positive impact on product markets (short-term)</p> <p>↓ Weaker high sulphur fuel crack spreads</p>	<p>↑ Some positive impact on product markets (short-term)</p> <p>↓ Weaker high sulphur fuel crack spreads</p>	Refinery maintenance in the current year is expected to include plant upgrades to accommodate IMO regulations. This could lead to pressure on crude intake and a decline in product availability.
Fuel quality standards	2019	<p>↑ Some positive impact on ULSF product markets</p>	<p>↑ Some positive impact on ULSF product markets</p>	<p>↑ Some positive impact on ULSF product markets</p>	More stringent fuel quality standards in India and China will increase the demand for cleaner products, which could also support prices and possibly encourage gasoline demand.
CDU additions	2019	<p>↓ Negative impact on product markets</p>	<p>↓ Negative impact on product markets</p>	<p>↓ Negative impact on product markets</p>	An overall increase in product output is to be expected which could further exacerbate the oversupply environment and lead to trade flow rearrangements, or a reduction in exports as more nations head towards self-sufficiency.

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	<u>Refinery throughput, mb/d</u>				<u>Refinery utilization, %</u>			
	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Change Dec/Nov</u>	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Change Dec/Nov</u>
US	16.74	17.35	17.81	0.46	89.14	93.77	95.74	2 pp
Euro-16	10.93	10.40	10.59	0.19	87.81	83.58	85.15	1.6 pp
France	1.19	1.07	1.11	0.04	94.97	85.55	88.42	2.9 pp
Germany	1.48	1.61	1.74	0.14	67.82	73.40	79.66	6.3 pp
Italy	1.28	1.40	1.34	-0.06	62.71	68.38	65.59	-2.8 pp
UK	1.12	1.08	1.06	-0.02	85.22	82.48	80.73	-1.8 pp
Selected Asia*	21.93	21.77	22.13	0.36	84.80	84.05	85.24	1.2 pp

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

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

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

	2015	2016	2017	4Q17	1Q18	2Q18	3Q18	4Q18
Total OECD	37.71	37.49	38.18	38.34	37.68	37.65	39.06	38.20
OECD Americas	19.00	18.78	19.09	18.99	18.79	19.50	19.82	19.38
of which US	16.43	16.51	16.88	17.01	16.75	17.50	17.68	17.30
OECD Europe	12.11	11.94	12.27	12.40	11.93	11.73	12.55	12.02
of which:								
France	1.17	1.14	1.17	1.23	1.12	0.94	1.21	1.12
Germany	1.91	1.93	1.91	1.97	1.89	1.86	1.78	1.61
Italy	1.35	1.30	1.40	1.45	1.35	1.33	1.37	1.34
UK	1.14	1.09	1.10	1.09	0.93	1.04	1.13	1.09
OECD Asia Pacific	6.60	6.78	6.82	6.95	6.97	6.43	6.70	6.80
of which Japan	3.26	3.28	3.23	3.19	3.33	2.85	3.07	3.20
Total Non-OECD	40.59	41.26	42.00	42.95	42.46	42.74	43.33	43.70
of which:								
China	10.44	10.77	11.35	11.92	11.75	12.04	12.10	12.35
Middle East	6.69	6.91	7.04	7.20	6.99	7.07	7.51	7.70
Russia	5.64	5.58	5.59	5.65	5.69	5.65	5.81	5.73
Latin America	4.89	4.54	4.38	4.32	4.23	4.30	4.20	3.85
India	4.56	4.93	4.98	5.21	5.19	5.05	5.03	5.23
Africa	2.14	2.19	2.16	2.09	2.11	2.19	2.00	2.13
Total world	78.30	78.75	80.18	81.29	80.14	80.39	82.40	81.90

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

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

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

	Nov 18	Dec 18	Change Dec/Nov	Average 2017	2018
US Gulf (Cargoes FOB):					
Naphtha*	56.56	49.60	-6.96	55.09	68.51
Premium gasoline (unleaded 93)	70.95	62.29	-8.66	74.42	85.78
Regular gasoline (unleaded 87)	65.49	57.77	-7.72	68.57	80.17
Jet/Kerosene	82.63	72.38	-10.25	66.07	85.35
Gasoil (0.2% S)	79.96	67.52	-12.44	62.31	80.99
Fuel oil (3.0% S)	59.49	51.58	-7.91	47.05	60.17
Rotterdam (Barges FoB):					
Naphtha	55.86	50.95	-4.91	53.66	66.47
Premium gasoline (unleaded 98)	76.78	67.58	-9.20	75.13	87.34
Jet/Kerosene	85.10	74.80	-10.30	66.84	86.93
Gasoil/Diesel (10 ppm)	86.35	74.59	-11.76	66.35	85.94
Fuel oil (1.0% S)	62.61	53.08	-9.53	48.71	62.33
Fuel oil (3.5% S)	58.71	48.88	-9.83	44.31	59.04
Mediterranean (Cargoes FOB):					
Naphtha	54.99	49.32	-5.67	52.81	65.79
Premium gasoline**	67.52	58.44	-9.08	66.56	79.08
Jet/Kerosene	83.22	72.64	-10.58	65.12	85.10
Diesel	85.10	73.24	-11.86	66.92	85.66
Fuel oil (1.0% S)	64.51	54.58	-9.93	49.55	63.53
Fuel oil (3.5% S)	60.01	49.67	-10.34	46.18	60.36
Singapore (Cargoes FOB):					
Naphtha	57.01	52.13	-4.88	54.04	67.24
Premium gasoline (unleaded 95)	68.65	60.02	-8.63	68.01	79.93
Regular gasoline (unleaded 92)	66.92	57.98	-8.94	65.43	77.66
Jet/Kerosene	82.97	71.17	-11.80	65.32	84.81
Gasoil/Diesel (50 ppm)	82.05	69.86	-12.19	66.33	84.67
Fuel oil (180 cst)	68.28	56.44	-11.84	49.67	65.24
Fuel oil (380 cst 3.5% S)	68.25	56.63	-11.62	49.24	64.74

Note: * Barges.

** Cost, insurance and freight (CIF).

Sources: Argus Media and OPEC Secretariat.

Tanker Market

Following gains in the tanker market registered in November, a softer sentiment was witnessed in December with average **dirty tanker spot freight rates** relatively stable affected by a drop in VLCC and Suezmax rates from the previous month.

Lower rates were seen in the larger dirty classes in December and across all reported routes on the back of limited demand. This was the result of the holiday season that led to thin market activity in general. Nevertheless, the drop was offset by higher rates registered in the Aframax class, which went up by WS15 points on average. Aframax rates were partly supported by severe weather conditions, delays and replacements in December.

Clean tanker spot freight rates showed a positive performance on all routes with significant gains registered on both eastern and western direction of Suez. In general, freight rates on all routes in December were above those in the same month a year earlier.

Spot fixtures

According to preliminary data, **global fixtures** dropped by 7.6% in December compared to the previous month. **OPEC spot fixtures** were down by 1.6%, or 0.23 mb/d, to average 14.21 mb/d.

Fixtures on the **Middle East-to-East route** averaged 8.16 mb/d in December, down by 0.18 mb/d m-o-m from November, and those on the **Middle East-to-West route** averaged 1.48 mb/d.

Outside of the Middle East, fixtures averaged 4.57 mb/d in December, increasing by 0.04 mb/d m-o-m. Compared with the same period a year before, the increase was 0.13 mb/d.

Table 7 - 1: Spot fixtures, mb/d

	Oct 18	Nov 18	Dec 18	Change Dec 18/Nov 18
All areas	21.56	21.98	20.32	-1.66
OPEC	14.31	14.44	14.21	-0.23
Middle East/East	7.77	8.33	8.16	-0.18
Middle East/West	1.62	1.58	1.48	-0.10
Outside Middle East	4.93	4.53	4.57	0.04

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

OPEC sailings increased by 0.04 mb/d, or 0.2%, m-o-m in December to stand at 25.29 mb/d. Middle East sailings remained stable in December and stood at 18.50 mb/d.

Crude oil arrivals dropped in December in all areas with the exception of arrivals to West Asia, which was higher by 0.01 mb/d, or 3%, from a month earlier. Arrivals to North America, Europe and the Far East declined by 0.6%, 1.0% and 2.7%, respectively, compared with the previous month.

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

	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Change Dec 18/Nov 18</u>
Sailings				
OPEC	24.71	25.25	25.29	0.04
Middle East	17.96	18.50	18.50	0.00
Arrivals				
North America	9.86	9.55	9.49	-0.06
Europe	12.00	11.76	11.64	-0.11
Far East	9.04	9.13	8.89	-0.24
West Asia	4.49	4.52	4.53	0.01

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

Following the increase in rates achieved in previous months, the **VLCC market** showed lower tonnage demand in general in December, which prolonged the tonnage list and thus kept spot freight rates under pressure. VLCC spot freight rates were softer in December on several routes as the market was mostly quiet.

VLCC freight rates on key the trading routes Middle East-to-East and Middle East-to-West fell, with spot freight rates decreasing by 6% and 7%, respectively m-o-m, to stand at WS87 and WS38 points in December.

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

	<u>Size 1,000 DWT</u>	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	<u>Change Dec 18/Nov 18</u>
Middle East/East	230-280	83	93	87	-6
Middle East/West	270-285	33	41	38	-3
West Africa/East	260	81	91	87	-5

Sources: Argus Media and OPEC Secretariat.

Similarly, spot freight rates on the West Africa-to-East route declined by 5% m-o-m to average WS87 points in December, influenced by the general downward trend in the Middle East. Nonetheless, despite the lower freight rates, VLCC returns were supported by a decline in bunker prices in December.

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

Suezmax

Suezmax average spot freight rates experienced a higher drop than those for VLCCs in December.

Suezmax fixing activities slowed in December, mainly in the West, thus negatively affecting the gains achieved in November. Activities in several markets witnessed a slowdown in December, including West Africa, the Mediterranean and the Black Sea.

Suezmax rates dropped on average despite a pre-holiday rush, which temporarily supported rates and shortened the tonnage list that led to a significant increase in rates. However, this did not last for long, as the market rebalanced and rates were pushed back.

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

	Size 1,000 DWT	Oct 18	Nov 18	Dec 18	Change Dec 18/Nov 18
West Africa/US Gulf Coast	130-135	94	120	111	-10
Northwest Europe/US Gulf Coast	130-135	67	101	95	-6

Sources: Argus Media and OPEC Secretariat.

Rates for tankers operating on the West Africa-to-US Gulf Coast (USGC) route decreased by WS10 points m-o-m to average WS111 points in December. Rates on the Northwest Europe (NWE)-to-USGC route fell by WS6 points from the previous month to average WS95 points.

Aframax

Average **Aframax spot freight rate** has witnessed a strong return in previous months, which continued in December. The class was the only one in the dirty tanker segment that showed a rate increase from the previous month. In fact, Aframax earnings in December reached a level not seen for several months. Aframax rates have been partly supported by severe weather conditions and delays. Additionally, high demand for ice vessels and forwards fixing further supported rates, mainly in the North Sea and the Baltic.

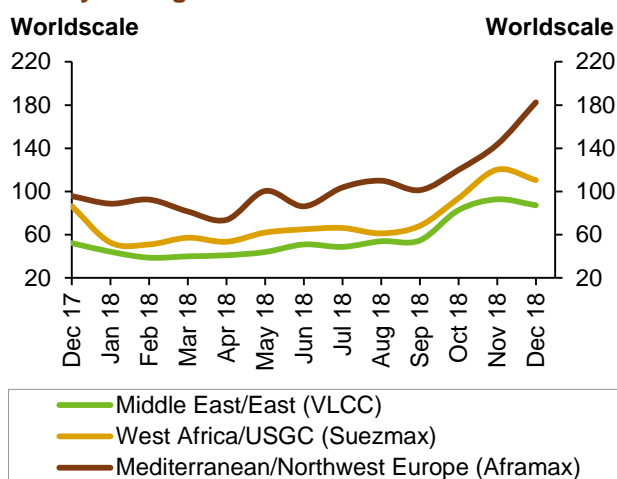
In general, Aframax spot freight rates rose in December, although the levels of gains varied on different routes. Average rates were up by 10% from one month previous, with higher rates on all routes except the Caribbean-to-US East Coast (USEC), which dropped by WS22 points from one month earlier to stand at WS188 points in December.

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

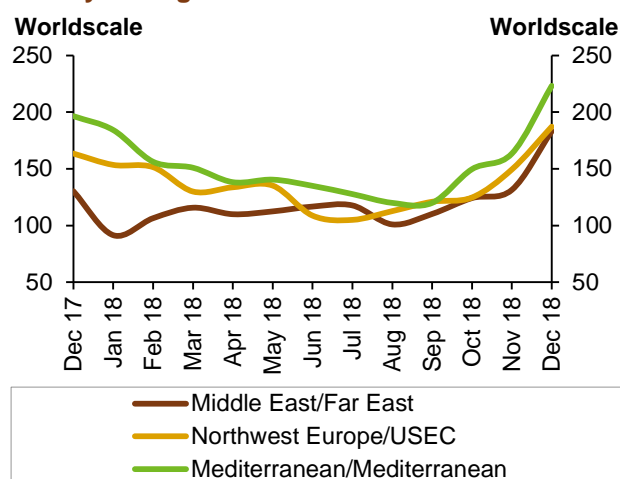
	Size 1,000 DWT	Oct 18	Nov 18	Dec 18	Change Dec 18/Nov 18
Indonesia/East	80-85	123	133	138	5
Caribbean/US East Coast	80-85	189	210	188	-22
Mediterranean/Mediterranean	80-85	129	155	195	40
Mediterranean/Northwest Europe	80-85	120	144	183	39

Sources: Argus Media and OPEC Secretariat.

Spot freight rates on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes rose by 26% and 27%, respectively m-o-m, to stand at WS195 and WS183 points in December.

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

Sources: Argus Media and Platts.

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

Sources: Argus Media and OPEC Secretariat.

Similarly, the market in the east showed higher rates with Aframax spot rates rising on the Indonesia-to-East route by 3% m-o-m to stand at WS138 points.

Clean tanker freight rates

Clean tanker spot freight rates increased by 32% on average in December compared with the previous month. The gains were registered on fixtures in both directions of Suez, with rates edging up on all selected routes.

On the **East of Suez**, spot freight rates for tankers operating on the Middle East-to-East route rose by WS52 points, and rates on the Singapore-to-East route went up by WS34 points m-o-m in December. Spot freight rates on both routes averaged WS183 points and WS180 points, respectively.

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

	Size 1,000 DWT	<u>Oct 18</u>	<u>Nov 18</u>	<u>Dec 18</u>	Change <u>Dec 18/Nov 18</u>
East of Suez					
Middle East/East	30-35	124	132	183	52
Singapore/East	30-35	123	147	180	34
West of Suez					
Northwest Europe/US East Coast	33-37	125	150	187	38
Mediterranean/Mediterranean	30-35	150	164	223	60
Mediterranean/Northwest Europe	30-35	162	172	233	62

Sources: Argus Media and OPEC Secretariat.

On the **West of Suez**, clean spot freight rates on the NWE-to-USEC route rose by WS38 points m-o-m to stand at WS187 points in December. The Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes showed the highest increases on the back of enhanced activities in the area and as the Black Sea market firmed. Spot rates went up on both routes by WS60 points and WS62 points, to stand at WS223 and WS233 points, respectively.

Oil Trade

Preliminary data for December shows that **US** crude oil imports declined to average 7.5 mb/d. This is down by 127 tb/d from the previous month and a drop of 316 tb/d from the same month in 2017. On a yearly average, preliminary data shows a drop in US crude imports of 171 tb/d in 2018 compared with the previous year. US product monthly imports fell slightly from November to average 1.8 mb/d. On an annual basis, the figure was lower by 400 tb/d, or 19%, compared to the same month in 2017.

In November, **Japan** increased its crude oil imports m-o-m by a small 32 tb/d, or 1%, to average 3.1 mb/d. On an annual comparison, crude imports showed a drop of 205 tb/d, or 6%, y-o-y. Product imports marginally increased m-o-m in November by 53 tb/d, or 8%. On a yearly comparison, the figures show an increase of 118 tb/d, y-o-y.

China's crude oil imports continued to increase, following the trend it has seen since June 2018. Crude imports increased by a significant 1.3 mb/d m-o-m in November to average 10.5 mb/d. On an annual comparison, crude imports increased by 1.4 mb/d, or 16%, from 2017 level. On the flip side, China's products imports dropped from the previous month to average 1.5 mb/d, down by 28 tb/d, or 2%, m-o-m. It also saw a drop of 51 tb/d, or 3%, y-o-y.

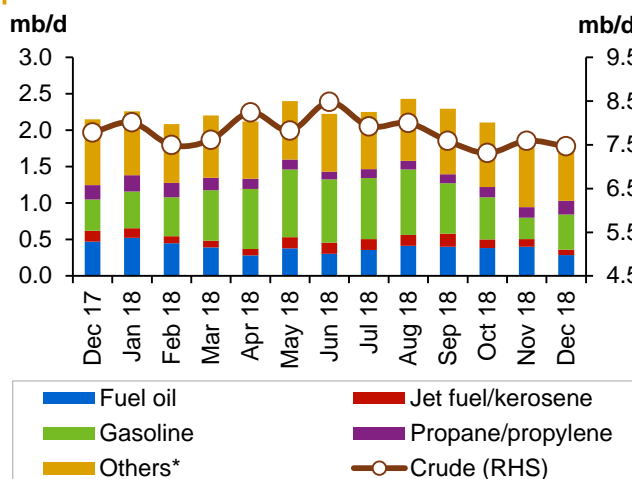
India's crude oil imports in November dropped by 834 tb/d, or 17%, to average 4.2 mb/d compared to the previous month. Y-o-y imports fell by 532 tb/d, or 11%,. India's product imports rose m-o-m in November by 40 tb/d, or 5%, to average 782 tb/d.

US

Preliminary data for December shows that **US crude oil imports** declined to average 7.5 mb/d. This is down by 127 tb/d from the previous month and a drop of 316 tb/d from the same month in 2017. For 2018, preliminary data shows a drop in US crude imports of 171 tb/d in 2018 compared with the previous year.

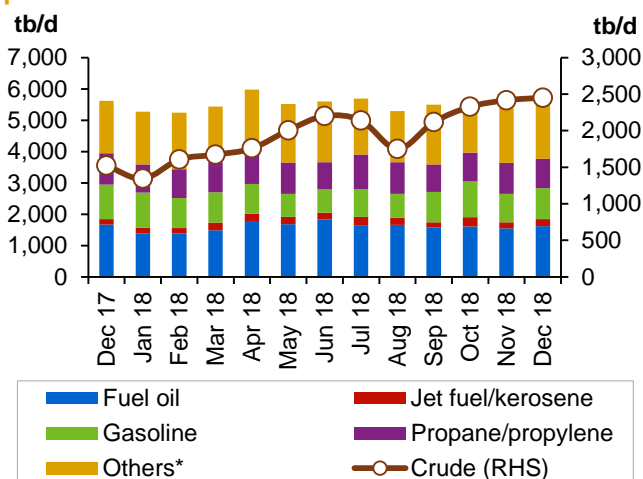
US product imports fell slightly m-o-m in December to average 1.8 mb/d. On an annual basis, the figure was lower by 400 tb/d, or 19%, compared to the same month in 2017. On an annual basis, US product imports were slightly down in December.

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



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

Graph 8 - 2: US exports of crude and petroleum products



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

Oil Trade

US crude oil exports in December reached a peak of 2.5 mb/d, up by 36 tb/d from one month before.

US product exports, on the other hand, were up by 167 tb/d from a month ago to average 5.6 mb/d. On an annual comparison, product exports were lower y-o-y by 50 tb/d, or just 1%.

As a result, **total US net imports dropped by 343 tb/d in December to average 1.2 mb/d.**

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

	Oct 18	Nov 18	Dec 18	Change Dec 18/Nov 18
Crude oil	4,986	5,178	5,015	-163
Total products	-3,587	-3,632	-3,811	-180
Total crude and products	1,399	1,546	1,204	-343

Sources: US EIA and OPEC Secretariat.

In October, the **top two crude suppliers to US** maintained their positions. Canada remained the premier crude supplier to the US, accounting for 50% of total US crude imports. It showed a m-o-m increase in exports to the US of 152 tb/d, or 4%. Saudi Arabia was again the second largest supplier to the US in October. It increased its exports to the US m-o-m by 65 tb/d. Mexico was the third largest supplier, accounting for 9% of total US crude imports, although its exports fell by 48 tb/d compared to the month before.

US crude imports from OPEC Member Countries (MCs) dropped m-o-m in October by 262 tb/d, or 10%, to account for 33% of total US crude imports.

US product imports from OPEC MCs declined slightly by 5 tb/d, or 2%, m-o-m in October.

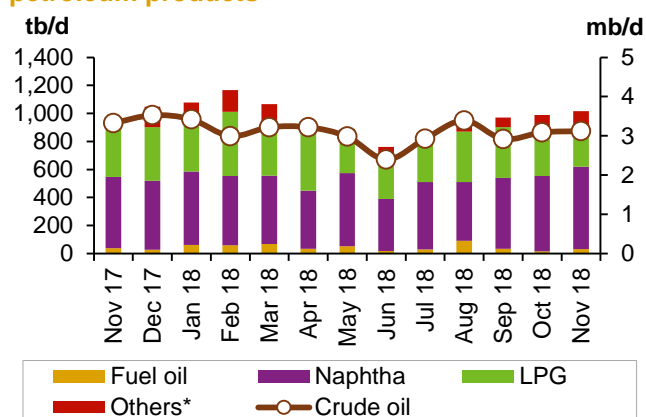
In terms of **US product supplier share**, Canada and Russia maintained their positions as the top two suppliers to the US, accounting for 24% and 11%, respectively.

From the perspective of **US crude imports by region**, in October 2018, US crude imports from top supplier North America averaged 3.6 mb/d, followed by Latin America at 1.7 mb/d. Imports from the Middle East fell by 96 tb/d to average 1.4 mb/d, and imports from Africa were almost stable at an average of 401 tb/d.

Japan

Japan's crude oil imports increased in November by a small 32 tb/d, or 1%, m-o-m to average 3.1 mb/d. On an annual basis, crude imports exhibited a drop of 205 tb/d, or 6%, despite refinery runs being stable.

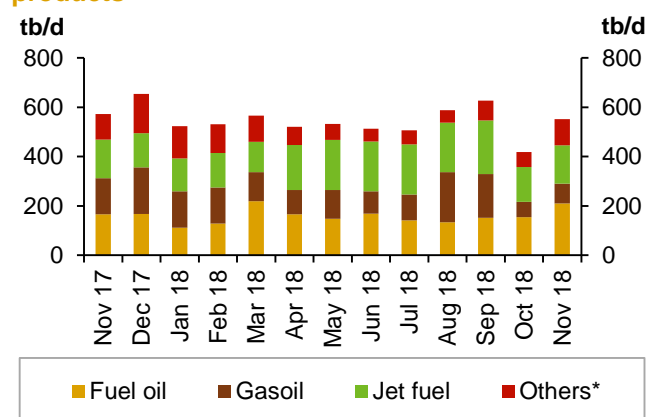
Graph 8 - 3: Japan's imports of crude and petroleum products



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

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

Graph 8 - 4: Japan's exports of petroleum products



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

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

In terms of **Japan's crude supplier share**, Saudi Arabia maintained its position as the top crude supplier to Japan in November, accounting for 37% of total Japan's crude imports, despite witnessing a drop of 106 tb/d from the month before. The UAE was the second largest supplier and also saw a m-o-m increase in crude exports to Japan of 124 tb/d, to average 884 tb/d in November. In third position was Kuwait, with total crude exports to the country of 286 tb/d in November.

Japan's product imports marginally increased by 53 tb/d, or 8%, m-o-m in November to average 730 tb/d. On a yearly comparison, it showed an increase of 118 tb/d.

As a result, **Japan's net trade imports dropped by 48 tb/d, or 1%, to average 3.3 mb/d.**

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

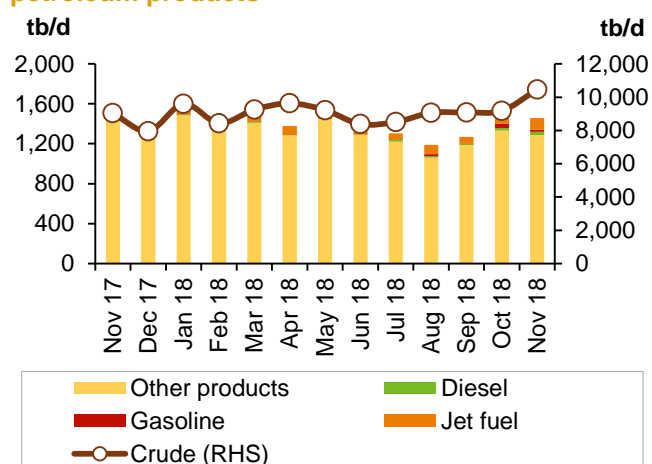
	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18
Crude oil	2,918	3,088	3,120	32
Total products	-18	258	179	-80
Total crude and products	2,900	3,347	3,299	-48

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

China

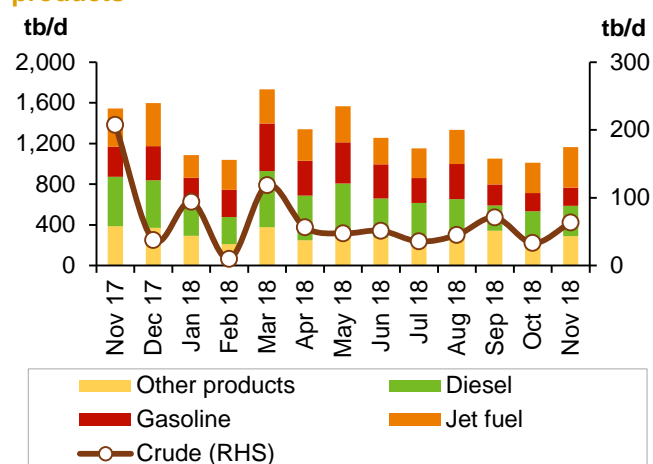
China's crude oil imports continued to increase, following the trend it has seen since June 2018. China's crude imports increased by a significant 1.3 mb/d in November to average a peak level of 10.5 mb/d, as independent refiners increased their buying activities using their 2018 quota allocations. On an annual comparison, China's crude imports increased by 1.4 mb/d, or 16%, from 2017 level. On a year-to-date (y-t-d) basis, the numbers show an increase of 695 tb/d, or 8%.

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



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

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



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

In contrast, **China's product imports** are estimated to have dropped m-o-m to average 1.5 mb/d, down by 28 tb/d, or 2%, while y-o-y they were down by 51 tb/d, or 3%.

China's products exports saw a monthly gain of 152 tb/d, or 15%, to average 1.2 mb/d in November. On an annual basis, however, product exports saw a decline of 381 tb/d, or 25%, from the same month in the previous year.

Accordingly, **China's net oil trade increased by around 1.1 mb/d m-o-m to average 10.7 mb/d** and rose by 1.9 mb/d from a year ago.

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

	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18
Crude oil	9,008	9,148	10,397	1,249
Total products	216	472	293	-180
Total crude and products	9,224	9,620	10,689	1,070

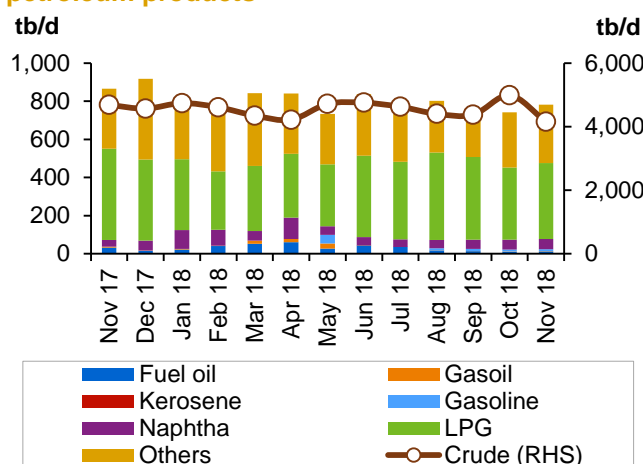
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

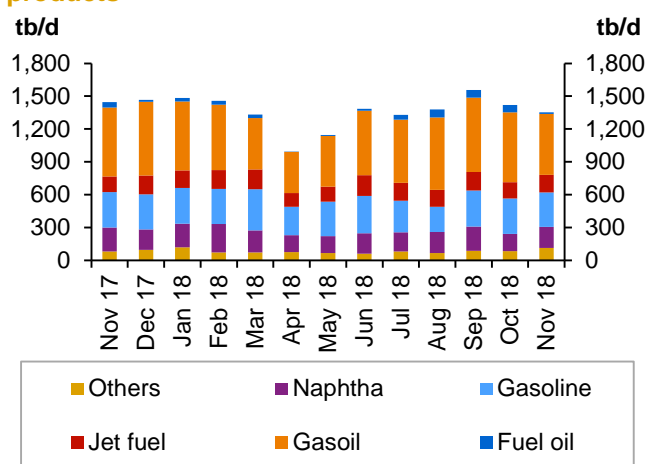
In November, **India's crude oil imports** dropped m-o-m by 834 tb/d, or 17%, and by 532 tb/d, or 11 %, y-o-y to average 4.2 mb/d. The drop can be partly attributed to refinery maintenance and a decline in crude intake.

India's product imports rose in November by 40 tb/d, or 5%, to average 782 tb/d, although on an annual basis it reflects a drop of 84 tb/d, or 10%. The monthly gains came as a result of higher imported volumes of LPG, as imports of LPG increased in November by 5%.

India's product exports dropped m-o-m in November by 67 tb/d to average 1.4 mb/d. On a y-o-y basis, it shows a drop of 93 tb/d, or 6%. The drop in product exports came on the back of lower exports of gasoil and fuel oil, which fell by 13% and 75%, respectively, from a month earlier.

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

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

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

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

As a result, **India's net imports in November** fell by 727 tb/d, or 17%, m-o-m and by 523 tb/d, or 13%, y-o-y to average 3.6 mb/d.

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

	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18
Crude oil	4,374	4,984	4,150	-834
Total products	-846	-678	-571	107
Total crude and products	3,528	4,306	3,579	-727

Note: India data table does not include information for crude import and product export by Reliance Industries.

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

Former Soviet Union (FSU)

In November, **total crude oil exports from the FSU** declined by 174 tb/d to average 7 mb/d.

In the **Transneft system**, total shipments from the Black Sea dropped as shipments from Novorossiysk fell by 79 tb/d, or 14%, m-o-m to average 481 tb/d. Total Baltic Sea exports fell by 120 tb/d m-o-m in November as shipments from the Primorsk port terminal fell by 142 tb/d, although the drop was offset by higher shipments at the Ust Luga port terminal. Druzhba pipeline total shipments were almost stable at an average 993 tb/d, while Kozmino shipments dropped by 26 tb/d, or 4%, m-o-m to average 622 tb/d.

Exports through the **Lukoil system** rose from the previous month in the Barents Sea. The Varandey offshore platform reported an increase of 11 tb/d to average 125 tb/d. Exports in the Baltic Sea from the Kalinigrad port terminal remained stable.

Regarding to the other routes, **Black Sea total** exports increased by 45 tb/d from one month previous, mainly due to the Novorossiysk port terminal (CPC) increasing its exports by 44 tb/d m-o-m.

In the **Mediterranean Sea**, BTC supplies remained mostly flat from the previous month to average 721 tb/d.

FSU total product exports dropped by 126 tb/d, or 5%, m-o-m to average 2.7 mb/d in November. The decline in product exports came as a result of lower exports in all product categories.

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

		2017	2Q18	3Q18	Oct 18	Nov 18
Transneft system						
Europe	Black Sea total	605	536	568	560	481
	Novorossiysk port terminal - total	605	536	568	560	481
	of which: Russian oil	424	375	402	402	391
	Others	181	162	167	158	91
	Baltic Sea total	1,516	1,297	1,227	1,485	1,364
	Primorsk port terminal - total	871	783	719	835	694
	of which: Russian oil	871	783	719	835	694
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	645	514	508	649	671
	of which: Russian oil	470	316	352	487	503
	Others	175	198	156	162	168
	Druzhba pipeline total	1,009	987	1,006	995	993
	of which: Russian oil	977	955	973	963	960
	Others	32	32	32	33	32
Asia	Pacific ocean total	645	623	632	648	622
	Kozmino port terminal - total	645	623	632	648	622
	China (via ESPO pipeline) total	336	554	600	601	601
	China Amur	336	554	600	601	601
Total Russia's crude exports		4,111	3,997	4,032	4,289	4,061
Lukoil system						
Europe & North America	Barents Sea total	170	125	152	114	125
	Varandey offshore platform	170	125	152	114	125
Europe	Baltic Sea total	13	7	7	7	7
	Kalinigrad port terminal	13	7	7	7	7
Other routes						
Asia	Russian Far East total	343	372	353	393	402
	Aniva Bay port terminal	127	137	89	119	121
	De Kastri port terminal	216	235	264	274	281
	Central Asia total	262	225	247	225	219
	Kenkiyak-Alashankou	262	225	247	225	219
Europe	Black Sea total	1,277	1,393	1,299	1,363	1,409
	Novorossiysk port terminal (CPC)	1,194	1,337	1,251	1,305	1,349
	Supsa port terminal	72	53	45	58	60
	Batumi port terminal	11	3	3	0	0
	Kulevi port terminal	0	0	0	0	0
	Mediterranean Sea total	707	693	696	723	721
	Baku–Tbilisi–Ceyhan (BTC)	707	693	696	723	721
Russian rail						
	Russian rail	40	32	30	39	35
	of which: Russian oil	40	32	30	39	35
	Others	0	0	0	0	0
Total FSU crude exports		6,923	6,844	6,816	7,154	6,979
Products						
	Gasoline	193	169	211	227	194
	Naphtha	549	544	502	522	488
	Jet	35	36	42	42	27
	Gasoil	980	1,010	961	881	878
	Fuel oil	1,025	932	931	871	851
	VGO	308	275	266	248	226
Total FSU product exports		3,089	2,967	2,913	2,791	2,665
Total FSU oil exports		10,012	9,811	9,730	9,945	9,644

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

Preliminary data for November showed that **total OECD commercial oil stocks** fell slightly by 0.7 mb m-o-m to stand at 2,871 mb. This was 32 mb lower than the same time one year ago, but 23 mb above the latest five-year average. Compared with the seasonal norm, crude indicated a surplus of 28.5 mb, while product stocks showed a deficit of 5.5 mb. In terms of **days of forward cover**, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 59.2 days. This was 1.5 days below the same period in 2017 and 1.4 days below the latest five-year average.

Preliminary data for December showed that **US total commercial oil stocks** fell by 3.7 mb m-o-m to stand at 1,242.2 mb. At this level, total US commercial stocks stood at 10.4 mb above the same period a year ago, and 38.3 mb higher than the latest five-year average. Within components, crude and product stocks fell by 1.7 mb and 2.0 mb, m-o-m, respectively.

OECD

Preliminary data for November showed that **total OECD commercial oil stocks** fell slightly by 0.7 mb m-o-m, reversing the build of the last four months. At 2,871 mb, total OECD commercial oil stocks were 32 mb lower than the same time one year ago, but 23.0 mb above the latest five-year average.

Within components, crude stocks indicated a surplus of 28 mb, while product stocks were 5 mb below the latest five-year average. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 314 mb since January 2017. In November, crude stocks rose by 3.3 mb m-o-m, while product stocks fell by 4.0 mb, m-o-m.

Within the regions, OECD Americas and OECD Europe total OECD commercial oil stocks fell by 0.4 mb and 3.6 mb in November, respectively, while OECD Pacific stocks increased by 3.3 mb, m-o-m.

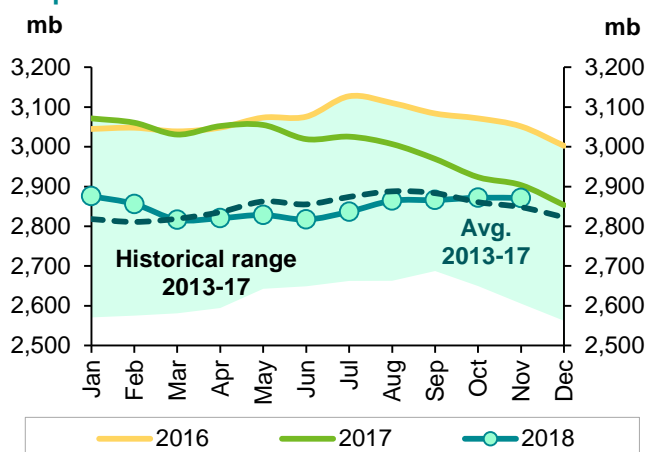
OECD commercial **crude stocks** rose by 3.3 mb m-o-m in November, ending the month at 1,437 mb. This was 38.8 mb lower than the same time a year ago, but 28.5 mb higher than the latest five-year average. Compared with the previous month, OECD America experienced stock builds, while OECD Asia Pacific and OECD Europe saw stock draws.

In contrast, total OECD **product inventories** fell by 4.0 mb m-o-m in November to stand at 1,434 mb. This was 6.4 mb above the same time a year ago, but 5.5 mb below the seasonal norm. Within the OECD regions, OECD America experienced a stock draw, while OECD Asia Pacific and OECD Europe witnessed stock builds, m-o-m.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 59.2 days. This was 1.5 days below the same period in 2017 and 1.4 days below the latest five-year average.

Within the regions, OECD Americas had 0.2 days of forward cover less than the historical average to stand at 60.2 days in November. OECD Europe's stocks stood at 3.9 days below the latest five-year average to

Graph 9 - 1: OECD commercial oil stocks



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

finish the month at 65.4 days. OECD Asia Pacific indicated a deficit of 1.5 days below the seasonal norm to stand at 46.5 days in November.

OECD Americas

Total commercial stocks in OECD Americas dropped slightly by 0.4 mb m-o-m in November, reversing the build of the last four months. At 1,542 mb, they stood 18.3 mb above a year ago, and 56.4 mb above the latest five-year average. Within components, crude stocks rose by 10.7 mb, while total product stocks fell by 11.1 mb, m-o-m.

Commercial **crude oil stocks** in OECD Americas rose by 10.7 mb m-o-m in November to stand at 819 mb. This was 15 mb higher than the same time a year ago, and 63 mb above the latest five-year average. The build in crude oil stocks came from higher US crude imports, while the increase in US crude throughput limited a further build.

In contrast, **total product stocks** in OECD Americas fell by 11.1 mb m-o-m in November to stand at 724 mb. This was 2.9 mb above the same time one year ago, but 6.3 mb below the seasonal norm. Higher consumption was behind the product stock draw.

OECD Europe

OECD Europe's total commercial stocks fell by 3.6 mb m-o-m in November, ending the month at 922 mb. This was 31 mb lower than the same time a year ago, and 18 mb below the latest five-year average. Crude fell by 5.3 mb, while product stocks rose by 1.7 mb, m-o-m.

OECD Europe's commercial **crude stocks** fell by 5.3 mb m-o-m in November, ending the month at 398 mb. This was 23 mb lower than a year earlier and 6.2 mb below the latest five-year average. The drop in crude oil stocks came despite lower refinery throughput in EU countries.

In contrast, OECD Europe's commercial **product stocks** rose by 1.7 mb m-o-m to end November at 523 mb. This was 7.8 mb below the same time a year ago and 11.9 mb below the seasonal norm. The build in product stocks could be attributed to lower demand in the OECD Europe region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose by 3.3 mb m-o-m in November to stand at 407 mb. At this level, they were 19.7 mb lower than a year ago and 15.3 mb below the latest five-year average. Within components, crude stocks fell by 2.1 mb, while product inventories rose by 5.4 mb in November, m-o-m.

OECD Asia Pacific's **crude inventories** fell by 2.1 mb m-o-m to end the month of November at 220 mb, which was 31 mb below one year ago and 28 mb below the seasonal norm.

By contrast, OECD Asia Pacific's **total product inventories** rose by 5.4 mb m-o-m to end November at 187 mb, standing 11.3 mb above the same time a year ago, and 12.7 mb higher than the seasonal norm.

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

	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18	Nov 17
Crude oil	1,385	1,433	1,437	3.3	1,476
Products	1,481	1,438	1,434	-4.0	1,428
Total	2,866	2,872	2,871	-0.7	2,904
Days of forward cover	59.3	59.6	59.2	-0.4	60.7

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

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

US

Preliminary data for December showed that **US total commercial oil stocks** fell by 3.7 mb m-o-m to stand at 1,242.2 mb. At this level, total US commercial stocks stood at 10.4 mb, or 0.8%, above the same period a year ago, and 38.3 mb, or 3.2%, higher than the latest five-year average. Within components, crude and product stocks fell by 1.7 mb and 2.0 mb, m-o-m, respectively.

US commercial **crude stocks** fell in December to stand at 441.4 mb, which was 19.8 mb, or 4.7%, above last year at the same time, but 32.7 mb, or 8.0%, above the latest five-year average. This drop came from lower crude imports, which decreased by 127 tb/d to stand at 7.5 mb/d. Higher crude throughput, which increased by more than 400 tb/d to average 17.8 mb/d, also contributed to the drop in crude oil stocks. In December, crude inventories in Cushing, Oklahoma, rose by more than 4 mb to end the month at 42.26 mb.

Total product stocks also fell by 2.0 mb m-o-m in December to stand at 800.7 mb, which is 9.3 mb, or 1.2%, below the level seen at the same time in 2017, but 5.5 mb, or 0.7%, above the seasonal average. Within products, the picture was mixed; gasoline, distillates and jet fuel experienced stock builds, while residual fuel, propylene and other unfinished product inventories witnessed stock draws.

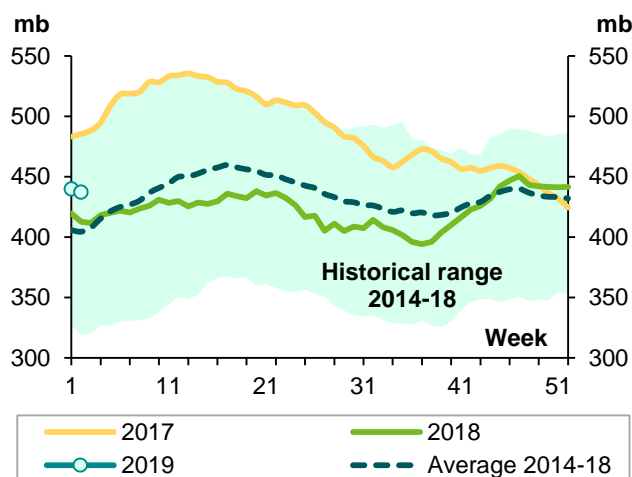
Gasoline stocks rose by 13.7 mb m-o-m in December to stand at 240.0 mb. At this level, they were 3.2 mb, or 1.3%, above levels at the same time last year, and 4.1 mb, or 1.8%, higher than the seasonal norm. This monthly build came on the back of lower gasoline consumption, which decreased by around 60 tb/d m-o-m to average 9.01 mb/d.

Distillate stocks also rose by 3.8 mb m-o-m in December for the second consecutive month. At 129.4 mb, distillate stocks stood at 16.2 mb, or 11.1%, below the same period a year ago, and 17.9 mb, or 12.2%, below the latest five-year average. The stock build could be attributed to higher output, which increased by around 200 tb/d to average 5.5 mb/d. Distillate demand rose slightly in December, limiting a further build in stocks.

Jet fuel oil stocks were up by 2.6 mb m-o-m to stand at 40.7 mb in December. At this level, they are 0.6 mb, or 1.4%, lower than a year ago at the same time, but 0.7 mb, or 1.7%, higher than the latest five-year average.

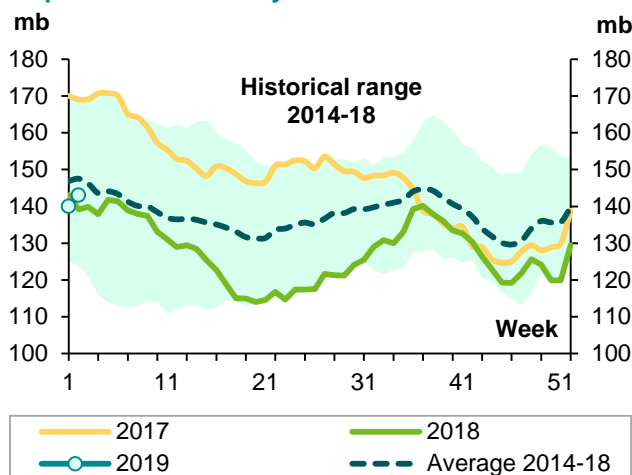
In contrast, **residual fuel stocks** fell by 0.8 mb m-o-m, ending December at 27.9 mb, which is 1.5 mb, or 5.1%, below the same time a year ago and 9.1 mb, or 24.6%, below the latest five-year average.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

Graph 9 - 3: US weekly distillate inventories



Sources: US EIA and OPEC Secretariat.

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

	Oct 18	Nov 18	Dec 18	Change Dec 18/Nov 18	Dec 17
Crude oil	432.5	443.2	441.4	-1.7	421.6
Gasoline	232.1	226.3	240.0	13.7	236.8
Distillate fuel	124.2	125.6	129.4	3.8	145.6
Residual fuel oil	29.2	28.6	27.9	-0.8	29.4
Jet fuel	42.2	38.1	40.7	2.6	41.3
Total products	828.8	802.7	800.7	-2.0	810.1
Total	1,261.3	1,245.9	1,242.2	-3.7	1,231.7
SPR	654.8	649.6	649.1	-0.4	662.8

Sources: US EIA and OPEC Secretariat.

Japan

In **Japan**, **total commercial oil stocks** rose by 3.3 mb m-o-m in November following a massive build of 13.9 mb in October. At 156.3 mb, they were 8.2 mb, or 5.5%, above one year ago, but 3.1 mb, or 2.0%, below the latest five-year average. Within components, crude stocks fell by 2.1 mb, while product inventories rose by 5.4 mb, m-o-m.

Japanese commercial **crude oil stocks** fell in November to stand at 69.7 mb. This was 2.5 mb, or 3.0%, above the same period a year ago, but 4.6 mb, or 5.0%, below the seasonal norm. The drop came on the back of higher refinery throughput.

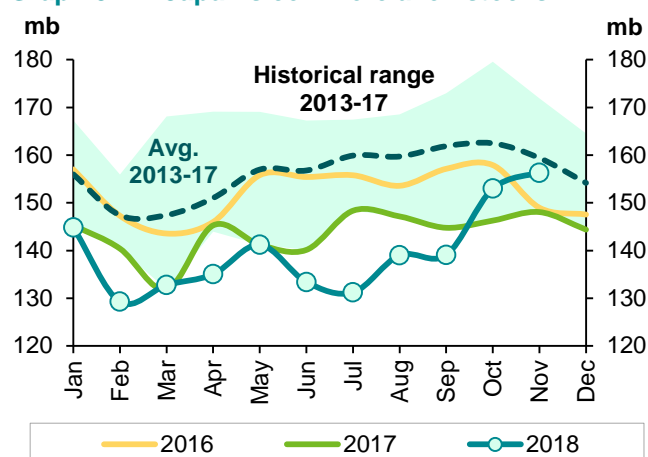
By contrast, Japan's **total product inventories** rose m-o-m by 5.4 mb to end November at 69.7 mb. This was 5.7 mb, or 8.8%, higher than the same month last year, and 1.5 mb, or 2.2%, above the seasonal norm. All products witnessed a stock build.

Gasoline stocks rose by 0.6 mb m-o-m to stand at 11.1 mb in November. At this level, they were 0.1 mb or 0.7% higher than a year ago, and they are 0.5 mb or 4.4% higher than the latest five-year average. The build was mainly driven by lower gasoline consumption, which fell by 1.7% from the previous month. Higher domestic gasoline production, which increased by 4.9%, also contributed to the build in gasoline stocks.

Distillate stocks also rose by 2.8 mb m-o-m to stand at 34.0 mb in November. This was 3.4 mb, or 10.9%, above the same time a year ago, and 1.0 mb, or 3.0%, above the seasonal average. Within distillate components, jet fuel, kerosene and gasoil stocks rose m-o-m by 17.8%, 2.9% and 15.9%, respectively. Higher output, combined with lower domestic sales, was behind the build in these three products.

Total residual fuel oil stocks also rose by 0.6 mb m-o-m to stand at 13.9 mb in November. This was 0.4 mb, or 3.0%, above the same period a year ago, but 0.6 mb, or 4.3%, less than the latest five-year average. Within fuel oil components, fuel oil A and B.C stocks rose by 11.1% and 0.4%, respectively. The build in fuel oil A was driven by higher production, increasing by 15.8%, while the build in fuel oil B.C stocks could be attributed to lower consumption, which declined by 17.3%.

Graph 9 - 4: Japan's commercial oil stocks



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

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

	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18	Nov 17
Crude oil	74.2	88.6	86.6	-2.1	84.0
Gasoline	10.3	10.5	11.1	0.6	11.0
Naphtha	10.2	9.4	10.8	1.4	8.9
Middle distillates	31.5	31.2	34.0	2.8	30.7
Residual fuel oil	12.9	13.3	13.9	0.6	13.5
Total products	64.9	64.3	69.7	5.4	64.0
Total**	139.1	153.0	156.3	3.3	148.1

Note: * At the end of the month.

** Includes crude oil and main products only.

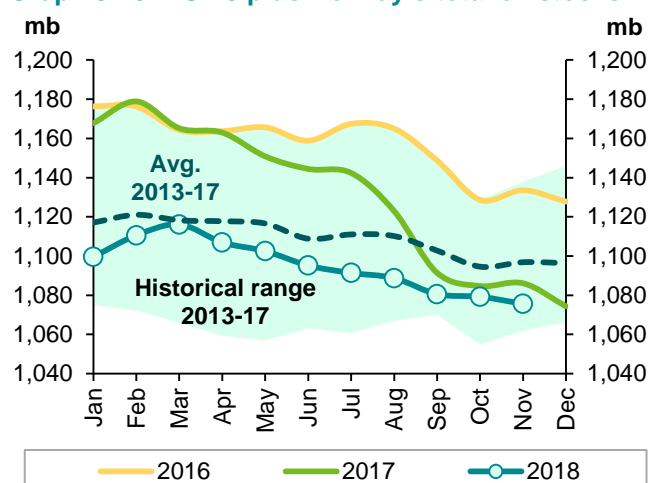
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

EU plus Norway

Preliminary data for November showed that **total European commercial oil stocks** fell by 3.6 mb m-o-m to stand at 1,076 mb. This was 10.5 mb, or 1.0% lower than the same time a year ago, and 21.2 mb, or 1.9%, lower than the latest five-year average. Within components, crude fell by 5.3 mb, while product stocks rose by 1.7 mb, m-o-m.

European **crude inventories** fell in November to stand at 466.7 mb. This was 15.6 mb, or 3.2%, higher than the same period a year ago, and 11.4 mb, or 2.4%, less than the latest five-year average. The drop in crude oil stocks came despite lower refinery throughput in EU countries.

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



Sources: Argus, Euroilstock and OPEC Secretariat.

In contrast, European **total product stocks** rose by 1.7 mb m-o-m, ending November at 608.9 mb. This was 5.1 mb, or 0.8%, higher than the same time a year ago, but 9.8 mb, or 1.6%, lower than the seasonal norm. Within products, gasoline, naphtha and residual fuel stocks witnessed a stock build, while distillates experienced a stock draw.

Gasoline and residual fuel stocks rose by 2.5 mb and 0.8 mb, m-o-m to end November at 111.3 mb and 65.5 mb, respectively. Gasoline stocks stood at 2.6 mb, or 2.3%, lower than last year's level at the same time, and were about 0.3 mb, or 0.3%, below the latest five-year average. Residual fuel stocks were 0.7 mb, or 1.1%, higher than the same time one year ago, and 7.9 mb, or 10.7%, lower than the seasonal norm. Lower demand, combined with higher output for both products, was behind the build in inventories.

In contrast, **distillate stocks** in November fell by 2.0 mb m-o-m to stand at 401.8 mb. At this level, they are 3.2 mb, or 0.8%, higher than the same time a year ago and 7.9 mb, or 1.9%, below the latest five-year average. The fall in distillate stocks was driven by higher demand in the region.

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

	Sep 18	Oct 18	Nov 18	Change Nov 18/Oct 18	Nov 17
Crude oil	470.5	472.0	466.7	-5.3	482.3
Gasoline	108.2	108.8	111.3	2.5	113.9
Naphtha	28.6	29.9	30.4	0.4	26.6
Middle distillates	410.0	403.8	401.8	-2.0	398.6
Fuel oils	63.3	64.7	65.5	0.8	64.8
Total products	610.1	607.2	608.9	1.7	603.9
Total	1,080.6	1,079.2	1,075.6	-3.6	1,086.1

Sources: Argus, Euroilstock and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

Singapore

At the end of November, **total product stocks in Singapore** rose by 6.9 mb m-o-m to stand at 44.1 mb. This was 2.0 mb, or 4.3%, below the same period a year ago. All refined product stocks experienced a stock build.

Light distillate stocks rose by 2.0 mb m-o-m for the second consecutive month to stand at 14.2 mb in November. This was 2.5 mb, or 21.4%, above the same time a year ago.

Middle distillate and residual fuel stocks also rose by 1.2 mb and 3.7 mb, m-o-m, ending the month of November at 10.7 mb and 19.2 mb, respectively. Middle distillate stocks were 0.4 mb below the same period a year ago, while residual fuel stocks stood at a higher deficit of 4.0 mb when compared with the same period last year.

ARA

Total product stocks in ARA fell by 3.5 mb in November, m-o-m, for the second consecutive month, to stand at 36.9 mb. At this level, they were 0.8 mb, or 2.2%, above the same time a year ago. Refined products were mixed, with gasoline and fuel oil witnessing a stock draw, while jet oil and naphtha saw a stock build. Gasoline stocks remained unchanged.

Naphtha and jet oil gasoline stocks rose by 0.1 mb and 0.2 mb m-o-m in November to stand at 2.3 mb and 5.1 mb, respectively. Naphtha remained 0.5 mb above last year's level, while jet oil stocks were 0.2 mb below the same time last year.

By contrast, **gasoil and residual fuel stocks** fell by 3.7 mb and 0.1 mb m-o-m in November to stand at 15.1 mb and 6.0 mb, respectively; they remained below last year's level at the same time.

Balance of Supply and Demand

Demand for OPEC crude in 2018 stood at 31.7 mb/d, 1.2 mb/d lower than the 2017 level. In comparison, according to secondary sources, OPEC crude production averaged 31.8 mb/d and 31.6 mb/d in 1Q18 and 2Q18, respectively, which is in line with the demand for OPEC crude. OPEC crude production averaged 32.0 mb/d in 3Q18, around 0.1 mb/d higher than the demand for OPEC crude. In the 4Q18, OPEC crude production stood at 32.1 mb/d, around 0.4 mb/d higher than the demand for OPEC crude.

Demand for OPEC crude in 2019 is forecast to decline by 0.9 mb/d to average 30.8 mb/d.

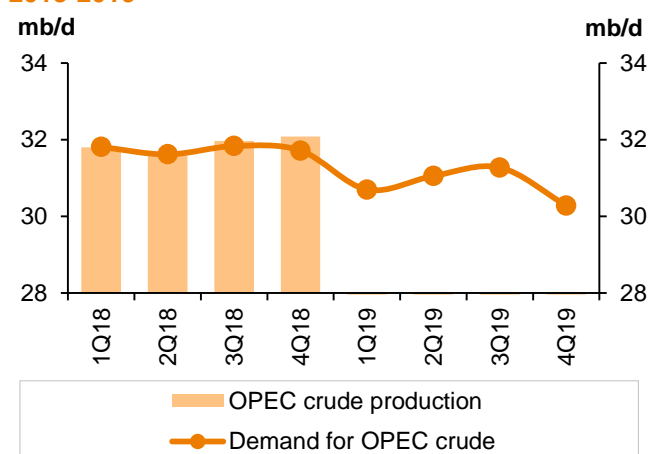
Balance of supply and demand in 2018

Demand for OPEC crude in 2018 stood at 31.7 mb/d, around 1.2 mb/d lower than the 2017 level.

When compared to the same quarter in 2017, 1Q18 was 0.2 mb/d higher, while the second and third quarters were 1.1 mb/d and 2.1 mb/d lower, respectively. The fourth quarter is expected to fall by 1.7 mb/d.

In comparison, according to secondary sources, OPEC crude production averaged 31.8 mb/d and 31.6 mb/d in 1Q18 and 2Q18, respectively, which is in line with the demand for OPEC crude. OPEC crude production averaged 32.0 mb/d in 3Q18, which is around 0.1 mb/d higher than the demand for OPEC crude. In the 4Q18, OPEC crude production stood at 32.1 mb/d, around 0.4 mb/d higher than the demand for OPEC crude.

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



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

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

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17
(a) World oil demand	97.29	97.80	98.02	99.35	99.94	98.78	1.50
Non-OPEC supply	59.45	61.07	61.44	62.53	63.18	62.06	2.61
OPEC NGLs and non-conventionals	4.94	4.92	4.96	4.98	5.05	4.98	0.04
(b) Total non-OPEC supply and OPEC NGLs	64.39	65.99	66.40	67.51	68.23	67.04	2.65
Difference (a-b)	32.90	31.81	31.62	31.83	31.72	31.74	-1.15
OPEC crude oil production	32.02	31.80	31.59	31.97	32.09	31.86	-0.15
Balance	-0.88	-0.01	-0.02	0.14	0.37	0.12	1.00

Notes: * 2018 = Estimate.

Totals may not add up due to independent rounding.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Balance of supply and demand in 2019

Demand for OPEC crude in 2019 is forecast at 30.8 mb/d, around 0.9 mb/d lower than the 2018 level.

When compared to the same quarter in 2018, the first and second quarters are forecast to fall by 1.1 mb/d and 0.6 mb/d, respectively, while the third and fourth quarters are expected to fall by 0.6 mb/d and 1.4 mb/d, respectively.

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

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18
(a) World oil demand	98.78	99.10	99.26	100.67	101.25	100.08	1.29
Non-OPEC supply	62.06	63.34	63.13	64.29	65.84	64.16	2.10
OPEC NGLs and non-conventionals	4.98	5.06	5.07	5.10	5.13	5.09	0.11
(b) Total non-OPEC supply and OPEC NGLs	67.04	68.40	68.20	69.40	70.97	69.25	2.21
Difference (a-b)	31.74	30.70	31.05	31.27	30.28	30.83	-0.92
OPEC crude oil production	31.86						
Balance	0.12						

Notes: * 2018 = Estimate and 2019 = Forecast.

Totals may not add up due to independent rounding.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Appendix

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

	2015	2016	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
World demand													
OECD	46.52	46.97	47.42	47.69	47.24	48.16	48.36	47.87	47.98	47.44	48.44	48.61	48.12
Americas	24.59	24.87	25.06	25.20	25.40	25.73	25.64	25.49	25.46	25.64	26.01	25.90	25.76
Europe	13.83	13.99	14.30	13.95	14.19	14.73	14.46	14.33	13.98	14.19	14.75	14.47	14.35
Asia Pacific	8.10	8.11	8.06	8.54	7.65	7.70	8.26	8.04	8.53	7.61	7.68	8.23	8.01
DCs	30.89	31.51	32.13	32.44	32.60	32.86	32.68	32.64	33.01	33.19	33.46	33.27	33.23
FSU	4.58	4.63	4.70	4.66	4.65	4.94	5.01	4.82	4.75	4.74	5.03	5.11	4.91
Other Europe	0.67	0.70	0.72	0.73	0.69	0.73	0.82	0.74	0.75	0.71	0.75	0.84	0.76
China	11.49	11.80	12.32	12.28	12.84	12.65	13.07	12.71	12.61	13.18	12.99	13.42	13.05
(a) Total world demand	94.16	95.61	97.29	97.80	98.02	99.35	99.94	98.78	99.10	99.26	100.67	101.25	100.08
Non-OPEC supply													
OECD	25.36	24.86	25.71	27.25	27.46	28.58	28.81	28.03	28.84	28.84	29.79	30.94	29.61
Americas	21.08	20.57	21.49	22.93	23.35	24.53	24.61	23.86	24.60	24.76	25.61	26.51	25.37
Europe	3.82	3.86	3.83	3.92	3.73	3.63	3.77	3.76	3.81	3.62	3.71	3.94	3.77
Asia Pacific	0.46	0.42	0.39	0.40	0.38	0.42	0.44	0.41	0.44	0.45	0.47	0.49	0.46
DCs	13.79	13.53	13.38	13.41	13.47	13.32	13.43	13.41	13.59	13.60	13.80	14.05	13.76
FSU	13.69	13.85	14.05	14.10	14.14	14.33	14.57	14.29	14.53	14.36	14.38	14.51	14.44
Other Europe	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
China	4.40	4.09	3.97	3.94	4.00	3.94	3.99	3.97	3.99	3.94	3.93	3.95	3.95
Processing gains	2.17	2.19	2.21	2.25	2.25	2.25	2.25	2.25	2.28	2.28	2.28	2.28	2.28
Total non-OPEC supply	59.55	58.66	59.45	61.07	61.44	62.53	63.18	62.06	63.34	63.13	64.29	65.84	64.16
OPEC NGLs + non-conventional oils	4.69	4.81	4.94	4.92	4.96	4.98	5.05	4.98	5.06	5.07	5.10	5.13	5.09
(b) Total non-OPEC supply and OPEC NGLs	64.24	63.47	64.39	65.99	66.40	67.51	68.23	67.04	68.40	68.20	69.40	70.97	69.25
OPEC crude oil production (secondary sources)	31.24	32.20	32.02	31.80	31.59	31.97	32.09	31.86					
Total supply	95.48	95.67	96.40	97.79	97.99	99.48	100.31	98.90					
Balance (stock change and miscellaneous)	1.32	0.05	-0.88	-0.01	-0.02	0.14	0.37	0.12					
OECD closing stock levels, mb													
Commercial	2,989	3,002	2,853	2,816	2,817	2,866							
SPR	1,588	1,600	1,568	1,575	1,570	1,565							
Total	4,577	4,602	4,421	4,391	4,386	4,431							
Oil-on-water	1,017	1,102	1,025	1,036	1,014	1,041							
Days of forward consumption in OECD, days													
Commercial onland stocks	64	63	60	60	58	59							
SPR	34	34	33	33	33	32							
Total	97	97	92	93	91	92							
Memo items													
(a) - (b)	29.92	32.14	32.90	31.81	31.62	31.83	31.72	31.74	30.70	31.05	31.27	30.28	30.83

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

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

Table 11 - 2: OECD oil stocks and oil on water at the end of period

	2015	2016	2017	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18
Closing stock levels, mb												
OECD onland commercial	2,989	3,002	2,853	3,084	3,002	3,031	3,019	2,969	2,853	2,816	2,817	2,866
Americas	1,561	1,598	1,498	1,621	1,598	1,606	1,596	1,571	1,498	1,468	1,471	1,541
Europe	993	989	943	1,013	989	1,022	999	965	943	970	958	936
Asia Pacific	435	414	412	450	414	404	424	433	412	378	388	389
OECD SPR	1,588	1,600	1,568	1,596	1,600	1,600	1,588	1,578	1,568	1,575	1,570	1,565
Americas	697	697	665	697	697	694	681	676	665	667	662	662
Europe	475	481	480	477	481	484	484	479	480	485	486	481
Asia Pacific	416	421	423	421	421	422	423	423	423	422	422	422
OECD total	4,577	4,602	4,421	4,679	4,602	4,630	4,608	4,547	4,421	4,391	4,386	4,431
Oil-on-water	1,017	1,102	1,025	1,068	1,102	1,043	1,052	998	1,025	1,036	1,014	1,041
Days of forward consumption in OECD, days												
OECD onland commercial	64	63	60	65	64	64	63	62	60	60	58	59
Americas	63	64	59	65	65	64	63	62	59	58	57	60
Europe	71	69	66	72	72	72	68	67	68	68	65	65
Asia Pacific	54	51	51	54	49	53	54	52	48	49	50	47
OECD SPR	34	34	33	34	34	34	33	33	33	33	33	32
Americas	28	28	26	28	28	28	27	27	26	26	26	26
Europe	34	34	33	34	35	34	33	33	34	34	33	33
Asia Pacific	51	52	53	50	50	55	54	51	50	55	55	51
OECD total	97	97	92	99	98	98	97	95	93	93	91	92

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

Table 11 - 3: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2015	2016	2017	3Q18	4Q18	2018	Change 18/17	1Q19	2Q19	3Q19	4Q19	2019	Change 19/18
US	14.1	13.6	14.4	17.2	17.5	16.6	2.2	17.6	17.8	18.5	19.3	18.3	1.7
Canada	4.4	4.5	4.9	5.3	5.1	5.2	0.3	5.0	5.0	5.2	5.3	5.1	-0.1
Mexico	2.6	2.5	2.2	2.1	2.0	2.1	-0.2	2.0	1.9	1.9	1.9	1.9	-0.1
OECD Americas	21.1	20.6	21.5	24.5	24.6	23.9	2.4	24.6	24.8	25.6	26.5	25.4	1.5
Norway	1.9	2.0	2.0	1.8	1.9	1.8	-0.1	1.9	1.7	1.8	1.9	1.8	0.0
UK	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.1	1.1	1.0	1.2	1.1	0.1
Denmark	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.1	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	3.8	3.9	3.8	3.6	3.8	3.8	-0.1	3.8	3.6	3.7	3.9	3.8	0.0
Australia	0.4	0.3	0.3	0.3	0.4	0.3	0.0	0.4	0.4	0.4	0.4	0.4	0.1
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	0.5	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.5	0.5	0.5	0.5	0.1
Total OECD	25.4	24.9	25.7	28.6	28.8	28.0	2.3	28.8	28.8	29.8	30.9	29.6	1.6
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Indonesia	0.9	0.9	0.9	0.9	0.8	0.9	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	3.7	3.7	3.6	3.5	3.5	3.5	-0.1	3.5	3.4	3.5	3.5	3.5	-0.1
Argentina	0.7	0.7	0.6	0.7	0.7	0.7	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Brazil	3.1	3.1	3.3	3.2	3.3	3.3	0.0	3.5	3.5	3.6	3.9	3.6	0.4
Colombia	1.0	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	5.2	5.1	5.2	5.1	5.2	5.2	0.0	5.4	5.4	5.5	5.7	5.5	0.3
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Qatar	2.0	2.0	1.9	2.0	2.0	2.0	0.1	2.0	2.0	2.0	2.0	2.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	3.3	3.3	3.1	3.2	3.2	3.2	0.1	3.2	3.2	3.2	3.2	3.2	0.0
Cameroon	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.6	0.7	0.7	0.7	0.0
Ghana	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.3	0.2	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa	1.6	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.6	1.6	1.6	0.0
Total DCs	13.8	13.5	13.4	13.3	13.4	13.4	0.0	13.6	13.6	13.8	14.0	13.8	0.4
FSU	13.7	13.9	14.1	14.3	14.6	14.3	0.2	14.5	14.4	14.4	14.5	14.4	0.2
Russia	10.8	11.1	11.2	11.4	11.6	11.3	0.2	11.5	11.4	11.5	11.5	11.5	0.1
Kazakhstan	1.6	1.6	1.7	1.8	1.8	1.8	0.1	1.9	1.9	1.8	1.9	1.9	0.0
Azerbaijan	0.9	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.4	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
China	4.4	4.1	4.0	3.9	4.0	4.0	0.0	4.0	3.9	3.9	4.0	4.0	0.0
Non-OPEC production	57.4	56.5	57.2	60.3	60.9	59.8	2.6	61.1	60.9	62.0	63.6	61.9	2.1
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.3	2.3	2.3	2.3	2.3	0.0
Non-OPEC supply	59.5	58.7	59.5	62.5	63.2	62.1	2.6	63.3	63.1	64.3	65.8	64.2	2.1
OPEC NGL	4.6	4.7	4.8	4.8	4.9	4.8	0.0	4.9	4.9	5.0	5.0	5.0	0.1
OPEC Non-conventional	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OPEC (NGL+NCF)	4.7	4.8	4.9	5.0	5.1	5.0	0.0	5.1	5.1	5.1	5.1	5.1	0.1
Non-OPEC & OPEC (NGL+NCF)	64.2	63.5	64.4	67.5	68.2	67.0	2.7	68.4	68.2	69.4	71.0	69.3	2.2

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

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 4: World rig count, units

	2016	2017	2018	Change 2018/17	1Q18	2Q18	3Q18	4Q18	Nov 18	Dec 18	Change Dec/Nov
US	509	875	1,031	157	964	1,037	1,051	1,073	1,077	1,078	1
Canada	131	207	191	-15	273	106	208	177	199	141	-58
Mexico	26	17	27	9	19	25	30	32	31	31	0
OECD Americas	665	1,099	1,249	150	1,257	1,168	1,289	1,282	1,307	1,250	-57
Norway	17	15	15	0	15	14	14	17	15	18	3
UK	9	9	7	-2	6	6	8	8	7	11	4
OECD Europe	96	92	85	-7	86	82	84	90	83	95	12
OECD Asia Pacific	7	15	21	5	16	21	22	23	22	24	2
Total OECD	768	1,206	1,355	149	1,359	1,271	1,395	1,396	1,412	1,369	-43
Other Asia*	204	208	222	14	221	216	228	224	223	226	3
Latin America	111	112	123	11	123	120	126	123	120	127	7
Middle East	75	68	65	-4	66	67	64	62	62	63	1
Africa	43	38	45	7	33	45	50	50	51	51	0
Total DCs	432	426	454	28	442	447	468	460	456	467	11
Non-OPEC rig count	1,200	1,632	1,809	177	1,801	1,718	1,863	1,855	1,868	1,836	-32
Algeria	54	54	50	-4	53	52	48	47	46	50	4
Angola	6	3	4	1	3	3	4	5	5	5	0
Congo	2	2	3	1	3	3	3	4	4	4	0
Ecuador	4	6	8	2	6	6	9	11	13	12	-1
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	1	0
Gabon	1	1	3	3	3	4	3	4	4	4	0
Iran**	143	156	157	2	157	157	157	157	157	157	0
Iraq	43	49	59	10	58	60	58	61	61	62	1
Kuwait	44	54	51	-3	54	54	50	45	44	41	-3
Libya	1	1	5	4	1	1	7	9	9	9	0
Nigeria	6	9	13	5	13	13	15	12	9	11	2
Saudi Arabia	125	118	117	-1	114	112	119	123	121	125	4
UAE	51	52	55	4	53	54	56	57	57	57	0
Venezuela	58	49	32	-17	46	30	27	26	25	27	2
OPEC rig count	537	553	558	5	564	550	557	563	556	565	9
World rig count***	1,737	2,185	2,368	183	2,365	2,268	2,419	2,418	2,424	2,401	-23
of which:											
Oil	1,313	1,678	1,886	209	1,864	1,803	1,945	1,934	1,944	1,911	-33
Gas	370	466	448	-17	468	432	440	453	451	460	9
Others	54	42	33	-9	33	34	34	31	29	30	1

Note: * Other Asia includes Indonesia.

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

*** Data excludes China and FSU.

Totals may not add up due to independent rounding.

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

Glossary of Terms

Abbreviations

b	barrels
b/d	barrels per day
bp	basis points
bb	billion barrels
bcf	billion cubic feet
cu m	cubic metres
mb	million barrels
mb/d	million barrels per day
mmbtu	million British thermal units
mn	million
m-o-m	month-on-month
mt	metric tonnes
q-o-q	quarter-on-quarter
pp	percentage points
tb/d	thousand barrels per day
tcf	trillion cubic feet
y-o-y	year-on-year
y-t-d	year-to-date

Acronyms

ARA	Amsterdam-Rotterdam-Antwerp
BoE	Bank of England
BoJ	Bank of Japan
BOP	Balance of payments
BRIC	Brazil, Russia, India and China
CAPEX	capital expenditures
CCI	Consumer Confidence Index
CFTC	Commodity Futures Trading Commission
CIF	cost, insurance and freight
CPI	consumer price index
DCs	developing countries
DUC	drilled, but uncompleted (oil well)
ECB	European Central Bank
EIA	US Energy Information Administration
Emirates NBD	Emirates National Bank of Dubai
EMs	emerging markets
EV	electric vehicle
FAI	fixed asset investment
FCC	fluid catalytic cracking
FDI	foreign direct investment
Fed	US Federal Reserve
FID	final investment decision
FOB	free on board
FPSO	floating production storage and offloading
FSU	Former Soviet Union
FX	Foreign Exchange
FY	fiscal year
GDP	gross domestic product
GFCF	gross fixed capital formation
GoM	Gulf of Mexico
GTLs	gas-to-liquids
HH	Henry Hub
HSFO	high-sulphur fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
IP	industrial production
ISM	Institute of Supply Management
LIBOR	London inter-bank offered rate
LLS	Light Louisiana Sweet
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LR	long-range (vessel)
LSFO	low-sulphur fuel oil

Glossary of Terms

MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report
MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)
NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
OSP	Official Selling Price
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index
RBI	Reserve Bank of India
REER	real effective exchange rate
ROI	return on investment
SAAR	seasonally-adjusted annualized rate
SIAM	Society of Indian Automobile Manufacturers
SRFO	straight-run fuel oil
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

OPEC Basket average price

US\$/b



down 8.39 in December

December 2018	56.94
November 2018	65.33
Annual average	69.78

December OPEC crude production

mb/d, according to secondary sources



down 0.75 in December

December 2018	31.58
November 2018	32.33

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2018	3.7	2.3	2.9	0.8	1.9	6.5	7.5
2019	3.5	2.0	2.6	1.0	1.7	6.1	7.2

Supply and demand

mb/d

2018		18/17	2019		19/18
World demand	98.8	1.5	World demand	100.1	1.3
Non-OPEC supply	62.1	2.6	Non-OPEC supply	64.2	2.1
OPEC NGLs	5.0	0.0	OPEC NGLs	5.1	0.1
Difference	31.7	-1.2	Difference	30.8	-0.9

OECD commercial stocks

mb

	Sep 18	Oct 18	Nov 18	Nov 18/Oct 18	Nov 17
Crude oil	1,385	1,433	1,437	3.3	1,476
Products	1,481	1,438	1,434	-4.0	1,428
Total	2,866	2,872	2,871	-0.7	2,904
Days of forward cover	59.3	59.6	59.2	-0.4	60.7

Next report to be issued on 12 February 2019.