

# OPEC

## Monthly Oil Market Report

12 February 2019

***Feature article:***  
*Review of global oil demand trends*

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## Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: [prid\(at\)opec.org](mailto:prid(at)opec.org)

Website: [www.opec.org](http://www.opec.org)

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# Contributors to the OPEC Monthly Oil Market Report

## Editor-in-Chief

Dr. Ayed S. Al-Qahtani, Director, Research Division  
email: aalqahtani(at)opec.org

## Editor

Behrooz Baikalizadeh, Head, Petroleum Studies Department  
email: bbaikalizadeh(at)opec.org

## Analysts

|                                         |                                                                                                                                                                                          |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Crude Oil Price Movements               | Yacine Sariahmed<br>email: ysariahmed(at)opec.org                                                                                                                                        |
| Commodity Markets                       | Hector Hurtado<br>email: hhurtado(at)opec.org                                                                                                                                            |
| World Economy                           | Afshin Javan<br>email: ajavan(at)opec.org<br>Imad Al-Khayyat<br>email: ial-khayyat(at)opec.org<br>Joerg Spitzzy<br>email: jspitzzy(at)opec.org                                           |
| World Oil Demand                        | Hassan Balfakeih<br>email: hbalfakeih(at)opec.org                                                                                                                                        |
| World Oil Supply                        | Mohammad Ali Danesh<br>email: mdanesh(at)opec.org                                                                                                                                        |
| Product Markets and Refinery Operations | Tona Ndamba<br>email: tndamba(at)opec.org                                                                                                                                                |
| Tanker Market <i>and</i> Oil Trade      | Anisah Almadhayyan<br>email: aalmadhayyan(at)opec.org                                                                                                                                    |
| Stock Movements                         | Aziz Yahyai<br>email: ayahyai(at)opec.org                                                                                                                                                |
| Technical team                          | Nadir Guerer<br>email: nguerer(at)opec.org<br>Aziz Yahyai<br>email: ayahyai(at)opec.org<br>Douglas Linton<br>email: dlinton(at)opec.org<br>Viveca Hameder<br>email: vhameder(at)opec.org |

## Statistical services

Adedapo Odulaja, Head, Data Services Department (aodulaja(at)opec.org),  
Hossein Hassani, Statistical Systems Coordinator (hhassani(at)opec.org),  
Pantelis Christodoulides (World Oil Demand, Stock Movements), Klaus Stoeger (World Oil Supply),  
Mohammad Sattar (Crude Oil Price Movements, Commodity Markets, Tanker Market, Oil Trade),  
Mihni Mihnev (World Economy, Product Markets and Refinery Operations)

## Editing, production, design and circulation

James Griffin, Maureen MacNeill, Scott Laury, Matthew Quinn,  
Hataichanok Leimlehner, Liane-Sophie Hamamciyan, Andrea Birnbach



# Oil Market Highlights

## Crude Oil Price Movements

The OPEC Reference Basket (ORB) rebounded in January, gaining more than 3%, or \$1.80 month-on-month (m-o-m), to average \$58.74/b. Crude oil prices improved over the month, buoyed by robust market fundamentals with signs of tightening crude supply as well as firm crude oil demand, particularly from Asia-Pacific. In January, ICE Brent was on average higher by \$2.57, or 4.4%, m-o-m at \$60.24/b, while NYMEX WTI rose m-o-m by \$2.57, or 5.2%, to average \$51.55/b. The Brent contango structure flattened as the market moved toward balance, while the WTI structure remained in significant contango, reflecting US market fundamentals. The DME Oman forward curve remained in backwardation.

## World Economy

The global economic growth forecast was revised down to 3.3% for 2019 and 3.6% in 2018. In the OECD, 2019 US growth was revised lower to 2.5%, following growth of 2.9% in 2018. Euro-zone growth was also revised down to 1.3% for 2019, after growth of 1.8% in 2018. Japan's growth forecast remained at 1.0% for 2019 and stands at 0.8% in 2018. In the non-OECD countries, China's growth forecast of 6.1% in 2019 remains unchanged from the previous month, following slightly better than expected growth in 2018 of 6.6%. India's growth forecast remained at 7.2% for 2019, after 7.5% in 2018. Growth in Brazil remains unchanged at a forecast 1.8% for 2019, following 1.1% in 2018. Russia's 2019 GDP growth forecast was revised down slightly to 1.6%, the same growth level as seen in 2018. While some positive signals still support global economic growth at around the current forecast level, underlying risks continue, considering ongoing trade tensions, monetary policies and ongoing challenges in several emerging and developing economies.

## World Oil Demand

In 2018, the estimate for world oil demand growth was revised lower by a slight 0.03 mb/d from last month's report. This came as a result of slower than expected demand growth from OECD-Europe and Asia Pacific as well as from non-OECD Other Asia and the Middle East. Total world oil demand growth in 2018 is estimated at 1.47 mb/d, for an average of 98.78 mb/d for the year. For 2019, oil demand growth is forecast at around 1.24 mb/d, slightly lower than the previous month's assessment by 0.05 mb/d to reach an average of 100.00 mb/d. The downward revision is mainly an outcome of lower economic expectations in 2019 for the OECD Americas and Europe, as well as Latin America and the Middle East.

## World Oil Supply

Non-OPEC oil supply growth in 2018 was revised up by 0.11 mb/d from the previous month's report, mainly due to adjustments for US, Canada, Malaysia, China and UK supply, and is now estimated at 2.72 mb/d, with total supply averaging 62.17 mb/d for the year. Key growth drivers in 2018 were the US with 2.24 mb/d, along with Canada, Russia, Kazakhstan, Qatar, Ghana and the UK, while Mexico, Norway and Vietnam showed the largest declines. The non-OPEC oil supply growth forecast for 2019 was also revised up by 0.08 mb/d to 2.18 mb/d, mainly due to a revised production forecast for the US Gulf of Mexico. Total non-OPEC supply for the year is projected to average 64.34 mb/d. The US, Brazil, Russia, the UK, Australia, Kazakhstan and Ghana are expected to be the main drivers, while Mexico, Canada, Norway, Indonesia and Vietnam are projected to see the largest declines. OPEC NGLs and non-conventional liquids are estimated to have grown by 0.04 mb/d in 2018 to average 4.98 mb/d, and forecast to grow by 0.09 mb/d in 2019 to average 5.07 mb/d. In January 2019, OPEC crude oil production decreased by 797 tb/d to average 30.81 mb/d, according to secondary sources.

## Product Markets and Refining Operations

Global product markets continued to lose ground in January for the second consecutive month. In the US, soaring gasoline stocks, along with poor fuel oil performance affected by lower FCC margins, offset support from strong heating oil demand. In Europe, product markets weakened across the barrel as arbitrage openings into the region pressured margins and outweighed support from a pick-up in diesel and fuel oil demand. In Asia, weakening naphtha and jet/kerosene markets dragged on margins, as a growing gasoline surplus reduced gasoline margins to a new multi-year low.

### Tanker Market

Average dirty tanker spot freight rates declined by 28% in January, reversing the profits made in 4Q18. Lower rates were seen in all reported dirty classes, with the drop mainly attributed to thin market activity in general, while vessel supply remains in surplus. Clean tanker spot freight rates also fell due to the general downward trend seen in the tanker market in January. A lack of activity prevailed in the different classes, leading to a drop in average clean tanker spot freight rates by 18% from the month before.

### Stock Movements

Preliminary data for December showed that total OECD commercial oil stocks fell by 10.8 mb m-o-m to stand at 2,851 mb. This was 2.5 mb lower than the same time a year ago, but 28 mb above the latest five-year average. Within the components, crude stocks indicated a surplus of around 50 mb, while product stocks are 22 mb below the latest five-year average. In terms of days of forward cover, OECD commercial stocks rose by 0.3 days m-o-m in December to stand at 59.5 days. This was 0.4 days below the same period in 2017 and 0.8 days below the latest five-year average.

### Balance of Supply and Demand

Demand for OPEC crude in 2018 stood at 31.6 mb/d, 1.3 mb/d lower than the 2017 level. In 2019, demand for OPEC crude is forecast at 30.6 mb/d, around 1.0 mb/d lower than the 2018 level.

## Feature Article

### Review of global oil demand trends

Global oil demand experienced healthier than expected growth in **2018**, increasing by 1.47 mb/d (**Graph 1**) compared to an initial expectation of 1.26 mb/d. The largest contributors to this growth are OECD Americas, with the US being the main contributor, followed by China and India. For the year, total oil consumption averaged around 98.76 mb/d.

From a regional perspective, the **OECD** experienced a solid increase, supported by strong demand from OECD Americas, particularly the US. OECD Americas was the largest contributor to the overall growth in world oil demand in 2018, amid firm macroeconomic indicators and a prosperous petrochemical sector. Growth was particularly strong for NGL/LPG, diesel fuel and jet kerosene.

In OECD Europe, oil demand remained in positive territory for the fourth-consecutive year as oil requirements increased in 2018 albeit at much slower pace than in previous years. OECD Asia Pacific registered solid gains in 1H18, stimulated by stable oil requirements from South Korea and Australia. Demand growth eased substantially thereafter, particularly in South Korea and from lower petrochemical feedstock demand, largely amid heavy maintenance activities. As a result, oil demand growth in OECD Asia Pacific declined y-o-y in 2018.

In the **non-OECD**, Other Asia enjoyed robust oil demand growth last year, following strong requirements in India, Indonesia, Singapore and Thailand. Oil demand in India recorded notable gains, supported by robust economic activities, and solid sales for both passenger and commercial vehicles, as well as government expansion projects, particularly in road construction. Oil demand in China remained firm, despite signs of a slowdown in 4Q18, as overall economic momentum eased and amid a steep decline in vehicle sales. In the Middle East, economic transformation policies, including subsidy reductions and an increase in tariffs, pushed oil demand growth into negative territory for the first time since 1989. Similarly, in Latin America, oil demand growth was lower than expected amid economic turmoil in Argentina and Brazil.

For **2019**, global oil demand is foreseen increasing by around 1.24 mb/d to average 100.00 mb/d, reaching the 100 mb/d threshold for the first time on an annual basis.

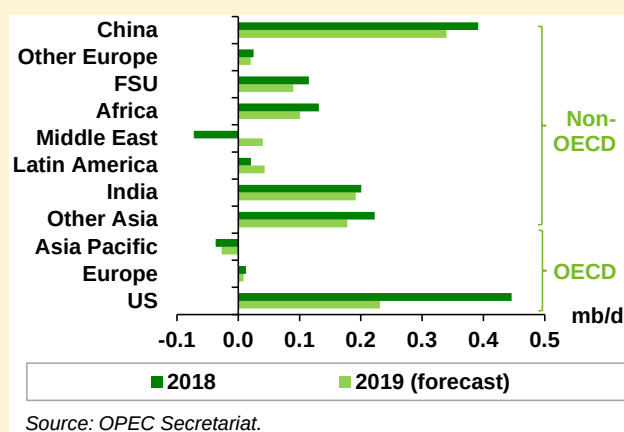
In the **OECD**, oil demand is projected to grow by 0.24 mb/d, with the OECD Americas being firmly positive, driven by solid NGL/LPG and middle distillate requirements. Oil demand in OECD Europe is projected to continue to decelerate in line with economic uncertainties. Oil consumption in OECD Asia-Pacific is also anticipated to weaken in light of planned substitution programmes.

In the **non-OECD**, oil demand is expected to grow by around 1.00 mb/d. Lower Chinese oil demand growth is expected to be offset by higher oil requirements in the Middle East and Latin America.

On the products side, the focus will be on light and middle distillates to fuel the growing petrochemical sector and support industrial activities, followed by gasoline, which will be driven by rising global vehicle sales.

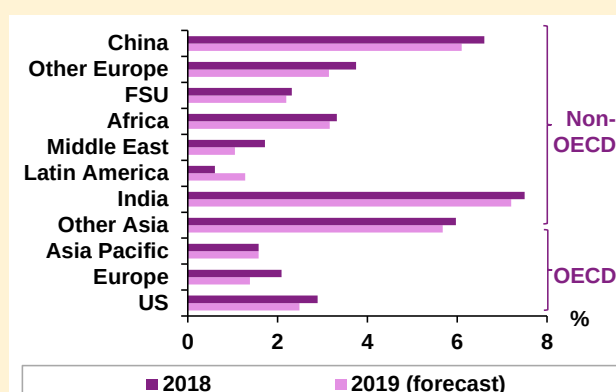
Over the past two years, global oil demand has turned out to be higher than expected, supported by healthy economic activities, particularly in the OECD. With economic momentum expected to slow in the current year (**Graph 2**), this makes economic developments in the major consuming nations a key factor to monitor going forward. Further uncertainties impacting oil demand growth this year are seen to be trade concerns, the strength of substitution with natural gas and other fuels, the effect of commissioning/delays/closure of petrochemical projects, and the implementation of subsidy and energy efficiency programmes, particularly in the transportation sector.

**Graph 1: Oil demand growth by region**



Source: OPEC Secretariat.

**Graph 2: GDP growth by region/country**



Source: OPEC Secretariat.





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## Crude Oil Price Movements

The **OPEC Reference Basket (ORB)** bounced back in January after two consecutive months of decline, gaining more than 3%, or \$1.80, m-o-m to average \$58.74/b. Crude oil prices improved over the month buoyed by robust market fundamentals and signs of tightening crude supply, as well as firm crude oil demand, particularly from Asia Pacific. All ORB component values improved in January, along with their respective crude oil benchmarks, and positive monthly changes were seen in their respective OSPs and crude differentials.

**Crude oil futures prices** recovered in January from low levels registered in December 2018 and ended January substantially higher compared with the previous month, increasing by around 5%, as investors gained more confidence amid bullish oil market fundamentals and signs of tighter crude oil supply. Both Brent and WTI futures contracts continued to be supported by geopolitical risk. In January, ICE Brent was on average \$2.57, or 4.4%, m-o-m higher at \$60.24/b, while NYMEX WTI rose m-o-m by \$2.57, or 5.2%, to average \$51.55/b. On an annual average, ICE Brent was \$8.84, or 12.8%, lower at \$60.24/b, while NYMEX WTI decreased by \$12.11, or 19.0%, to \$51.55/b. DME Oman crude oil futures also progressed m-o-m by \$2.66 in January, or 4.7%, over the previous month to settle at \$59.64/b. For the yearly average, DME Oman was down by \$6.76, or 10.2%, at \$59.64/b.

**Hedge funds and other money managers** increased their bullish positions in January, following three consecutive months of decline, after they suffered heavy losses last year following wrong-way bets on oil prices. Money managers returned to the market with cautious optimism amid more balanced global oil market and growing signs of tightening supply.

The contango **structure** of ICE Brent flattened, as the market moved toward more balance, while the NYMEX WTI structure remained in significant contango, reflecting US market fundamentals. However, the DME Oman forward curve structure remained in backwardation.

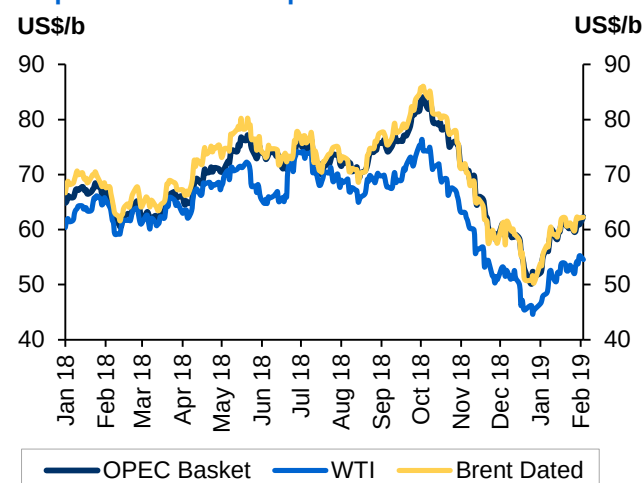
The **sweet/sour differential** narrowed in Europe and the US Gulf Coast (USGC) due to planned and unplanned reductions in medium and heavy sour crudes in different regions, while the supply of light sweet crudes, particularly US tight oil, continued to increase. Lower light distillate margins and a global gasoline surplus also contributed to narrowing the spread.

## OPEC Reference Basket

The **ORB** bounced back in January after two consecutive months of decline, gaining more than 3%, or \$1.80, m-o-m to average \$58.74/b.

**Crude oil prices** improved over the month, buoyed by robust market fundamentals and signs of tightening crude supply, as well as firm crude oil demand, particularly from Asia Pacific. Indeed, crude oil demand from China remained strong in January, boosted by higher purchases by Chinese independent refiners, in order to fulfil their import quotas. Lower supply from OPEC Member Countries in December last year and signs of high conformity to the Declaration of Cooperation have contributed to a more balanced oil market.

**Graph 1 - 1: Crude oil price movement**



Sources: Argus Media, OPEC Secretariat and Platts.

## Crude Oil Price Movements

The entry into force of a decision by the Canadian Province of Alberta to cut oil supply, along with the continued closure of Libyan's El Sharara oil field and unplanned supply disruptions, also contributed to a more balanced market. Nonetheless, recovering prices were tempered by persistent concerns over global economic and oil demand growth.

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

|                      | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change</u><br><u>Jan/Dec</u> | <u>%</u>   | <u>Year-to-date</u><br><u>2018</u> | <u>2019</u>  |
|----------------------|---------------|---------------|---------------------------------|------------|------------------------------------|--------------|
| <b>Basket</b>        | <b>56.94</b>  | <b>58.74</b>  | <b>1.80</b>                     | <b>3.2</b> | <b>66.85</b>                       | <b>58.74</b> |
| Arab Light           | 58.24         | 59.63         | 1.39                            | 2.4        | 67.42                              | 59.63        |
| Basrah Light         | 56.12         | 58.20         | 2.08                            | 3.7        | 66.11                              | 58.20        |
| Bonny Light          | 57.82         | 60.51         | 2.69                            | 4.7        | 69.92                              | 60.51        |
| Djeno                | 54.36         | 56.77         | 2.41                            | 4.4        | 67.42                              | 56.77        |
| Es Sider             | 55.66         | 58.27         | 2.61                            | 4.7        | 68.23                              | 58.27        |
| Girassol             | 57.52         | 59.98         | 2.46                            | 4.3        | 69.77                              | 59.98        |
| Iran Heavy           | 54.84         | 56.29         | 1.45                            | 2.6        | 65.85                              | 56.29        |
| Kuwait Export        | 57.10         | 58.65         | 1.55                            | 2.7        | 65.74                              | 58.65        |
| Merey                | 49.89         | 50.90         | 1.01                            | 2.0        | 59.14                              | 50.90        |
| Murban               | 59.33         | 60.81         | 1.48                            | 2.5        | 68.81                              | 60.81        |
| Oriente              | 51.26         | 55.10         | 3.84                            | 7.5        | 63.53                              | 55.10        |
| Rabi Light           | 56.21         | 58.62         | 2.41                            | 4.3        | 68.16                              | 58.62        |
| Sahara Blend         | 56.41         | 59.27         | 2.86                            | 5.1        | 69.93                              | 59.27        |
| Zafiro               | 57.66         | 60.09         | 2.43                            | 4.2        | 69.23                              | 60.09        |
| <b>Other Crudes</b>  |               |               |                                 |            |                                    |              |
| Dated Brent          | 56.96         | 59.37         | 2.41                            | 4.2        | 69.13                              | 59.37        |
| Dubai                | 57.29         | 59.07         | 1.78                            | 3.1        | 66.15                              | 59.07        |
| Isthmus              | 55.58         | 58.13         | 2.55                            | 4.6        | 67.57                              | 58.13        |
| LLS                  | 55.87         | 58.50         | 2.63                            | 4.7        | 67.80                              | 58.50        |
| Mars                 | 53.32         | 56.71         | 3.39                            | 6.4        | 64.10                              | 56.71        |
| Minas                | 50.28         | 51.72         | 1.44                            | 2.9        | 60.91                              | 51.72        |
| Urals                | 57.18         | 60.26         | 3.08                            | 5.4        | 68.69                              | 60.26        |
| WTI                  | 49.52         | 51.63         | 2.11                            | 4.3        | 63.70                              | 51.63        |
| <b>Differentials</b> |               |               |                                 |            |                                    |              |
| Brent/WTI            | 7.44          | 7.74          | 0.30                            | -          | 5.42                               | 7.74         |
| Brent/LLS            | 1.09          | 0.87          | -0.22                           | -          | 1.32                               | 0.88         |
| Brent/Dubai          | -0.33         | 0.30          | 0.63                            | -          | 2.98                               | 0.31         |

*Note: As of January 2019, the ORB excludes the Qatar's crude "Qatar Marine".*

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

**Physical crude oil benchmarks** also settled higher in January, with Dated Brent, WTI and Dubai spot prices up m-o-m by \$2.41, \$2.11 and \$1.78, respectively, to settle at \$59.37/b, \$51.63/b and \$59.07/b. The year-to-date ORB value was \$8.11, or 12.1%, lower at \$58.74/b than the same period in 2018.

All **ORB component values** improved in January, along with their respective crude oil benchmarks and positive monthly changes in their respective official selling prices (OSPs) and crude differentials. These were underpinned by an ongoing sustained backwardation in Dubai prices, a tighter physical market and strong demand. Some spot crude differentials in the Atlantic Basin reached multi-month highs in January. The ORB value increased m-o-m on average by \$1.80, or 3.2%, to settle at \$58.74/b in January.

Light sweet **ORB components from West and North Africa** – including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – increased m-o-m by \$2.55/b or 4.5% on average to \$59.07/b in January. Strong buying interest from Chinese refiners for West African crudes ahead of the Lunar New Year and a significant decrease in the spread between Brent and Dubai benchmarks pushed crude differentials to multi-month highs, despite weak refining margins in the main hubs. The continued closure of the Libyan El Sharara oil field has also underpinned differentials in the Mediterranean and West African markets.

**Latin American ORB components** also rose strongly in January, supported by a tighter heavy sour crude market that deepened with the start of temporary crude oil production cutbacks in Alberta. The heavy sour crude market strengthened further in late January amid geopolitical tensions and concerns over supply disruptions. Venezuela's Merey and Ecuador's Oriente settled higher m-o-m by \$1.01, or 2.0%, to \$50.90/b, and by \$3.84, or 7.5%, to \$55.10/b, respectively.

The value of **multiple-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, increased by \$1.62, or 2.9%, m-o-m in January to \$58.19/b in January, buoyed by a tight market for similar grades, strong Asian demand and increases in official selling prices (OSPs).

Similarly, **Middle Eastern spot component** Murban saw its value rise m-o-m by \$1.48, or 2.5%, in January to \$60.81/b.

On 11 February, the ORB was 3¢ higher at \$61.40/b, \$2.66 above the January average.

## The oil futures market

**Oil futures prices** recovered in January from their low levels in December last year, ending the month substantially higher compared with the previous month, up by around 5%. Investors gained confidence amid improving oil market fundamentals and signs high conformity levels were contributing to a more balanced market. Both futures contracts continued to be supported by mounting geopolitical risks, which raised additional concerns over potential oil supply disruptions, as well as by growing optimism over US-China trade talks and easing trade tensions. Nonetheless, oil prices were capped by persistent concerns about global economic and oil demand growth, particularly after the International Monetary Fund (IMF) forecast lower global economic growth for 2019 and China showed slower economic growth in 2018.

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

|                                                       | <b>Dec 18</b> | <b>Jan 19</b> | <b>Change</b>  |            | <b>Year-to-date</b> |             |
|-------------------------------------------------------|---------------|---------------|----------------|------------|---------------------|-------------|
|                                                       |               |               | <b>Jan/Dec</b> | <b>%</b>   | <b>2018</b>         | <b>2019</b> |
| <b>NYMEX WTI</b>                                      | 48.98         | 51.55         | 2.57           | 5.2        | 63.66               | 51.55       |
| <b>ICE Brent</b>                                      | 57.67         | 60.24         | 2.57           | 4.4        | 69.08               | 60.24       |
| <b>DME Oman</b>                                       | 56.98         | 59.64         | 2.66           | 4.7        | 66.41               | 59.64       |
| <b>Transatlantic spread<br/>(ICE Brent-NYMEX WTI)</b> | <b>8.69</b>   | <b>8.69</b>   | <b>0.00</b>    | <b>0.0</b> | <b>5.42</b>         | <b>8.69</b> |

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

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

In January, **ICE Brent** was on average \$2.57, or 4.4%, higher m-o-m at \$60.24/b, while **NYMEX WTI** rose by \$2.57 or 5.2% m-o-m to average \$51.55/b. In an annual average comparison, ICE Brent was \$8.84, or 12.8%, lower at \$60.24/b, while NYMEX WTI decreased by \$12.11, or 19.0%, to \$51.55/b.

**DME Oman** crude oil futures also rose m-o-m in January by \$2.66, or 4.7% over the previous month, to settle at \$59.64/b. For the yearly average, DME Oman was down by \$6.76, or 10.2%, at \$59.64/b.

On 11 February, ICE Brent stood at \$61.51/b and NYMEX WTI at \$52.41/b.

**Hedge fund and other money managers** returned to the market in January, after three consecutive months of decline following heavy losses seen at the end of last year. Money managers exhibited cautious optimism due to a more balanced global oil market and amid geopolitical tensions that could disrupt crude supply. Greater optimism regarding the global economic outlook and rising expectations of a trade deal between the US and China, as well as a recovery in oil prices, has spurred investors to increase their long positions. Nonetheless, uncertainty about global oil demand growth this year remained high.

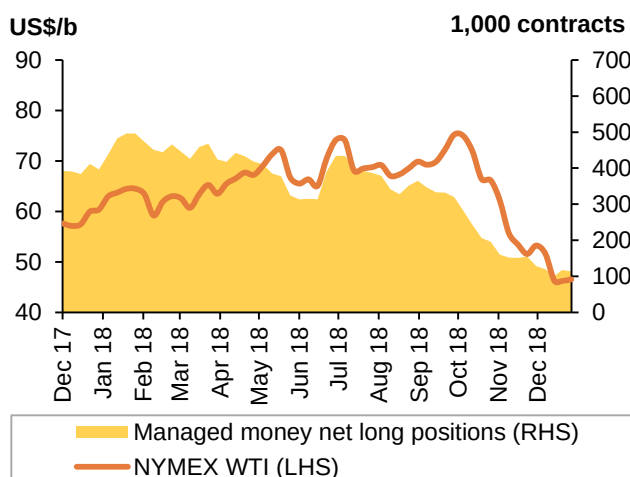


## Crude Oil Price Movements

Data on speculative activity in US crude futures and options was not available in January, due to the US federal government's partial shutdown.

The last available data for the week ending 31 December showed that hedge funds and other money managers decreased their combined net long positions in **NYMEX WTI** futures and options by 4,175 contracts, or 3.6%, to 113,426 contracts, according to US Commodity Futures Trading Commission (CFTC).

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



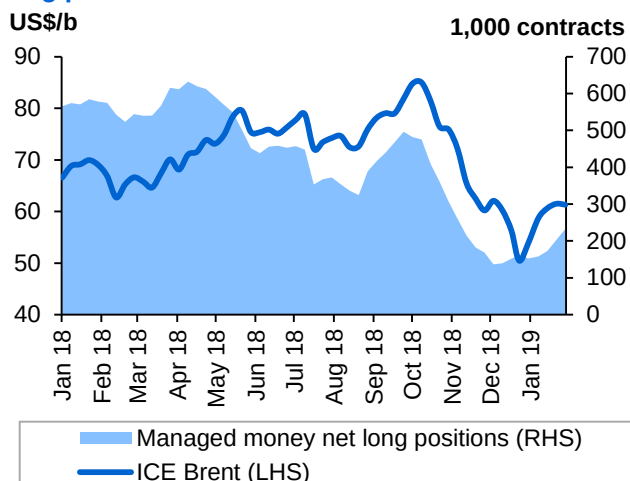
Sources: CFTC, CME Group and OPEC Secretariat.

Hedge funds and other money managers significantly increased their combined net long positions in **ICE Brent** futures and options by 80,378 contracts, or 52.8%, to 152,325 contracts in January, according to the ICE Exchange.

The **long-to-short ratio** in ICE Brent speculative positions increased in late January to 5.9:1, compared with 2.5:1 in late December. According to the latest data issued by the CFTC, the long-to-short ratio for NYMEX WTI decreased to 2.0:1 for the week ending 31 December.

**Total futures and options open interest volume** in the two exchanges increased slightly by 38,571 contracts to stand at 5.9 million contracts for the week ending 31 December.

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



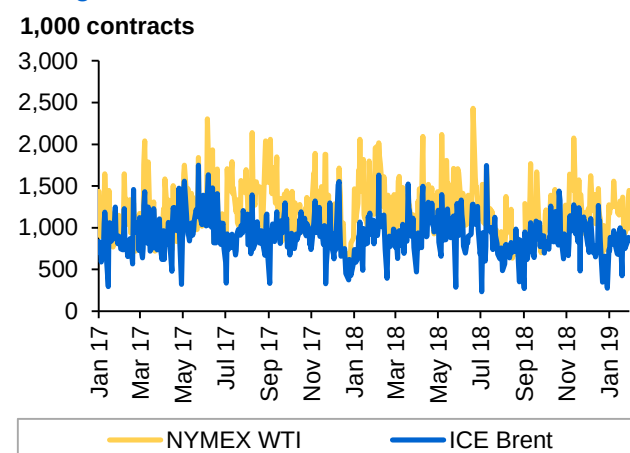
Sources: Intercontinental Exchange and OPEC Secretariat.

**Daily average traded volume** for NYMEX WTI contracts rose by 91,006 lots, or 7.9%, in January to 1,236,440 contracts. Daily average traded volume for ICE Brent also rose by 64,623 contracts, or 8.4%, to 830,545 lots.

The **daily aggregate traded volume** in January for both crude oil futures markets increased by 155,629 contracts m-o-m to stand at 2.1 million contracts, or about 2.1 billion b/d of crude oil.

The December **total traded volume** in NYMEX WTI was 13.3% higher at 26.0 million contracts, while ICE Brent was 19.3% higher at 18.3 million contracts.

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



Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

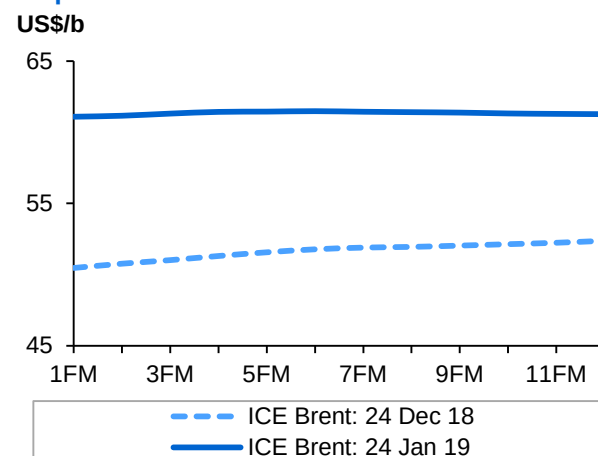
## The futures market structure

The contango structure in ICE Brent flattened as market fundamentals were more balanced, while WTI structure remained in significant contango, reflecting US market developments. However, the DME Oman forward curve structure was in backwardation, with the front of the curve steepening further.

The **ICE Brent contango** structure flattened notably in the forward months, particularly for the first six months, while the structure turned into backwardation for later months, amid signs of a more balanced oil market. The start of OPEC and non-OPEC production adjustments and temporary reductions in Alberta, as well as unplanned outages, have led to a lessening of oversupply in the market. Geopolitical tensions also supported for prompt prices.

**DME Oman's backwardation** structure strengthened further in January as the market was supported by strong crude oil demand from the Asia Pacific region, ahead of the Lunar New Year holiday, and by lower oil supply, particularly for medium and heavy sour grades.

**Graph 1 - 5: ICE Brent forward curves**

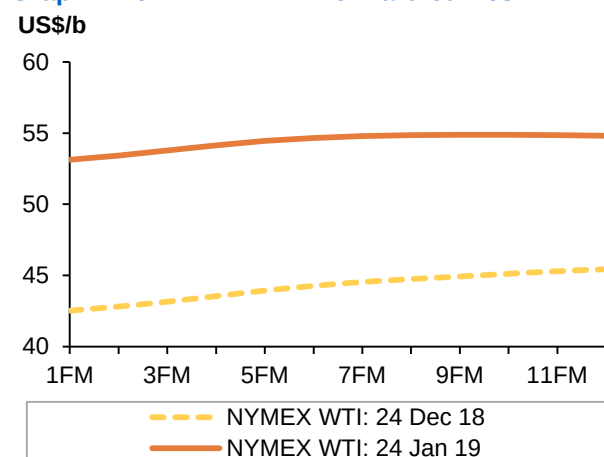


Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

However, the **NYMEX WTI** price structure remained in **contango** over the next six months and persisted along the curve for later months amid weak US market fundamentals, which were exasperated by a continued increase in US oil supply to record high levels, and relatively high crude oil stocks in Cushing, relative to previous months.

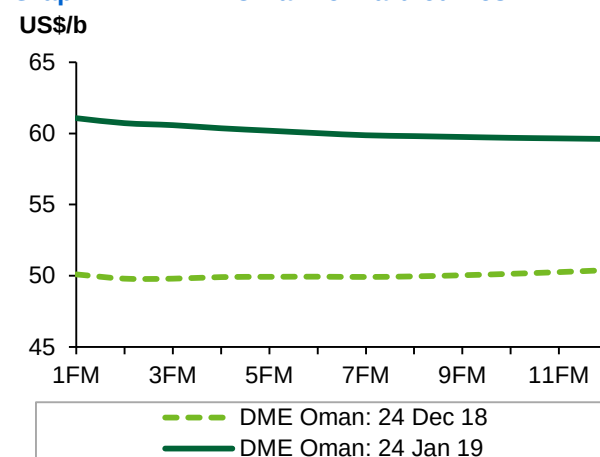
**Graph 1 - 6: NYMEX WTI forward curves**



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

**Graph 1 - 7: DME Oman forward curves**



Note: FM = future month.

Sources: Dubai Mercantile Exchange and OPEC Secretariat.

Regarding the **M1/M3 structure**, the North Sea Brent M1/M3 contango of 46¢/b narrowed sharply to just 2¢/b, a rise of 45¢/b. The Dubai M1 33¢/b premium to M3 decreased to a 30¢/b premium, down by 3¢. In the US, the WTI contango of 55¢/b widened again to 61¢/b, while the M1-M3 spread decreased by 5¢.

The **spread between the ICE Brent and NYMEX WTI** benchmarks was unchanged m-o-m in January, averaging \$8.69/b on a monthly basis. NYMEX WTI was supported by strong demand for exports and by expectations of lower oil supply from Alberta, Canada to Cushing.

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

|                  |               | <u>1FM</u>   | <u>2FM</u>   | <u>3FM</u>   | <u>6FM</u>   | <u>12FM</u> | <u>12FM-1FM</u> |
|------------------|---------------|--------------|--------------|--------------|--------------|-------------|-----------------|
| <b>NYMEX WTI</b> | 24 Dec 18     | 42.53        | 42.82        | 43.16        | 44.27        | 45.44       | 2.91            |
|                  | 24 Jan 19     | 53.13        | 53.42        | 53.78        | 54.66        | 54.82       | 1.69            |
|                  | <b>Change</b> | <b>10.60</b> | <b>10.60</b> | <b>10.62</b> | <b>10.39</b> | <b>9.38</b> | <b>-1.22</b>    |
| <b>ICE Brent</b> | 24 Dec 18     | 50.47        | 50.77        | 51.02        | 51.78        | 52.38       | 1.91            |
|                  | 24 Jan 19     | 61.09        | 61.16        | 61.31        | 61.48        | 61.27       | 0.18            |
|                  | <b>Change</b> | <b>10.62</b> | <b>10.39</b> | <b>10.29</b> | <b>9.70</b>  | <b>8.89</b> | <b>-1.73</b>    |
| <b>DME Oman</b>  | 24 Dec 18     | 50.10        | 49.80        | 49.80        | 49.94        | 50.40       | 0.30            |
|                  | 24 Jan 19     | 61.07        | 60.72        | 60.58        | 60.02        | 59.61       | -1.46           |
|                  | <b>Change</b> | <b>10.97</b> | <b>10.92</b> | <b>10.78</b> | <b>10.08</b> | <b>9.21</b> | <b>-1.76</b>    |

Note: FM = future month.

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

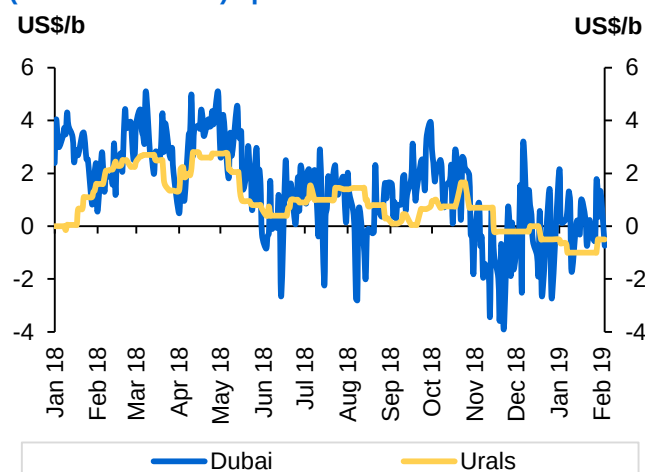
## The light sweet/medium sour crude spread

**Sweet/sour differentials** narrowed in Europe and in the USGC due to planned and unplanned supply curtailments of medium and heavy sour crudes in different regions, while the supply of light sweet crudes, particularly US tight oil, continued to increase. Lower light distillate margins and a global gasoline surplus also contributed to the narrowing spread.

In **Europe**, the premium between Urals crude differentials to light sweet North Sea Brent widened further in January, reaching its highest level in five years, as the sour market in Europe strengthened amid lower availability and healthy demand, while the light sweet market remained well supplied in the Mediterranean and Northwest Europe, as US exports of light sweet crudes to Europe remained high. Lower Middle Eastern crudes flowing to Europe and a lessening Urals loading programme added support to the sour market. The Brent/Urals discount widened by 67¢ to minus 89¢/b.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over Mars crude narrowed significantly in January, as the Mars crude differential hit its strongest premium to WTI futures since 2014. The sour market tightened in the USGC due to less inflow from Latin America and the start of the Canadian supply cut, in addition to a supply disruption risk for sour crudes. Furthermore, light sweet crude differentials remained under pressure from a record high supply of US tight oil and lower gasoline and naphtha margins. The LLS/Mars spread narrowed by 76¢ to \$1.79/b.

In **Asia**, the Tapis premium over Dubai widened in January as light sweet crudes in Asia Pacific were supported by strong demand and by higher prices of alternative crudes in the Atlantic Basin. Nonetheless, the spread between light sweet Brent and sour Dubai prices narrowed significantly in January to reach its lowest point since 2017, as market participants expected more tightening in the sour crude supply.

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

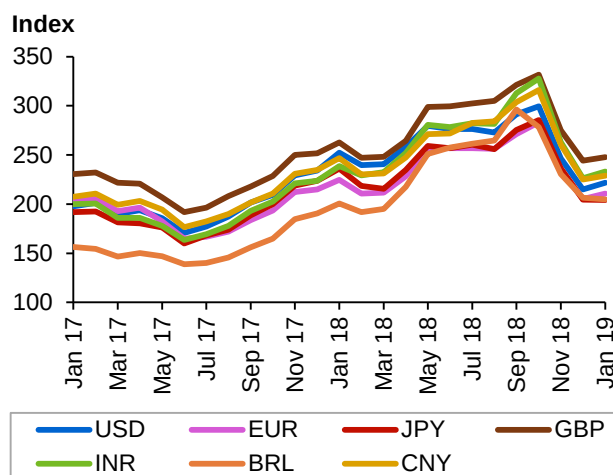
Sources: Argus Media, OPEC Secretariat and Platts.

## The impact of the US dollar and inflation on oil prices

The **US dollar (USD)** generally declined in January against both major and emerging market currency counterparts.

US Federal Reserve officials signalled their intention to slow the pace of monetary tightening this year in response to the financial market turmoil in December and signs of deceleration of the global economy. The dollar declined on average by 0.4% m-o-m against the euro. A steeper drop was prevented as a significant slowdown is already visible in the Euro-zone economy and is likely to prevent the ECB from lifting interest rates this year. Against the Swiss franc, the dollar lost 0.3%. Against the Japanese yen, the dollar lost 3.2% on average, as demand for safe haven assets increased in view of the recent financial markets turmoil. The dollar lost 1.6% against the pound sterling amid hopes that a no-deal Brexit could be averted.

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



Sources: IMF and OPEC Secretariat.

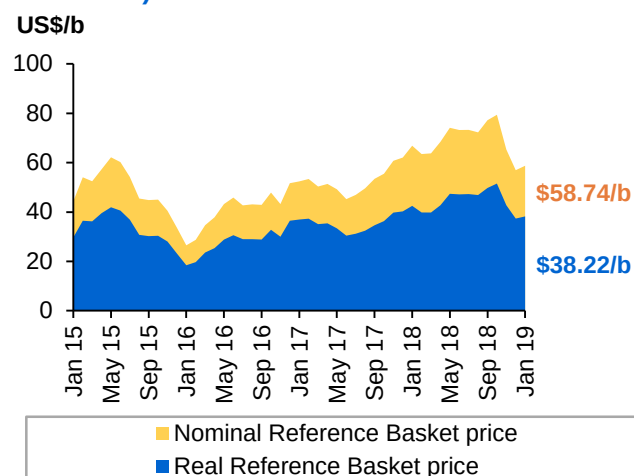
On average, the USD declined against the Chinese yuan in January by 1.4%, supported by optimism regarding an agreement between the US and China on the ongoing trade disputes. Against the Indian rupee, it was relatively stable; however, it gained ground in the second half of the month on the expectation of a more dovish stance by the reserve Bank of India and recovering oil prices. The USD declined against the currencies of large commodity exporters, by 3.7% against the Brazilian real, partly influenced by the expectation of a reform package by the new government, and by 0.9% m-o-m against the Russian ruble, as oil prices recovered.

In **nominal terms**, the price of the ORB increased by \$1.80, or 3.2%, from \$56.94/b in December to \$58.74/b in January.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to \$38.22/b in January from a revised \$37.34/b (base June 2001=100) in the previous month.

Over the same period, the **USD** decreased by 0.8% 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 ORB price (base June 2001 = 100)**



Source: OPEC Secretariat.

## Commodity Markets

**Energy commodity** prices were mixed in January. There was a recovery in crude oil prices, in tandem with improving global financial market sentiment, particularly following a shift towards a more patient approach in regard to interest rates increases by the US Federal Reserve. In contrast, coal and natural gas generally declined as the weather outlook points toward a continuation of a milder winter, despite some cold January spells.

In the group of **non-energy commodities**, base metal prices have recovered some ground since the beginning of the year, also in tandem with the global financial market recovery. Expectations of stimulus measures by the Chinese government, and a potential breakthrough in trade negotiations between China and the US, helped lift market sentiment in metals, although the purchaser managers' surveys continued to point towards a sharp slowdown in global manufacturing activity. In the group of precious metals, gold registered further advances, with the US Federal Reserve's signalling of a slower pace of US rate increases supporting prices.

## Trends in selected commodity markets

The **energy price index** decreased m-o-m by around 1.6% in January and it was down 13.2% compared to the same month last year. The non-energy index was up by 0.6% m-o-m, but down 6.7% compared to the previous January level.

**Table 2 - 1: Commodity prices**

| Commodity               | Unit      | Monthly averages |             |             | % Change<br>Jan 19/Dec 18 | Year-to-date |             |
|-------------------------|-----------|------------------|-------------|-------------|---------------------------|--------------|-------------|
|                         |           | Nov 18           | Dec 18      | Jan 19      |                           | 2018         | 2019        |
| <b>Energy*</b>          |           | <b>81.9</b>      | <b>72.6</b> | <b>73.8</b> | <b>1.6</b>                | <b>85.0</b>  | <b>73.8</b> |
| Coal, Australia         | US\$/mt   | 100.7            | 101.4       | 98.6        | -2.8                      | 106.5        | 98.6        |
| Crude oil, average      | US\$/b    | 62.3             | 54.0        | 56.6        | 4.9                       | 66.2         | 56.6        |
| Natural gas, US         | US\$/mbtu | 4.1              | 4.0         | 3.1         | -22.1                     | 3.9          | 3.1         |
| Natural gas, Europe     | US\$/mbtu | 8.3              | 8.0         | 7.3         | -9.0                      | 6.7          | 7.3         |
| <b>Non-energy*</b>      |           | <b>81.1</b>      | <b>80.8</b> | <b>81.3</b> | <b>0.6</b>                | <b>87.1</b>  | <b>81.3</b> |
| <b>Base metal*</b>      |           | <b>83.8</b>      | <b>82.7</b> | <b>81.3</b> | <b>-1.8</b>               | <b>97.0</b>  | <b>81.3</b> |
| <b>Precious metals*</b> |           | <b>92.7</b>      | <b>94.9</b> | <b>98.4</b> | <b>3.6</b>                | <b>102.7</b> | <b>98.4</b> |

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

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

In January, the **Henry Hub natural gas index** decreased on average by 22%, to \$3.08/mmbtu. The index was also 20.6% below the January 2018 level. Prices witnessed a short-lived rally in the middle of the month, hitting \$3.6/mmbtu due to the arrival of an arctic blast, particularly in the Midwest and Northeast, though with the forecast of a resumption of milder weather in February, natural gas prices gave up their gains quickly. According to the US Energy Information Administration (EIA), utilities withdrew 173 bcf from working gas underground storage during the week ending 25 January, lower than the median analyst expectations of a 189 bcf draw. The draw left total working gas in underground storage at 2,197 bcf, which was 13.0% lower than the latest five-year average.

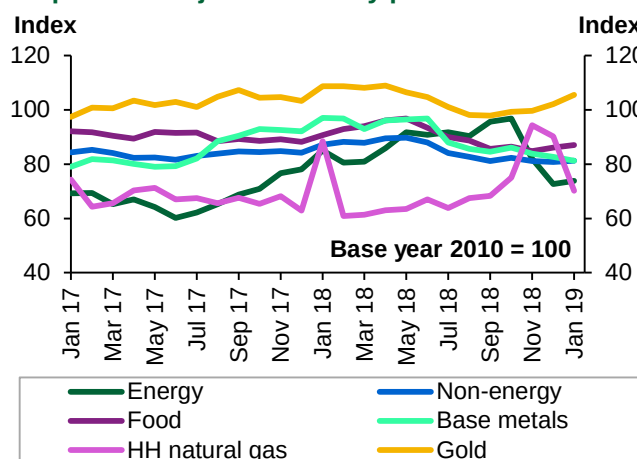
The US Climate Prediction Center (CPC) forecast warmer than average temperatures for portions of the east coast at the beginning of February, but a lower certainty was provided for this pattern to continue for the rest of the month. In its most recent update, the CPC kept the probability of El Nino continuing in the northern hemisphere through spring unchanged at 65%.



**Natural gas prices in Europe** in January declined with the **Title Transfer Facility** price falling by 9.0% to \$7.26/mmbtu. However, prices were 9% above the January 2018 level. Temperatures dropped significantly in the second half of the month, which resulted in a significant drop in inventories. Natural gas inventories for EU Member States declined to around 52.6% of capacity at the end of January, versus 70.4% at the end of December. They were higher compared than the 49.2% level at the end of January last year, according to Gas Infrastructure Europe. However, the weather outlook for the rest of the winter has switched towards milder weather for the rest of the winter, which would prevent significant depletion of inventories as was seen at the end of the previous winter when they reached levels around 18% of capacity. Furthermore, milder temperatures in Asia have made available more LNG cargoes to Europe.

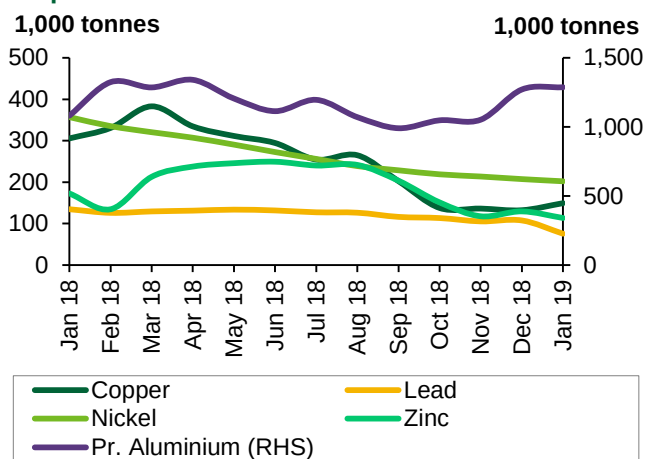
**Thermal coal prices** decreased to an average of \$98.6/mt in January, or 2.8%, m-o-m, with milder weather and China's government import restriction putting downward pressure on prices. Chinese imports decelerated significantly in the second half of 2018, though they still increased by 3.9% for the year. China's coal output increased by 2.1% y-o-y in December, and rose by 5.2% in 2018 compared to the previous year.

**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: LME, Thomson Reuters and OPEC Secretariat.

The **base metal price index** declined by 1.8% in January m-o-m, and it was down by 16.2% compared to January 2018. Prices continued to be pressured by the deepening slowdown in global manufacturing. The JPM Global Manufacturing Purchasers Managers' Index was at a two-and-a-half year low of 50.7 in January. The new exports sub-component went further into the contraction zone at 49.4, versus 49.7 the previous month. The new orders sub-component was at 50.1 – close to the expansion/contraction level – versus 51.1 in December. In China, both manufacturing surveys by the National Bureau of Statistics of China (NBS) and Markit showed readings below 50.0 for the second consecutive month, signalling a further contraction in activity.

**Copper prices** were on average 2.2% down m-o-m in January; however, they recovered some ground in tandem with improving financial market sentiment, the expectation of further stimulus in China to stem the current slowdown, and a weakness in the US dollar. Inventory levels at the London Metal Exchange (LME) – designated warehouses – increased to around 149,200 mt vs 132,000 mt the previous month, though they still remain around half of January 2018 levels, and around the lowest in the last decade. This could provide support to price should a pick-up in demand take place.

Meanwhile, **aluminium prices** declined by 3.5%, due to the impact of the lifting of sanctions on Russian producer Rusal, and the aforementioned worries about the slowdown in China. Aluminium inventories at the LME increased further leaving stocks at 1,287,425 mt vs 1,271,200 mt the previous month, potentially as a result of the removal of sanctions.

**Iron ore**, in contrast, rose by 10.1% on tightening supply, as a result of an accident at one of Rio Tinto's shipping ports in Australia, which delayed shipments and, a major accident at one of Vale's largest operations in Brazil later in the month, which is expected to reduce its output by at least 10%. Australia and Brazil are the world's first and second largest exporter of iron ore.

In the group of **precious metals**, the index rose by 3.6% as the US Federal Reserve signalled a pause in its interest rate hiking cycle, amid increasing downside risks to the global economy. Gold prices advanced by 3.3%, silver by 5.0% and platinum 2.0%.

## Investment flows into commodities

**Open interest (OI)** increased on average in 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. The current report captures the full data for December 2018; however, January data is still pending due to delays caused by the US government shutdown.

**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         | 2,068        | 136        | 7         | 84         | 4         |
| Natural gas     | 1,414         | 1,256        | 250        | 18        | 210        | 17        |
| Precious metals | 716           | 597          | -91        | -13       | 21         | 3         |
| Copper          | 234           | 217          | 0          | 0         | -12        | -6        |
| <b>Total</b>    | <b>4,415</b>  | <b>4,138</b> | <b>254</b> | <b>23</b> | <b>353</b> | <b>35</b> |

Note: Data on this table is based on monthly average CFTC released on 30 December 2018 during the lapse in appropriations.

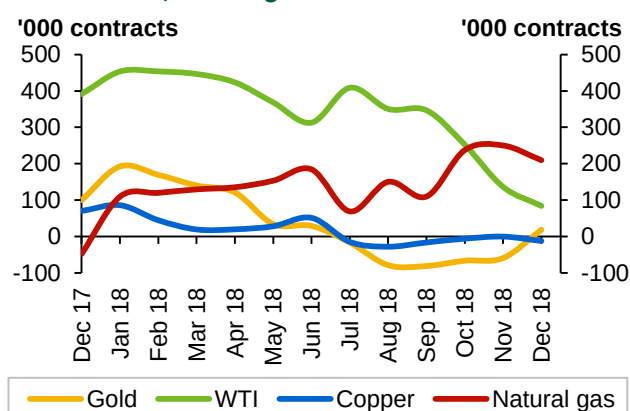
Sources: CFTC and OPEC Secretariat.

**Henry Hub's natural gas OI** decreased in December by 11.1%, while money managers' average net long positions decreased by 6.2% to 209,692 contracts.

**Copper's OI** decreased in December by 7.7%. Money managers increased their net short positions to 12,200 from only 172 contracts the previous month.

**Precious metals' OI** decreased by 16.6%. Money managers switched to an average net short position of 20,542 lots from 90,728 lots the previous month.

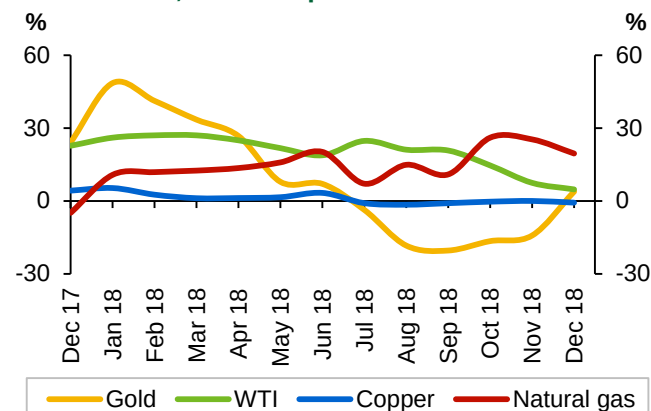
**Graph 2 - 3: Money managers' activity in key commodities, net length**



Note: Data on this graph is based on monthly average CFTC released on 30 December 2018 during the lapse in appropriations.

Sources: CFTC and OPEC Secretariat.

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



Note: Data on this graph is based on monthly average CFTC released on 30 December 2018 during the lapse in appropriations.

Sources: CFTC and OPEC Secretariat.

# World Economy

The **slowing momentum in the world economy** continued in the last quarter of 2018, with some of this weakening trend likely to spill over into 2019. The forecast for global economic growth in 2019 has been revised downward to now stand at 3.3%, following growth of 3.6% in 2018, due to factors including the slowing pace in the Euro-zone and to a lesser extent that of the US, ongoing challenges in emerging and developing economies and a slow-down in global trade. However, some recent positive developments could support the global economy at its current level, including the recovery in oil prices, possible progress in US-China trade negotiations and less-ambitious monetary tightening by the US Federal Reserve. Nevertheless, this would not lift the global economy beyond the growth forecast.

In the **OECD**, the divergent growth trends have become even more accentuated. Momentum in economic growth in the US continues, albeit at a slowing pace. Underlying growth has been recently impacted by ongoing political challenges and trade frictions. Consequently, the 2019 growth forecast for the US was lowered to 2.5%, after estimated 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. Euro-zone growth in 2019 has been revised down to 1.3%, following growth of 1.8% in 2018. The growth forecast for Japan remains unchanged at 1.0% for 2019 and 0.8% for 2018. However, further downside risks remain to the OECD growth forecast, which now stands at 1.9% for 2019, after 2.3% in 2018.

In the **emerging economies**, the growth forecasts remain broadly unchanged. China reported a better-than-expected growth of 6.6% for 2018, while the 2019 growth forecast remains unchanged at 6.1%. Some upside may come from further fiscal and monetary stimulus. India's economic growth forecast remains at 7.2% for 2019, following growth of 7.5% in 2018. Growth in Brazil remains 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 alter. Russia's growth forecast for 2019 was revised down slightly to now stand at 1.6%, the same level as in 2018.

While the **economic growth forecast is now relatively balanced**, underlying risks continue. These pertain to ongoing trade tensions, uncertainties in monetary policies and challenges in several emerging and developing economies. Moreover, Brexit, fiscal issues in some EU Member Country economies and Japan's envisaged sales tax increase pose 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     |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>2018</b>                | <b>3.6</b> | <b>2.3</b> | <b>2.9</b> | <b>0.8</b> | <b>1.8</b> | <b>1.3</b> | <b>6.6</b> | <b>7.5</b> | <b>1.1</b> | <b>1.6</b> |
| Change from previous month | -0.1       | 0.0        | 0.0        | 0.0        | -0.1       | 0.0        | 0.1        | 0.0        | 0.0        | 0.0        |
| <b>2019</b>                | <b>3.3</b> | <b>1.9</b> | <b>2.5</b> | <b>1.0</b> | <b>1.3</b> | <b>1.4</b> | <b>6.1</b> | <b>7.2</b> | <b>1.8</b> | <b>1.6</b> |
| Change from previous month | -0.2       | -0.1       | -0.1       | 0.0        | -0.4       | 0.0        | 0.0        | 0.0        | 0.0        | -0.1       |

Note: \* 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

## OECD

### OECD Americas

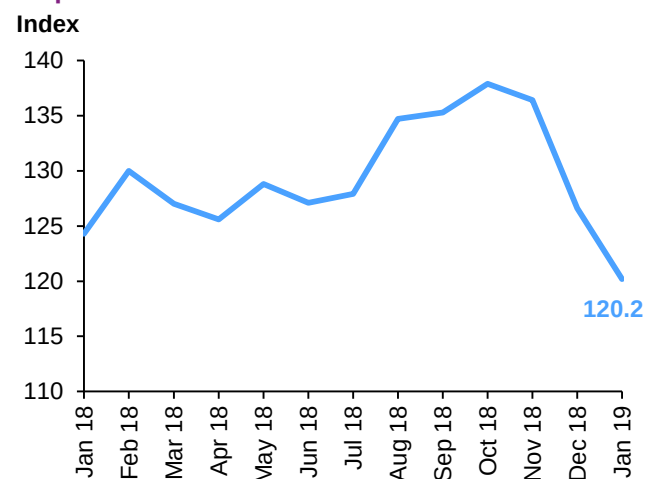
#### US

While only limited data is available due to the government shutdown, **US economic growth** continues to outgrow most of the other major OECD economies. However, momentum has slowed, due to the impact of the government shut-down, the cold weather on the East Coast and a downward trend in consumer sentiment. The slow-down may be limited and temporary, but risks remain in the form of political issues, trade tensions and the waning effects of last year's implemented fiscal stimulus. The current growth momentum was supported by a strong labour market and the more gradual approach to monetary tightening by the Fed. The likelihood of an agreement between the US and China on trade-related issues remains uncertain, following the 90-day suspension of further tariffs which expires at the end of February. Moreover, budgetary issues, including the upcoming debt ceiling discussion in Congress, will probably aggravate political tensions. The suspension of the debt limit expires at the beginning of March. Furthermore, 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 in the past months, while equities have in the meantime recovered.

While the unemployment rate rose, the general development in the labour market continued positively in January. The **unemployment rate** rose to 4.0%. This may be one tentative signal that the labour market is maturing and the upside will lessen from current levels. Average hourly earnings' growth for the private sector also remained above 3% for the fourth consecutive month at a considerable rate of 3.2% y-o-y. Long-term unemployment fell again to stand at 19.3%, the lowest level since 2008, down from 20.5% in December and 20.7% in November, while the participation rate rose to the highest level since 2013 to stand at 63.2%. **Non-farm payrolls** increased by a considerable 304,000 in January, compared to the downwardly revised 222,000 in December. While no updated data is available regarding inflation, indicators point at ongoing reasonable price level increases of around 2%. This is probably slightly below the level for total inflation and the Fed's favoured personal consumption expenditure price index (PCE index). Therefore, 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 120.2 in January, compared to 126.6 in December and 136.4 in November. This indicates that domestic consumption may also have decelerated recently, but no new data is available due to the government shutdown. **Industrial production** growth stood at 4.0% y-o-y in December, only slightly below the November level of 4.1%.

**Graph 3 - 1: US consumer confidence index**



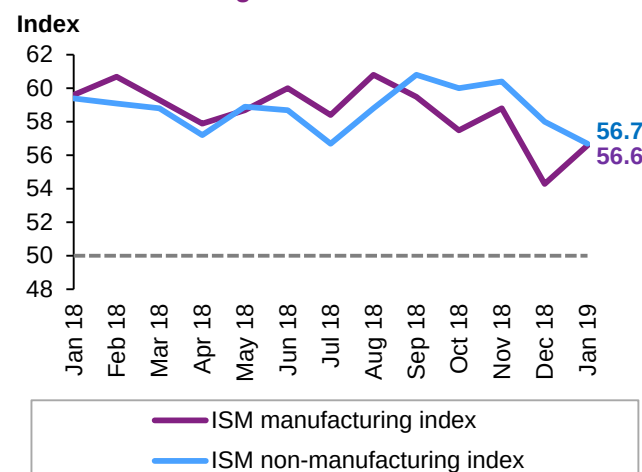
Sources: The Conference Board and Haver Analytics.

January's **Purchasing Managers' Index (PMI)**, as provided by the Institute of Supply Management (ISM), indicated a continued strong trend in the manufacturing sector and a somewhat slowing trend in the services sector. The manufacturing PMI rose to 56.6, compared to 54.1 in December, albeit this is below the peak levels of 2018 which were at levels of more than 60 in some months. The important index for the services sector retracted slightly to 56.7 in January, compared to 58 in December. This is also below levels above 60 reached in several months in 2018.

Taking the slight moderating pace of the economy in 1Q19 into consideration, the 2019 **GDP growth forecast** was revised down mildly to 2.5%, compared to 2.6% in the previous month. Growth is expected to be 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 estimate remains at 2.9%. While the domestic political frictions have added to the downside risks, trade-related issues remain important, particularly relations between the US and China. Moreover, uncertainties remain about the way forward in monetary policies, although the Fed's policy is currently relatively accommodative.

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



Sources: Institute for Supply Management and Haver Analytics.

## Canada

The gradual slow-down in **Canada's economy** continues. Various factors are contributing to this trend. Canada's most important trading partners are facing decelerating economies. Declining oil-prices, which are significant for an economy that has a large energy sector, and the most recent decision in the province of Alberta to implement mandatory production cuts since the beginning of January for oil-producers are having an impact. The government announced this week that curtailments are likely to be scaled back in February and March, after WCS saw a strong lift. Another downside risk comes from Canada's housing sector, which saw price declines in the past two months, after strong rises over the last years. This is an indication that the growth trend may turn, particularly given that the central bank has lifted interest rates by 1.25 pp since July 2017. The **key interest rate** now stands at 1.75%. With relatively sensitive indebtedness in the housing sector, this remains an area that should be closely monitored. According to data from Haver Analytics, household and non-profit institution's debt in relation to disposable income has risen from around 140% in 2008 to more than 165% in 2018. This mixed development is likely to lead the central bank to keep interest rates at the current level in the short-term, a development which is also supported by the unemployment rate of 5.8% in January, seemingly at around the level, the central bank may consider to be inflation neutral. **Inflation** stood at 2.0% in December, rising from 1.8% y-o-y in November. This is, however, considerably lower than in the preceding months, when inflation was hovering around 2.5% y-o-y.

This slowing trend is also reflected in the November **industrial production** number, as it grew by 2.4% y-o-y, compared to 4.4% y-o-y in October. Moreover, retail trade continued its sluggish momentum, growing by only 0.5% y-o-y in November, compared to 0.3% y-o-y in October. The latest **PMI** index for manufacturing is also pointing at deceleration, reaching a level of 53.0, the lowest number in more than two years.

While the economic situation in Canada has already been taken into consideration, the **GDP growth forecast** remains unchanged at 2.1% and 1.8% for 2018 and 2019, respectively.



## OECD Asia Pacific

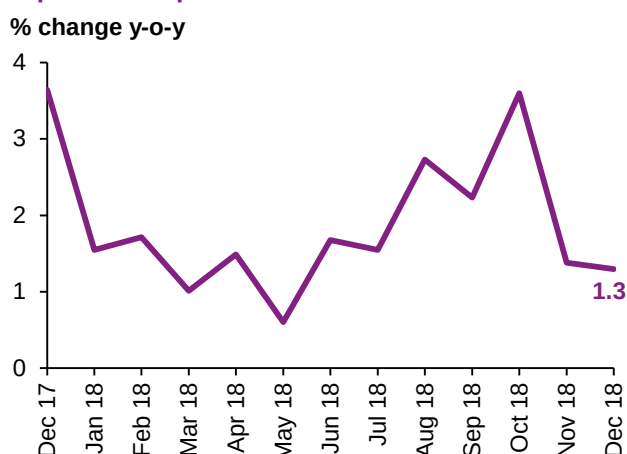
### Japan

After a temporary gradual recovery from the decline in 3Q18, **Japan's economy** continues to grow. The growth trend in 3Q18 saw a GDP decline of 2.5% q-o-q SAAR and was very much impacted by a weather related contraction. A recovery is forecast for 4Q18 and growth may reach around 3% q-o-q SAAR. However, important indicators point at further downside risks for GDP in 4Q18. Recent indicators point at the risk that growth may have been lower than expected at the end of the year, with a probable spill-over effect into 1Q19. Particularly exports and industrial production have declined towards the end of the year and retail trade remained muted in a core-inflation dynamic that continues a relatively stagnant trend, despite the tight labour market. The deceleration in inflation is now making it more likely that the BoJ will continue its accommodative monetary policies at least until the end of the year, while 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%. While the strong labour market continues bolstering domestic demand, levels remain low.

**Inflation** slowed again in December. It retracted to stand at only 0.3% y-o-y, compared to 0.9% y-o-y in November and 1.4% y-o-y in October. While wages have risen and earnings growth remains strong, the support is lifting inflation to a limited extent only. In November, monthly earnings rose by a high level of 1.9% y-o-y, the same rise as seen in October. The more wage level-driven core inflation, which excludes food and energy, stood at 0.3% y-o-y in December, the same level as in November. Given the labour market tightness, the unemployment rate stood at an extremely low level of 2.4% in December, less than the already low 2.5% from November.

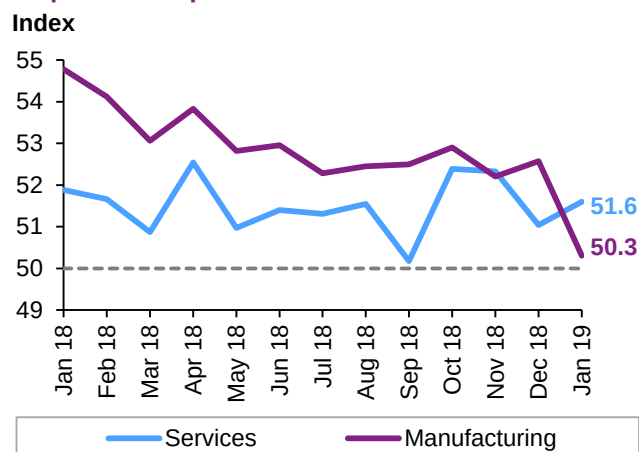
Along with other economic indicators, **export** growth slowed as well. After a solid increase of exports for most of 2018, international trade fell considerably in December, declining by 3.9% y-o-y non-seasonally adjusted, compared to a low rise in November of 0.1% y-o-y. The same slowing trend was seen for **industrial production**, which after a solid rise in October of 2.3% y-o-y, the expansion fell back to 0.3% y-o-y in November and declined by 1.2% y-o-y in December. Positively the lead-indicator of manufacturing orders point at a recovery in manufacturing as they rose by 4.3% y-o-y in December, pointing at some upside for the beginning of 2019. **Domestic retail demand** mirrored the slowing trend in the Japanese economy, growing by only 1.3% y-o-y in December, again lower than the November level of 1.4% y-o-y. This compares also to a rise of 3.6% y-o-y in October and 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 January **PMI numbers** for manufacturing confirm the slowing trend. The manufacturing PMI fell to 50.3, compared to 52.6 in December. The services sector PMI – the sector that constitutes around two-thirds of the Japanese economy – recovered slightly to stand at 51.6 in January, compared to 51.0 in December.

The 2018 **GDP growth forecast** remains unchanged, standing at 0.8%, but considering the ongoing weakness, the depth of the recovery in 4Q18 remains uncertain. GDP growth for 2019 remains at 1.0%. 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 ongoing signs of a moderation in its growth dynamic, in line with its most important trading partners and peer economies in Asia. Exports point at such a development, along with other indicators. After already softening growth of 3.2% y-o-y in December, exports fell by 1.1% y-o-y in January, compared to 6.0% y-o-y in November. Industrial production remained low, albeit not declining, to stand at only 0.6% y-o-y in December, the same growth level as seen in November. Moreover, on the negative side, the latest **PMI number** for the manufacturing sector points to another declining trend. It fell to 48.3 in January, compared to 49.8 in December, which was the lowest level in 2018.

The **GDP growth** estimate for 2018 remains at 2.6%. Growth in 2019 indicates some further annual slowdown in line with developments in the OECD economies and China – South Korea's most important trading partners – and remains unchanged at 2.4%.

## OECD Europe

### Euro-zone

After the latest release of data it has become obvious that the slow-down in the **Euro-zone** has gained pace and is more than expected. The 2H18 growth stood at only 0.2% q-o-q seasonally adjusted (SA) growth, according to the reports by Eurostat, the statistical agency. Growth was weak across the Member Countries' economies. Italy experienced a 2H18 decline, with the 3Q18 at 0.1% q-o-q SA and 4Q18 declining by 0.2% q-o-q SA. While 4Q18 data for Germany has not been made available yet, 3Q18 growth was also negative at a decline rate of -0.2% q-o-q. France's growth stood at 0.3% q-o-q SA growth in both the 3Q18 and 4Q18. While a recovery in the Euro-one for 1Q19 is anticipated, the trend will remain low on a yearly comparison. Italy is currently the weakest of the three largest economies, but it is also the softening momentum in Germany that needs close monitoring. Focusing on the various aspects of the economy, it is clear that the slowing trend has gained momentum and already started at the beginning of last year and seems to be a mixture of weakening external demand, domestic political issues that create uncertainties (Brexit, Italy) and also somewhat sliding domestic consumption. As improvements in the labour market continue, the ECB has halted its monetary policy normalisation. Moreover, international trade is forecast not to retract much further. However, this will also depend on the outcome of the ongoing US-China trade talks. Moreover, ongoing elevated sovereign debt levels in some economies, particularly Italy, along with some weak areas in the banking sector will require constant monitoring. From a positive perspective, some fiscal stimulus in France, after the past month's protests will likely impact the short-term economic situation to the upside as it has led to higher spending on social welfare but has increased the budget deficit in France for 2019.

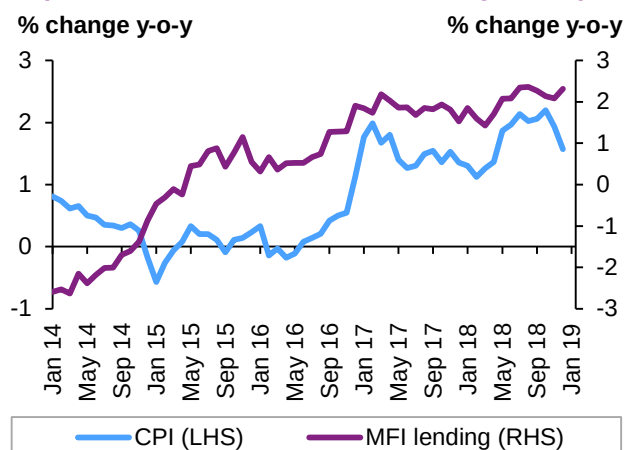
Adding to uncertainties are the latest developments concerning **Brexit**, as political challenges for the UK remain very large. Financial markets had assumed that the remaining hurdles will be resolved before the UK's exit date in March 2019 or that at least an agreement on a transition period would be found. However, the latest parliamentary gridlock means that there is now more likelihood of a no-deal scenario.

In the **labour market**, the unemployment rate in December remained at 7.9% for the second month in a row, the lowest level in more than a decade. Levels of unemployment continue to differ widely among countries, with Germany having an unemployment rate of only 3.3% in December, while France is at 9.1%, Spain has improved to 14.3% and Greece to 18.5%. Almost all of the region's economies exhibit an improving trend and there is still some upside in the peripheral economies. Italy showed an improving trend in December as the unemployment rate moved down to 10.3% compared to 10.5% in November and 10.6% in October.

While the labour market has shown signs of improvements, the developments in the area of **retail trade** already indicate some weakening. Retail trade growth in value terms stood at only 1.3% y-o-y in December, the lowest level since September 2016. **Industrial production** fell considerably in November, declining by 3.2% y-o-y, after already weak growth in the preceding four months, when growth stood at below 1%. Manufacturing activity was particularly low in November, as it declined by 2.9% y-o-y. An only slightly positive trend in new orders in the manufacturing sector, a good lead indicator for future manufacturing activity, also indicates the slow growth trend to continue. Manufacturing order growth stood at 1.4% y-o-y in November, compared to 0.1% y-o-y in October and 0.4% y-o-y in September.

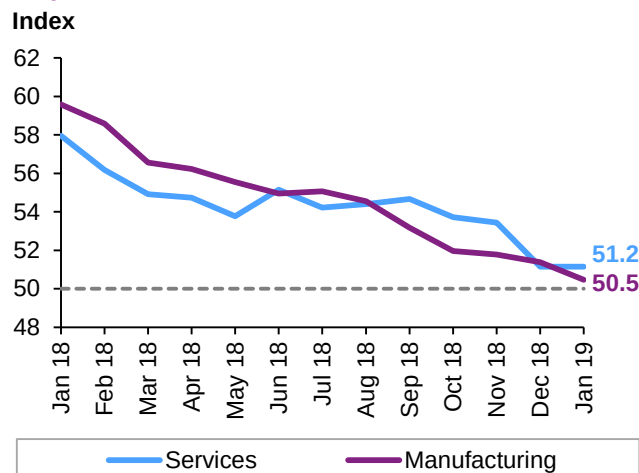
**Inflation** retracted again in line with falling oil-prices. This may provide some breathing space for the ECB in its effort to normalise monetary policies. Total inflation stood at 1.4% y-o-y in January, falling for the third month in a row. 4Q18 inflation stood at 1.9% y-o-y, compared to 2.1% y-o-y in 3Q18. While this dynamic was largely due to rising energy prices, rising wage and income growth now better support consumer prices levels. However, with declining consumption, amid rising uncertainties, it remains to be seen if this trend continues. Moreover, the deceleration in the global economy and the recent drop in energy prices point at some further uncertainties in this 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 December rose to 2.3% y-o-y, compared to 2.1% y-o-y in November.

The Euro-zone's latest January **PMI indicators** generally point to a continuation of a slowing underlying growth in the economy. The manufacturing PMI fell to stand at 50.5, compared to 51.4 in December, and 51.8 in November. The important PMI for the service sector, which constitutes the largest sector in the Euro-zone, remained unchanged at 51.2 in January. The current level remains the lowest in more than a year.

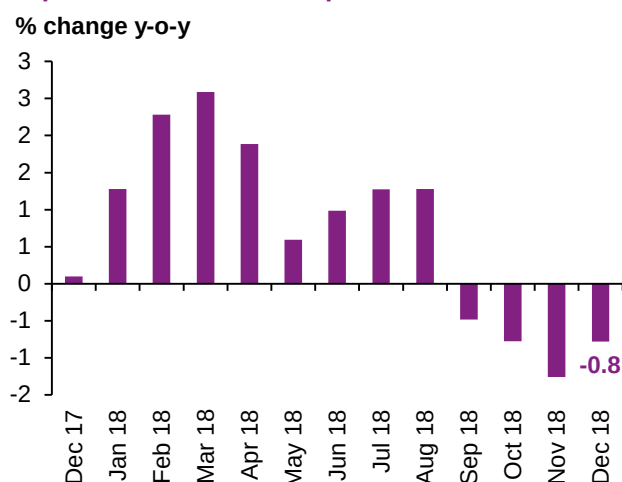
**GDP growth** in 2018 was reported at 1.8% by Eurostat. Given the confirmation of low GDP growth in 2H18 and the expectation of a continuation of the decelerating trend, the 2019 growth forecast was revised down to 1.3% y-o-y, compared to 1.7% in the previous month. This is now also the same level as the EU Commission's recently published forecast. However, uncertainties remain. Italy is currently forecast to achieve a positive growth level of 0.2%, but could turn negative, depending on the depth of the recovery after the 2H18 decline. Also the growth pattern of the German economy will need close monitoring. While Germany is expected to achieve growth of 1.1%, there may be some further downside from this level. In line with the EU Commission's forecast, no economy is expected to decline in 2019. In general, the political uncertainties, including the Brexit process, weakness in the banking sector, as well as monetary policies and the management of in some economies still high debt sovereign levels remain important factors to monitor.

## UK

After the rejection of the UK's Prime-Minister's EU-exit deal, near term developments remain uncertain. A disorderly and hard **Brexit** is still likely. The particular sticking point remains the tricky question of the Irish border. After this week's parliamentary discussions, it will become clearer how the UK government wishes to proceed. 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. The ongoing uncertainty is forecast to have negatively impacted 1Q19 economic activity and, depending on the outcome over the coming weeks, a further downward revision of 2019 GDP growth cannot be ruled out. The Bank of England has revised down its GDP growth forecast to 1.2% in the meantime.

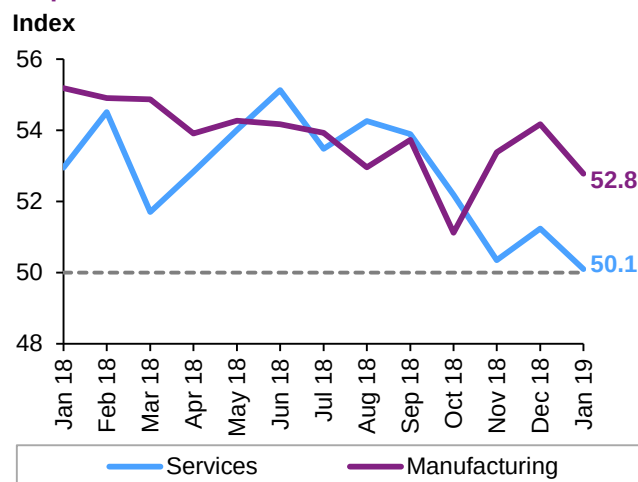
**Industrial production** declined for the third consecutive month in November, falling by 1.5% y-o-y. **Retail trade** in value terms retracted to 3.6% y-o-y, compared to 4.8% in November as the decelerating trend has become more accentuated over past months. The weak pound sterling continues to support growth in exports, which rose by 5.5% y-o-y in November, compared 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 January **PMI** lead indicators point to a continued deceleration. While manufacturing may still benefit from the weak pound sterling, the service sector remains relatively weaker. The PMI for manufacturing fell to 52.8, comparing to 54.2 in December and 53.6 in November. The very important PMI of the services sector, which constitutes the majority of the UK's economy, declined to 50.1, compared to 51.2 in December and 50.4 in November.

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 the current uncertainty is likely to have a negative impact on the UK's economic growth. 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 |
| <b>Brazil</b> | 1.1                | 1.8  | 3.8                                  | 4.4  | -29.6                            | -42.9 | -7.1                                | -5.9 | 80.3                      | 83.5 |
| <b>Russia</b> | 1.6                | 1.6  | 2.9                                  | 4.5  | 92.0                             | 91.0  | 1.6                                 | 1.6  | 10.7                      | 8.8  |
| <b>India</b>  | 7.5                | 7.2  | 4.0                                  | 3.6  | -73.5                            | -69.8 | -3.6                                | -3.5 | 50.2                      | 49.6 |
| <b>China</b>  | 6.6                | 6.1  | 2.0                                  | 2.8  | 30.1                             | 22.9  | -3.5                                | -4.4 | 18.8                      | 21.8 |

Note: \* 2018 = Estimate and 2019 = Forecast.

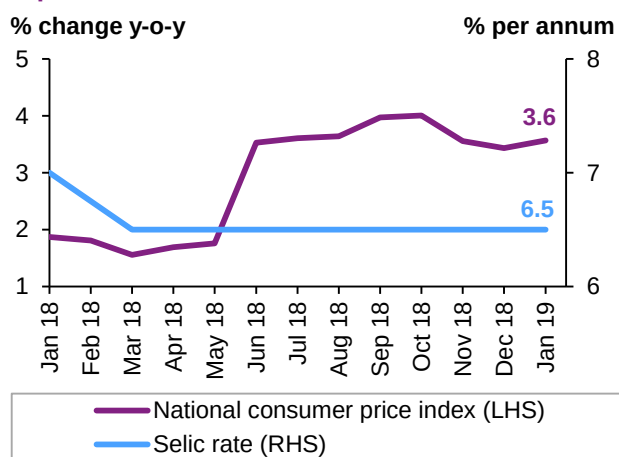
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, Oxford Economics and OPEC Secretariat.

## Brazil

**Brazil's trade surplus** narrowed to \$2.19 billion in January 2019, below market expectations of \$3.4 billion and down from \$2.82 billion in the same month a year ago. It was the smallest trade surplus since January of 2016, as imports jumped 15.4% year-on-year to \$16.39 billion and exports rose at a softer 9.1% to \$18.58 billion. **Exports** increased mostly due to sales of primary goods, which increased by 10.1%, namely corn, raw cotton, copper ore, soybeans, soybean meal, and iron ore. Also, exports of semi-manufactured products advanced 11.1% led by cast iron, copper cathodes and cellulose. Additionally, sales of manufactured products rose 15.2%, boosted by airplane parts, planes and fuel oil. Exports to China increased by 20.8%, to ASEAN countries by 59.2% and to the US by 2.1%, but decreased to the EU by 5.6% and to Argentina by 43.7%. The increase in **imports** was mainly driven by higher purchases of capital goods and intermediate goods. On the other hand, imports dropped for fuels and lubricants and consumption goods. Imports rose from China by 81%, from Argentina by 4.9% and from Japan by 8.2%, but declined from the US by 5.2%, from ASEAN countries by 8.8% and from the EU by 5.1%. **GDP** posted 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.

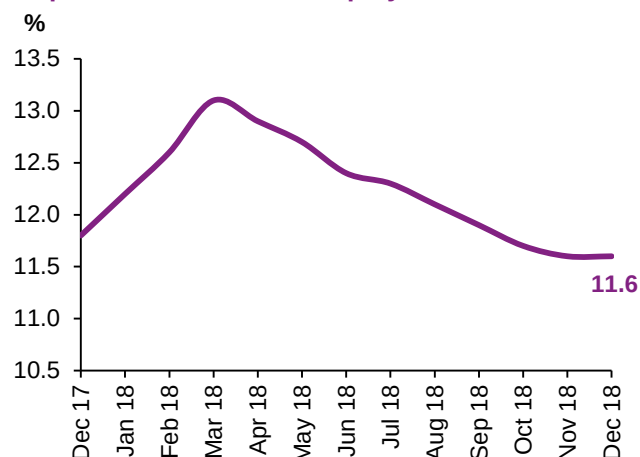
In January, the **Brazilian real** appreciated by 3.7% m-o-m, after a 2.6% depreciation at the end of 2018. The real depreciated by 18% in 2018. **Inflation** eased from 4.0% in October, to 3.6% y-o-y in November, to 3.4% in December 2018. For 2018, inflation averaged 2.9%. In January 2019, inflation rose to 3.6% y-o-y. The central bank held its benchmark **interest rate** unchanged at 6.5% in January 2019 for the eleventh month in a row. The unemployment rate was unchanged in December at 11.6%, similar to the previous month. The **consumer confidence index** improved from 94.9 in December 2018 to 98.7 in January 2019.

**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**



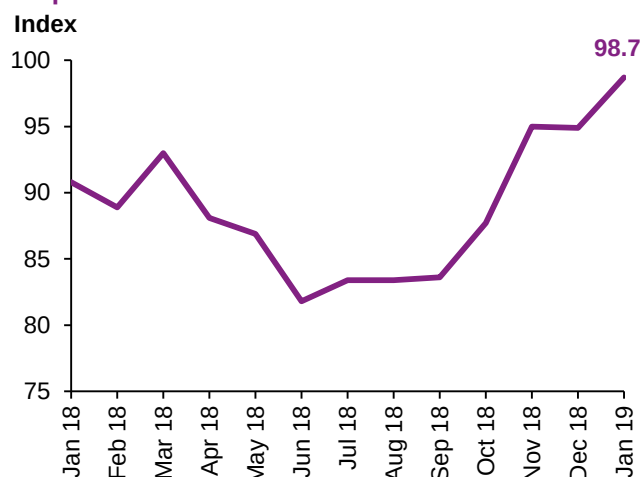
Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

The IHS Markit Brazil **Manufacturing** PMI reading in January was a continuation of solid increases in manufacturing production and sales across Brazil, which has been evident since the end of the presidential elections. Moreover, goods producers scaled up their input buying and hired staff at the quickest pace in ten months. Also, business confidence climbed to a series peak. The headline index rose marginally from 52.6 in December to 52.7 in January. Business conditions strengthened to the greatest extent in the capital goods industry, although growth was also evident in the consumer and intermediate goods categories. Sentiment among Brazilian manufacturers regarding the 12-month outlook for output improved to the strongest in the series history during January.

Brazil's **service** sector took a further step forward in January. Companies experienced the fastest increases in new business in six years, raising output to the highest level in 11 months. While the domestic market was supportive of the uptick, there was a solid and quicker reduction in new business from abroad. As for the labour market, there was a third successive contraction in employment, though job losses softened to a marginal pace. Business sentiment, meanwhile, strengthened to a three-month high. The IHS Markit Brazil Services Business Activity Index posted 51.9 in January, from 52.0 in December.

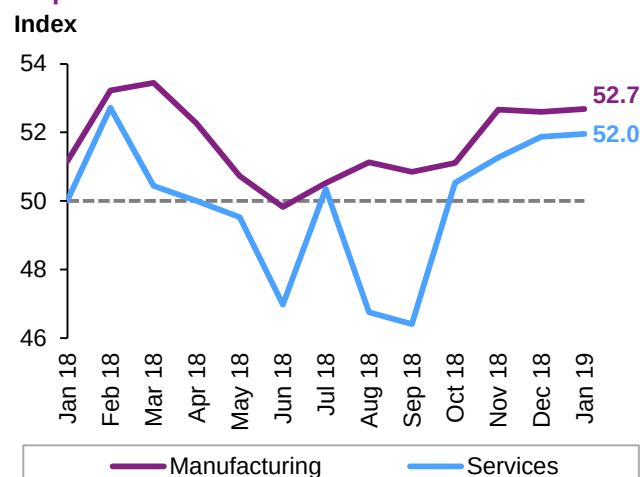


Graph 3 - 11: Brazil's consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 12: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

The economy of Brazil started 2019 on a positive note. Private sector growth was solid in both manufacturing and services. However, exports to Argentina fell by more than 55% y-o-y in December 2018. Argentina is the third largest trading partner to Brazil. Furthermore, detailed plans on how the new government will proceed in making some necessary economic reforms are still not clear enough to pencil in a more optimistic scenario for GDP growth in 2019.

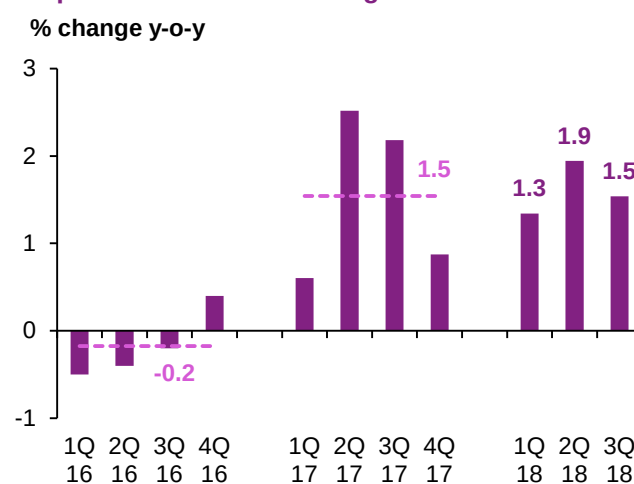
There is no change this month to Brazil's **GDP**, which is forecast to grow by 1.1% y-o-y in 2018 and 1.8% in 2019.

## Russia

Russia's **unemployment rate** stood at 4.8% in December 2018, unchanged from the previous month and lower than the previous year's level of 5.1%. **Real wages** increased 2.5% y-o-y in December 2018, falling from a downwardly-revised 4.2% increase in the previous month. Average nominal wages jumped 6.9% to 55,150 rubles, while the annual inflation rate advanced to 4.3%, its highest level since June 2017. Meanwhile, real disposable personal **income** in Russia went up 0.1% in December, following an upwardly-adjusted 3.1% fall in November.

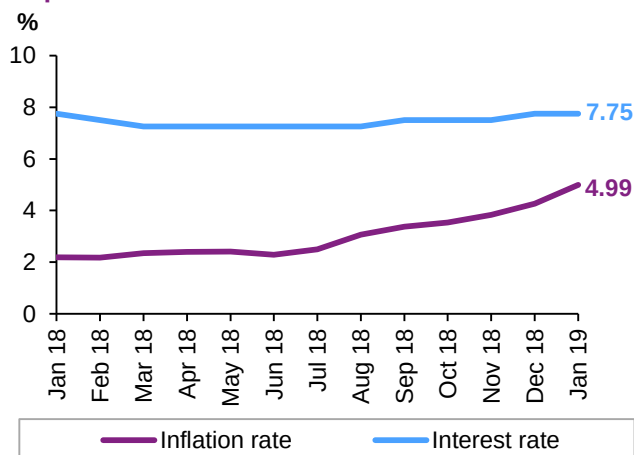
The **ruble** appreciated by 0.9% m-o-m in January 2019, after depreciating by 1.6% in the previous month. Y-o-y, the ruble was 17.5% lower in January 2019 from its level a year earlier. **Consumer price inflation** in rose to 5.0% y-o-y in January, up from December's 4.3%. It was the highest inflation rate since January 2017 on the back of the 2% increase in VAT. 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 November's 7.50%. The central bank kept interest rates unchanged in January 2019.

Graph 3 - 13: Russia's GDP growth



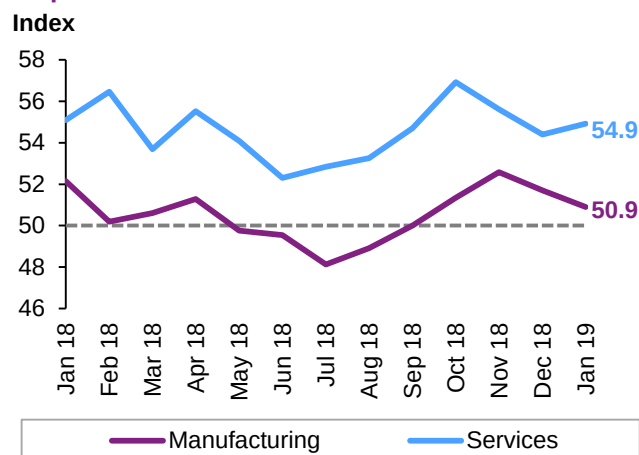
Sources: Federal State Statistics Service and Haver Analytics.

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

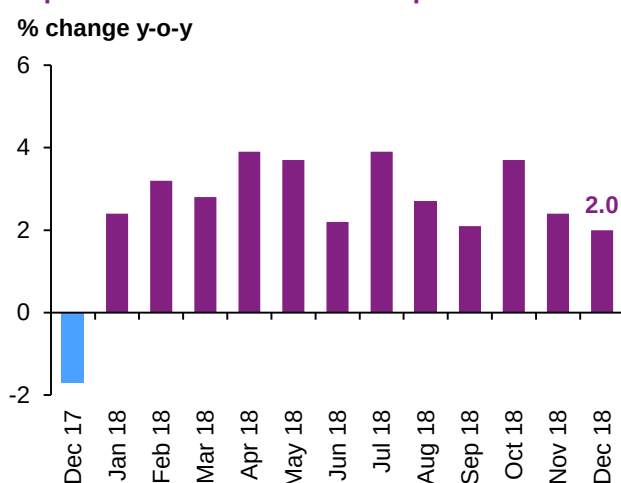


Sources: IHS Markit and Haver Analytics.

The IHS Markit Russia **manufacturing** PMI in January indicated a marginal improvement in the health of the Russian manufacturing sector. The headline figure dipped below the series trend as output and new orders increased at weaker rates. Weighing further on the overall performance of the sector was a contraction in employment, the first monthly fall in staffing numbers since August 2018. The recent hike in VAT led to accelerated rates of both input costs and output charge inflation, with the latter quickening to the fastest rate since September 2015 as firms sought to partly pass on higher costs. The index registered 50.9 in January, down from 51.7 in December and indicating only a marginal improvement in operating conditions across the Russian goods-producing sector. The headline figure eased for the second successive month and was the lowest since last September. Output increased at only a fractional rate in January and at the slowest pace in the current five-month sequence of expansion. **Industrial production** grew by 2.0% y-o-y in December from 2.4% y-o-y in November.

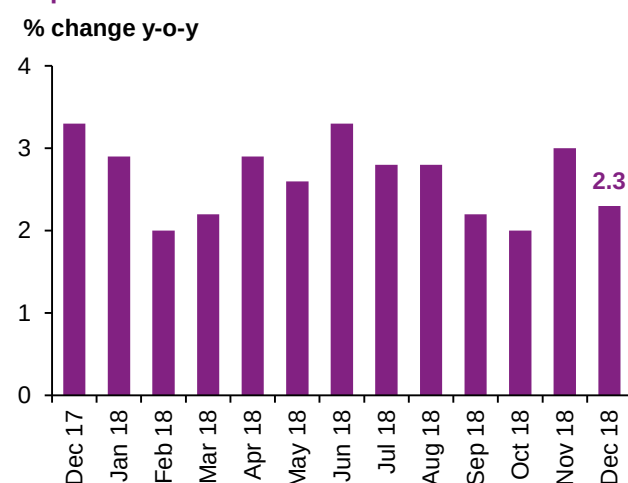
Business activity across the Russian **service** sector continued to expand in January, with the rate of growth accelerating from that seen in December. The upturn in output was supported by a sharp increase in new business and the fastest rise in new export orders since that series began in September 2014. The IHS Markit Russia Services Business Activity posted 54.9 in January, up from 54.4 in December. The rise in business activity was strong overall and in line with the long-run series average. In line with a stronger expansion in new business, service providers registered a faster rate of job creation. The solid rise in staffing numbers was commonly linked to greater business requirements. Furthermore, the pace of increase in employment was the quickest in ten months. **Retail sales** continued its increasing streak in December for the thirteenth month in a row. The rate of increase was 2.3% y-o-y, from 3.0% in November.

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.

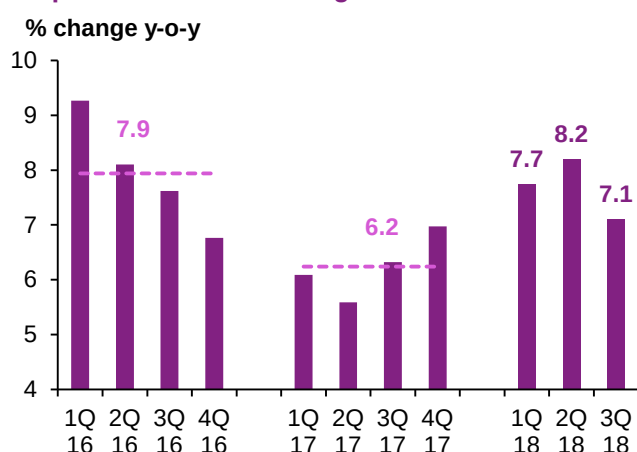
Russia's **GDP** growth forecasts point to 1.6% y-o-y in 2018 and 1.6% in 2019.

## India

**India's real GDP growth** decelerated to 7.1% y-o-y in 3Q18 from 8.2% in the 2Q18 and is likely to have slowed further in the 4Q18. Decelerating domestic demand appears to have held back overall growth, while the drag from net exports narrowed. GDP growth remains under pressure amid a broad-based slowing in domestic demand, despite a modestly positive contribution from net exports. Auto sales fell sharply in December, contracting 3% on the year. Passenger vehicle sales fell for the second consecutive month (-0.4% y-o-y after -3.4% in November), while two-wheeler sales contracted for the first time in more than a year (-2.2% versus 7.1% in November).

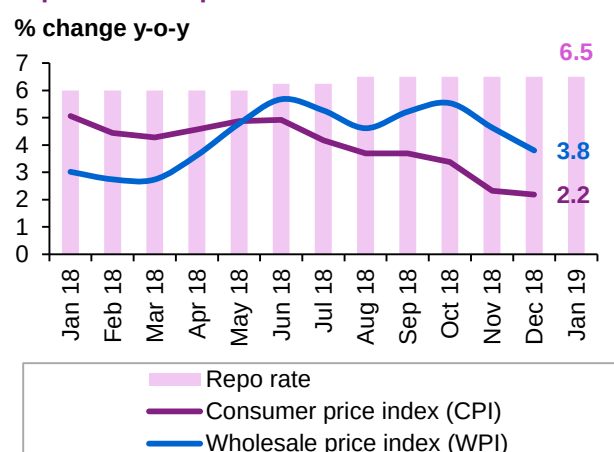
**Investment** recovery was at risk and early signs that manufacturing activity was picking up in 4Q18 have not been sustained. Investment growth appears to have slipped back into single digits in 4Q18 from the 12.3% y-o-y average seen in the first three quarters of 2018. A persistent return to the robust double-digit investment growth experienced in the mid-2000s is unlikely until there is meaningful progress in key reform areas. Despite the recent stabilization, widening current account deficits and capital outflows will renew the pressures on the rupee in 2019.

**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.

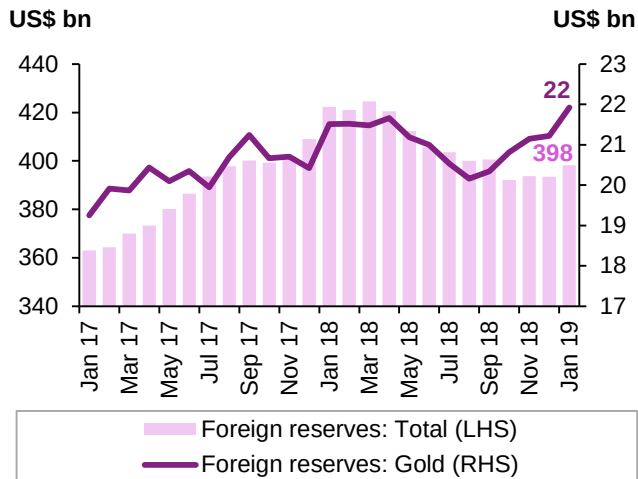
India's **CPI** inflation declined to 2.19% in December 2018 from 2.33% in November, the lowest inflation rate since June 2017, as food prices continued to decline and inflation eased for clothing, housing and fuel. India's **WPI** rose by 3.8% y-o-y in December 2018, slowing from a 4.64% gain in the prior month. It was the lowest WPI inflation rate since April, as costs increased at a slower pace for fuel and manufactured products while prices of food declined further. On a monthly basis, wholesale prices decreased by 1.40%, following a 0.1% rise in November. Food costs in India decreased 2.51% y-o-y in December 2018.

India's **trade deficit** fell to \$13.08 billion in December 2018 from \$14.2 billion in the same month in the previous year. **Exports** rose by a meagre 0.3% to \$27.93 billion, mainly driven by sales of electronic goods (50.81%); plastic and linoleum (20.18%); and petroleum products (13.18%). **Imports** declined 2.44% to \$41.01 billion, the biggest fall since August 2016, mainly dragged down by a 24.33 drop in gold purchases. Meanwhile, increases were seen for imports of iron and steel (15.61%); coal, coke and briquettes (11.39%); machinery (8.38%); and petroleum and crude products (3.16%). From April to December 2018, India's trade gap increased to \$141.2 billion from \$120.57 billion in the same month in the previous year, despite a decline in the oil price.

India recorded a capital and financial **account deficit** of \$21.31 million in 3Q18. Capital flows in India averaged \$7.27 million from 2010 until 2018, reaching an all-time high of \$766.97 million in 2Q18 and a record low of -\$271.47 million in 2Q11.

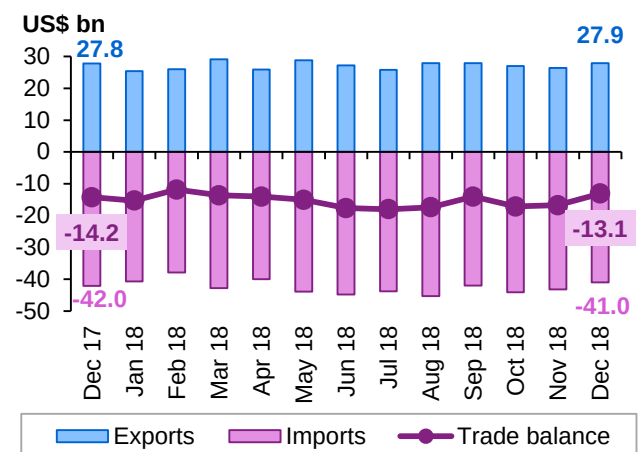
India's **gold reserves** increased to 592 tonnes in 4Q18 from 573.10 tonnes in the 3Q18.

Graph 3 - 20: India's total and gold reserves



Sources: Reserve Bank of India and Haver Analytics.

Graph 3 - 21: India's trade balance

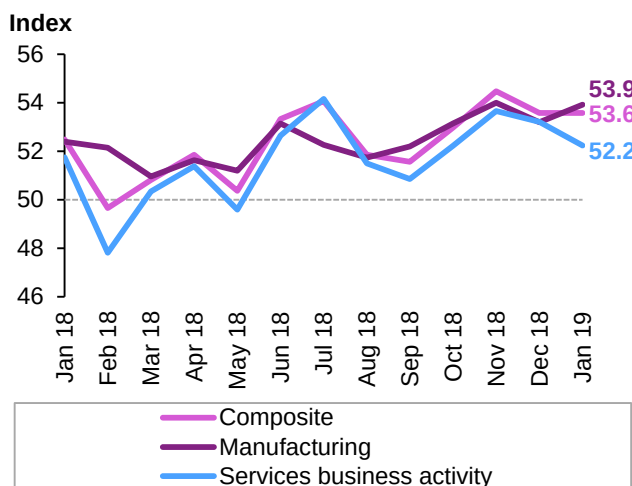


Sources: Ministry of Commerce and Industry and Haver Analytics.

The **Nikkei India Manufacturing PMI** increased to 53.9 in January 2019 from 53.2 a month earlier, beating market expectations of 52.5. Outputs rose the most since December 2017, surpassing its long-run average, while new orders expanded at the fastest rate in 13 months and new export orders grew for the 15th-straight month. At the same time, additional inputs were purchased, as companies sought to rebuild inventories, and more jobs were created. On the price front, inflationary pressures were negligible in the context of historical data. Meanwhile, sentiment improved to a five-month high, supported by forecasts of greater sales, favourable economic conditions, and planned investment in marketing.

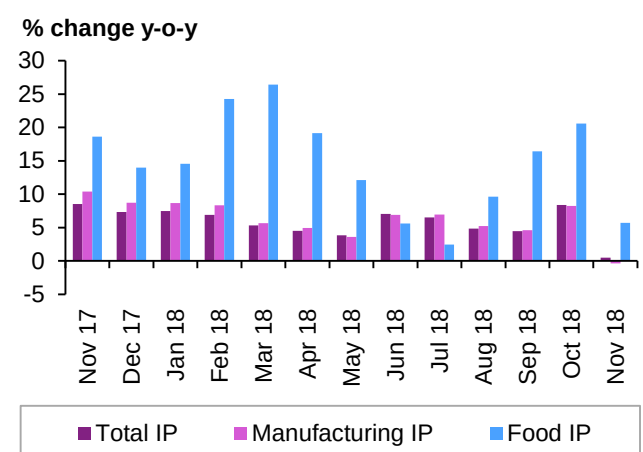
The **Nikkei India's Services PMI** decreased to 52.20 in January from 53.20 in December 2018.

Graph 3 - 22: India's PMI



Sources: Nikkei, IHS Markit and Haver Analytics.

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



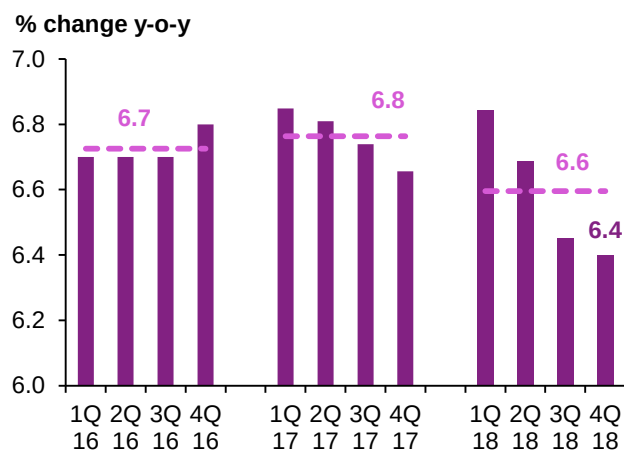
Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

**India's GDP growth** forecast was unchanged at 7.5% for 2018 and 7.2% for 2019.

## China

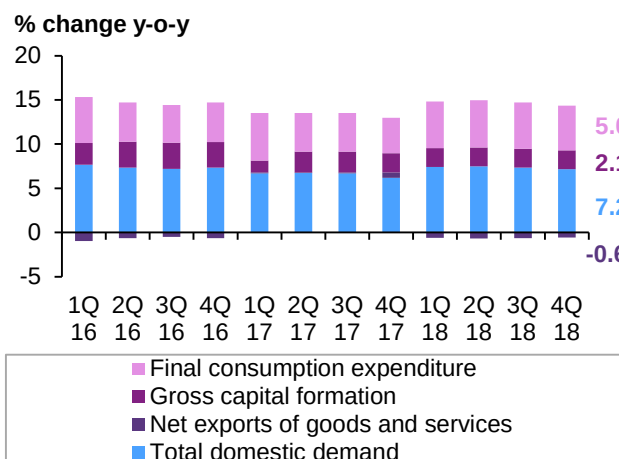
**China's economy** advanced 6.4% y-o-y in 4Q18, after 6.5% growth in 3Q18. It was the lowest growth rate since the global financial crisis amid an intense trade dispute with the US, weakening domestic demand and alarming off-balance-sheet borrowings by local governments. The Chinese government set a 2018 growth target of around 6.5%. In 4Q18, the primary sector expanded 3.5%; the secondary 5.8%; and the tertiary 7.4%. Agriculture also increased 3.5%, down from 3.9% in 2017.

Graph 3 - 24: China's GDP growth



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

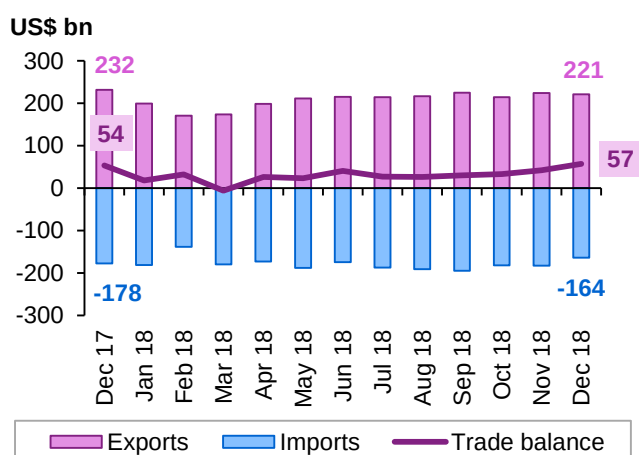
Graph 3 - 25: China's GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

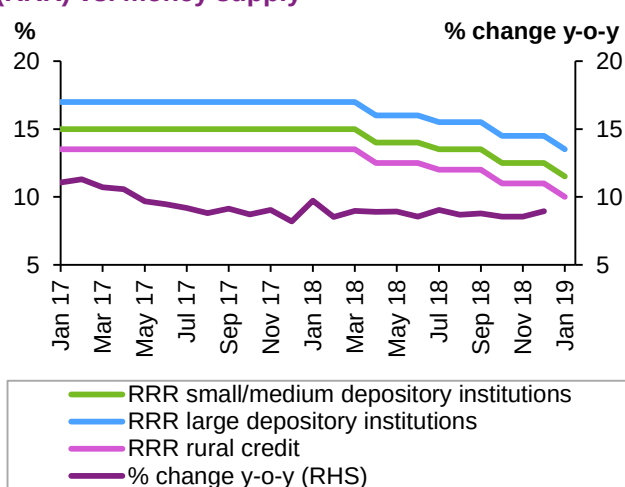
**Industrial output** rose 6.2% in 2018, some 0.4 percentage points (pp) lower than in 2017. Manufacturing advanced 6.5%; electricity, thermal power, gas and water supply grew by 9.9%; and the mining sector rose 2.3%. The value added by high-tech manufacturing, strategic emerging industries and equipment manufacturing increased by 11.7%, 8.9% and 8.1%, respectively, over the previous year. The services sector increased 7.7%, slower than the 8.2% growth seen in 2017. On the expenditure side, final consumption accounted for 76.2% of GDP, with retail sales rising 9%, lower than the rate of 10.2% in 2017. Capital formation accounted for 32.4% of GDP, with property investment growing by 9.5%, 2.5 pp faster than the pace in 2017. Investment in residential buildings increased 13.4%, 0.4% higher than in 2017 and accounting for 70.8% of real estate development investment. At the same time, fixed asset investment went up 5.9%, 1.3% lower than in 2017. Private investment went up 8.7%, 2.7 pp faster than in 2017. Investment by state-holding enterprises edged up 1.9%. Total trade grew 12.6% from 2017. Exports increased by 9.9%, while imports rose at a faster 15.8%. The deceleration in 4Q18 was primarily due to slower services growth across most subsectors. The growth in wholesale and retail trade declined to its slowest pace since 2009, in line with the weakening retail sales growth. Real estate growth was at its weakest since 3Q15, in line with the cooling of the housing market. The information and software services sector remained the fastest-growing sector, but the expansion was 3.7 pp down from the third quarter.

Graph 3 - 26: China's trade balance



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

Graph 3 - 27: China's reserve requirement ratio (RRR) vs. money supply



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

Transportation and financial services recovered as a result of increasing fiscal stimulus and an easing monetary policy, which helped drive up infrastructure investment in the private sector. The industrial sector continued to weaken while construction accelerated at its fastest rate since the beginning of 2017, in line with the strong performance in infrastructure investment. Inflation declined across most sectors. The GDP deflator



of most sectors, with the exception of the agriculture, construction and finance sectors, declined. This indicates a strong food component, which is likely to increase inflationary pressures in 2019.

According to Caixin, the China Securities Regulatory Commission (CSRC) will merge the **Qualified Foreign Institutional Investor (QFII) programme** and the **Renminbi QFII (RQFII) programme**. The merge will harmonize regulations and streamline investor application procedures. The CSRC is also planning to broaden the investment scope of these two schemes. The CSRC will permit foreign investors to “trade securities on China’s main over-the-counter equity market, known as the New Third Board, and also invest in private funds, bond repurchase agreements and derivatives, including financial futures, commodity futures and options”. Because of capital controls, QFII and RQFII were the main channels for large qualified foreign financial institutions to invest in the Chinese stock and bond markets before the Bond Connect and Stock Connect were launched. Foreign investors use offshore foreign currency accounts to invest in onshore yuan-denominated assets under the QFII scheme, while offshore renminbi accounts are used under the RQFII programme. The widening of foreign investors’ access to China’s capital markets under these two schemes will further open up China’s financial sector and attract more foreign investment.

China’s number of **employed persons** will continue to decline in the coming years given the rate at which the workforce is shrinking, putting a major strain on the economy. Labour costs for enterprises will increase, which may cause low-end, labour-intensive manufacturing to shift to inland China or Southeast Asia. Meanwhile, the falling number of births will accelerate population ageing in China. An ageing population will improve China’s urbanization ratio, but it will also increase pressure on social welfare.

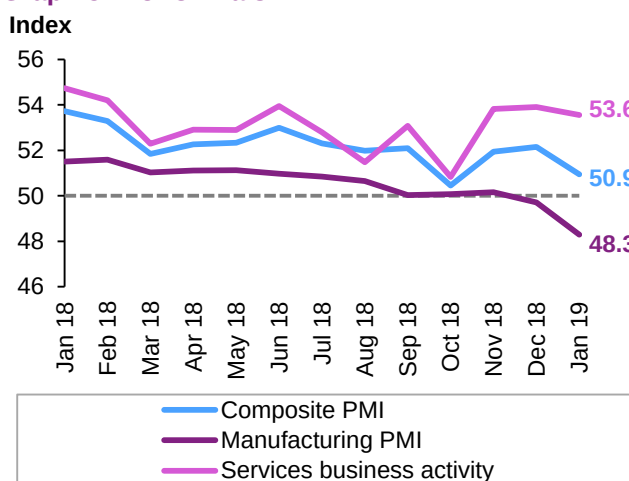
China’s **foreign direct investment growth** is expected to remain relatively stable in 2019 as the government will open up more sectors in the face of headwinds from the trade dispute and a cooling domestic economy.

The **Official NBS Manufacturing PMI** unexpectedly inched higher to 49.5 in January 2019 from 49.4 in the previous month.

The **Caixin China Manufacturing PMI** fell to 48.3 in January 2019 from 49.7 in December. Output, new orders, and employment all fell, while new work from abroad rose slightly amid positive progress in China-US trade talks. On the price front, gauges for input costs and output charges dropped slightly.

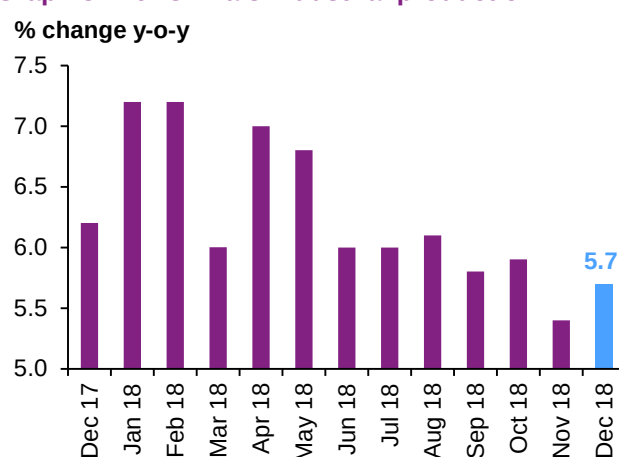
The **Caixin China General Services PMI** edged down to 53.6 in January 2019 from 53.9 in the previous month. The latest reading pointed to the weakest growth in the service sector since October 2018, mainly affected by weakening domestic demand and despite signs of progress in the China-US trade negotiations. New orders rose the most in seven months, new export orders expanded at the steepest pace in over a year, and employment growth accelerated to a 3-month high. Meanwhile, backlogs of work declined slightly. On the price front, input price inflation slowed to its lowest since May last year, while factory gate prices fell for the third month in a row and at a quicker rate. Finally, sentiment weakened. The effects of China’s policies to support domestic demand and the development of the trade dispute between the country and the US will remain key to the prospects of the Chinese economy.

**Graph 3 - 28: China’s PMI**



Sources: Caixin, IHS Markit and Haver Analytics.

**Graph 3 - 29: China’s industrial production**



Sources: China National Bureau of Statistics and Haver Analytics.

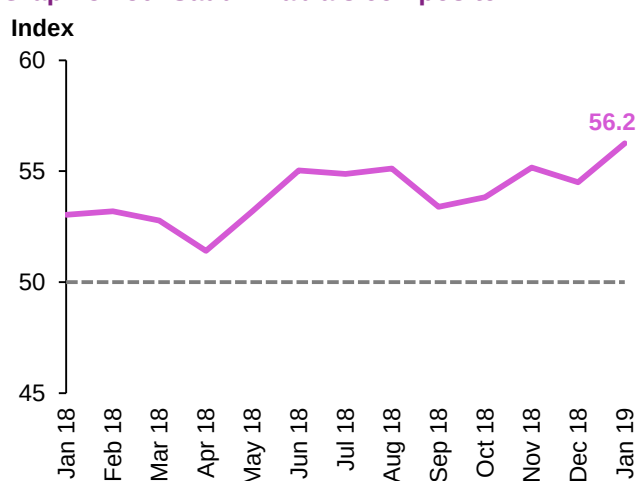
The slightly better than expected growth of **China's GDP** in 2018 of 6.6% is forecast to be followed by growth of 6.1% in 2019, unchanged from the previous forecast.

## OPEC Member Countries

### Saudi Arabia

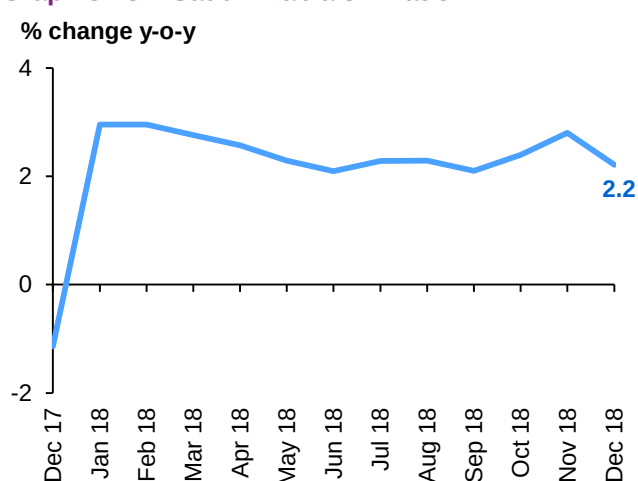
Inflation in **Saudi Arabia** eased from 2.9% y-o-y in November to 2.2% in December. The country's total reserve assets amounted to 1.86 trillion riyals in December 2018, from 1.89 trillion riyals in the previous two months. The Emirates NBD Saudi Arabia PMI climbed to 56.2 in January 2019, up from 54.5 in December 2018. The index reading in January represents its highest level in more than a year. The main driver was an acceleration in new order growth, which appears to have been domestically driven, as export orders remained broadly flat month-on-month. Some of the growth in new orders was likely due to price discounting, with output prices falling by the most since February 2018. Firms were able to reduce selling prices as their purchasing costs also declined in January. Business optimism regarding future output was the highest in more than five years in January 2019. The government has announced an ambitious budget for this year, with expenditure projected to rise more than 7% and a number of initiatives to boost investment and expansion in the non-oil sectors of the economy, which likely contributed to positive business sentiment.

Graph 3 - 30: Saudi Arabia's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 31: Saudi Arabia's inflation

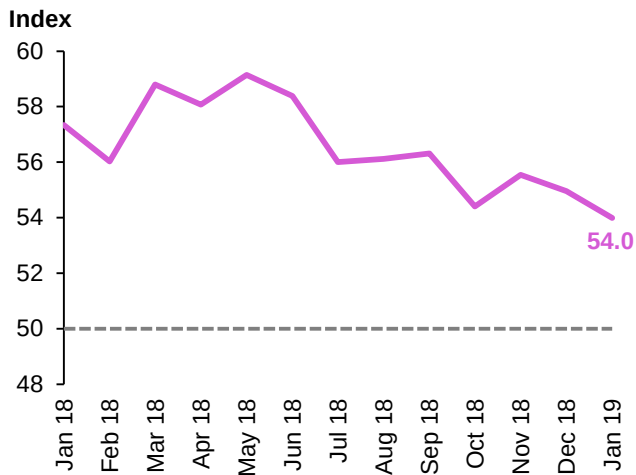


Sources: General Authority for Statistics and Haver Analytics.

### Nigeria

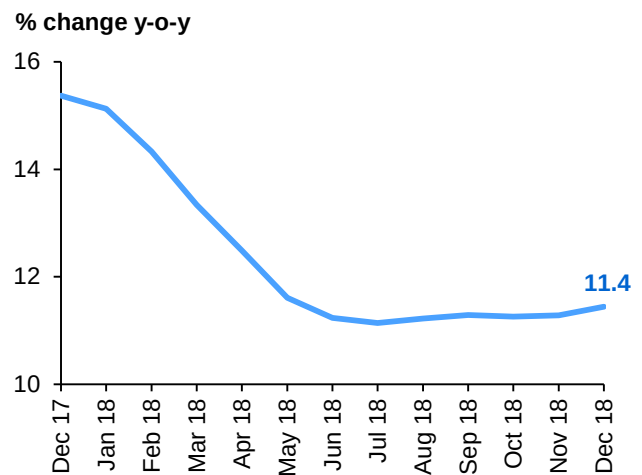
Inflation in **Nigeria** increased slightly in December to 11.4% y-o-y, from November's 11.3%. Inflation was still higher than the central bank's upper-limit target of 9%. The Nigerian private sector continued to expand during January, but there were signs of growth losing momentum at the start of the year as both output and new orders rose at a weaker pace. The rate of job creation continued to accelerate, however, as companies responded to a further pick-up in backlogs of work. Inflationary pressures softened, with input costs and output prices each rising to a lesser extent than in December. The Stanbic IBTC Bank Nigeria PMI registered 54.0 in January, from 55.0 in December. Rates of expansion in output and new orders softened at the start of 2019, with the latest rises the weakest in nineteen and three months, respectively. Growth remained sharp, however, amid reports of improving customer demand. Higher new orders resulted in a sixth successive monthly rise in backlogs of work in January, albeit one that was the weakest since August last year.

**Graph 3 - 32: Nigeria's composite PMI**



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

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

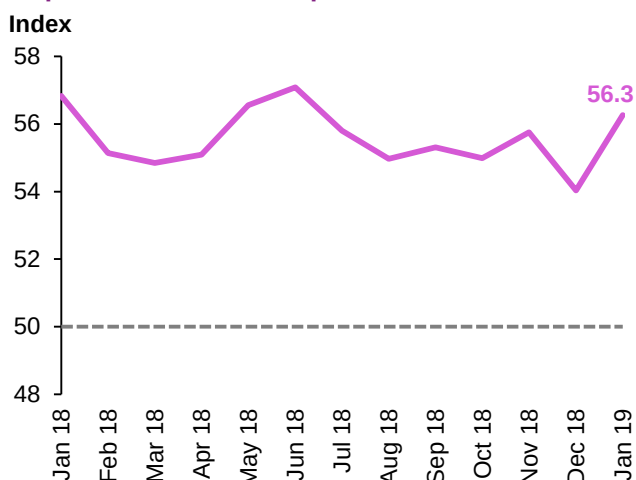


Sources: National Bureau of Statistics and Haver Analytics.

## The United Arab Emirates (UAE)

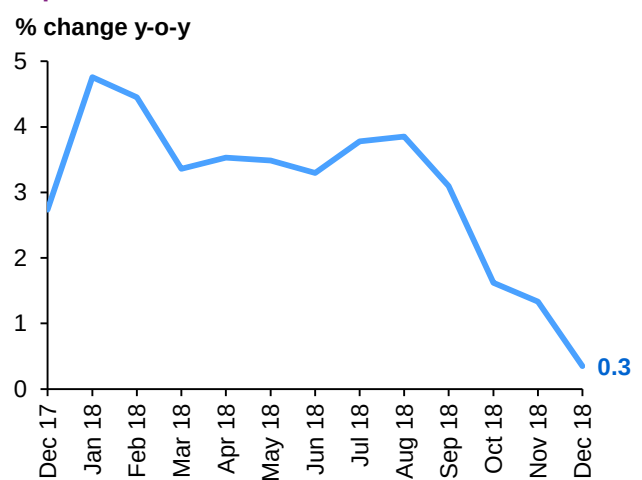
Consumer price inflation in the **UAE** eased notably in December to 0.4% y-o-y, from November's 1.3%. The downward trend in inflation started in September when the consumer price index rose by 3.2%, down from 3.9% in August. Prices decreased in the categories of food, transportation, recreational and cultural goods and services. The Emirates NBD UAE PMI rebounded to 56.3 at the start of 2019 after a disappointing December reading of 54.0. The January PMI was the highest in seven months and signalled a good start to the year for the non-oil private sector. The main driver for the higher headline index in January was faster output growth, and the new orders index increased as well. The improvement in business activity was partly due to promotions and price discounting by firms. Purchasing activity was robust in January as firms responded to stronger order growth and increased output. Business optimism regarding future output remained high in January, with more than 68% of firms expecting their output to be higher in a year's time. None of the firms surveyed expected output to be lower in a year's time. Activity requirements increased in January, leading companies to raise their staffing levels for the fourth month running.

**Graph 3 - 34: UAE's composite PMIs**



Sources: Emirates NBD, IHS Markit and Haver Analytics.

**Graph 3 - 35: UAE's inflation**



Sources: National Bureau of Statistics and Haver Analytics.

## Other Asia

### Indonesia

In **Indonesia**, the central bank left its benchmark seven-day reverse repo rate unchanged at 6% in January 2019. Policymakers said the decision was consistent with efforts to reduce the current account gap towards a range of 2.5% of GDP in 2019 and maintaining the attractiveness of domestic financial markets. The trade deficit widened to \$1.1 billion in December 2018 from \$0.2 billion in the same month. It was the third-straight month of trade gap, as exports dropped while imports increased. Imports rose 1.2% from a year earlier to \$15.3 billion in December, following an upwardly-revised 11.8% rise in the prior month. Imports of non-oil and gas went up 6.2% to \$13.3 billion, while those of oil and gas plunged by 23.3% to \$1.9 billion. Exports fell by 4.6% y-o-y in December to \$14.2 billion. Exports of non-oil and gas products dropped by 7.0% to \$12.4 billion, while those of oil and gas rose by 16.7% to \$1.8 billion. Growth in Indonesian manufacturing activity slowed in January, with survey data indicating broadly stagnant business conditions during the month. Output volumes were largely unchanged while new orders fell. Input purchases and employment grew marginally. Inventories declined further amid weak sales. Price pressures, meanwhile, eased noticeably, with input cost inflation at a survey-record low. That said, business confidence remained buoyant, pointing to upbeat sentiment regarding the year ahead. The headline Nikkei Indonesia Manufacturing PMI fell from 51.2 in December to 49.9 in January, representing largely unchanged conditions in the sector. This was the first time in a year that an improvement had not been registered. Survey data indicated that demand conditions weakened at the start of the year. Having increased in December, new order intakes declined in January. Not only did domestic sales suffer, overseas demand remained weak, with export orders fell for a fourteenth-consecutive month. Consequently, backlogs continued to fall, underlining the surplus of operating capacity.

## Africa

In **South Africa**, the trade surplus reached 17.2 billion rand in December 2018 compared to a downwardly revised 3.29 billion surplus in the prior month. It is the widest trade surplus since May 2016, as imports fell faster than exports. In 2018, the country posted a trade surplus of 11.3 billion rand compared to a 76.7 billion rand surplus in the previous year. Business conditions in South Africa's private sector economy deteriorated only slightly at the beginning of 2019. The rate of decline was the weakest in the current seven-month period of contraction, as output and new orders fell marginally. Meanwhile, new export orders increased for the first time since September 2017, and employment rose for the second month running. The IHS Markit South Africa PMI rose to 49.6 in January, from 49.0 in December, to record its highest reading since June 2018 when business conditions last improved. Nevertheless, this still indicated a slight deterioration in conditions, driven by falls in output and new orders.

## Latin America

### Argentina

In **Argentina**, the monthly economic activity indicator showed growth of 0.9% m-o-m in October 2018, reversing the previous month's 2.1% contraction. Comparing to the previous year, the output contraction eased from -6.1% y-o-y in September 2018 to -4.0% in October 2018. Better performance in the agriculture and fishery industries helped to somewhat ease the downward trend. However, most other sectors of the economy reported contractions as highlighted by the ongoing contraction in industrial output during November 2018 and falling cement sales and construction activity in the final months of 2018. Such indicators suggest a continued contraction in GDP in 4Q18. The deceleration is expected to slightly ease in 2019, with the help of a recovery in farm output, which was hit by severe drought in 2018, together with increasing competitiveness due to a weak currency. 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 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. Gross fixed capital formation (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 a 2.9% y-o-y expansion in 2Q18 to a 9.9% contraction in 3Q18.

## Transition region

### Czech Republic

In the **Czech Republic**, the national bank held its benchmark two-week repo rate unchanged at 1.75% in December 2018. The annual inflation rate fell to the central bank's target of 2% in November from 2.2% in October, the lowest since April 2018. The IHS Markit Czech Republic Manufacturing PMI dipped to a six-year low in January. The index fell to 49.0 in January, from 49.7 in December. Output fell for the second successive month in January. Although the rate of contraction softened slightly, it was still the second-fastest fall in production since December 2012. New orders received by Czech manufacturing firms continued to fall in January, with new order book volumes hit by muted client demand and a loss of competitiveness. Similarly, new business from abroad contracted for the third month running. Manufacturing firms noted concerns surrounding ongoing trade tensions and subdued demand among key trading partners. In line with weaker demand from domestic and foreign markets and greater global trade tensions, the degree of business confidence was one of the weakest over the past six years. GDP grew by 2.5% y-o-y in 3Q18, from 2.7% in the previous quarter due to a slower pace of growth in household consumption, GFCF, and exports alongside a higher increase in imports.

# World Oil Demand

**World oil demand** growth in **2018** was revised lower by 0.03 mb/d from the previous month's projections. Global oil demand growth is now pegged at 1.47 mb/d for the previous year. The downward revisions were primarily a reflection of lower than expected data from OECD Europe, OECD Asia Pacific, Other Asia, Latin Americas and the Middle East in 3Q18 and 4Q18. Total global oil demand is now estimated to average 98.76 mb/d in 2018.

Oil demand growth in the **OECD** was revised down by 0.01 mb/d in 2018, despite upward revisions to OECD Americas in 4Q18. In the US, better than expected demand for light and middle distillates, as well as for the petrochemical and industrial sectors, contributed to an upward revision to US oil demand growth of 0.1 mb/d in 4Q18. In contrast, OECD Europe performed below initial projections as a result of slower economic activity, a decrease in petrochemical feedstock requirements and warmer weather conditions in 4Q18. A downward adjustment of 0.02 mb/d in 2018 took place, mainly in 2H18. Similarly, OECD Asia Pacific was revised down by around 0.01 mb/d in 2018, due to lower than expected demand in South Korea's petrochemical sector in 4Q18.

Oil demand growth in the **non-OECD** was revised lower by around 0.02 mb/d in 2018, in line with lower than expected demand in Other Asia, Latin America and the Middle East in 4Q18. In Other Asia, a downward revision of 0.03 mb/d in 4Q18 stemmed from lower than expected demand in India for the month of November 2018. In the Middle East, 2018 oil demand growth was revised lower by 0.01 mb/d, mainly reflecting lower oil requirements from Saudi Arabia in light of a high level of substitution and economic reform plans, including subsidy reductions.

In **2019**, **world oil demand** growth was revised lower by 0.05 mb/d and is now forecast at 1.24 mb/d, as a result of downward revisions to the economic outlook for major economies. In the **OECD**, oil demand was revised down by 0.02 mb/d due to lower economic projections for OECD Americas in 1Q19 and OECD Europe for the whole of 2019. The oil demand outlook for the current year was also adjusted downward in the **non-OECD**, as economic expectations for Latin America and the Middle East were adjusted lower compared with last month's projections. Oil demand was lowered by 0.01 mb/d and 0.02 mb/d in Latin America and the Middle East, respectively.



## World oil demand in 2018 and 2019

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

|                              | <u>2017</u>  | <u>1Q18</u>  | <u>2Q18</u>  | <u>3Q18</u>  | <u>4Q18</u>  | <u>2018</u>  | <u>Change 2018/17</u> |             |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|-------------|
|                              |              |              |              |              |              |              | <u>Growth</u>         | <u>%</u>    |
| Americas                     | 25.06        | 25.20        | 25.40        | 25.73        | 25.74        | 25.52        | 0.46                  | 1.85        |
| 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        | 14.68        | 14.42        | 14.31        | 0.01                  | 0.09        |
| Asia Pacific                 | 8.06         | 8.54         | 7.65         | 7.70         | 8.21         | 8.03         | -0.04                 | -0.46       |
| <b>Total OECD</b>            | <b>47.42</b> | <b>47.69</b> | <b>47.24</b> | <b>48.11</b> | <b>48.37</b> | <b>47.86</b> | <b>0.44</b>           | <b>0.93</b> |
| Other Asia                   | 13.24        | 13.55        | 13.84        | 13.38        | 13.90        | 13.67        | 0.42                  | 3.19        |
| of which India               | 4.53         | 4.83         | 4.74         | 4.40         | 4.96         | 4.73         | 0.20                  | 4.43        |
| Latin America                | 6.51         | 6.35         | 6.48         | 6.81         | 6.47         | 6.53         | 0.02                  | 0.31        |
| Middle East                  | 8.17         | 8.19         | 7.96         | 8.40         | 7.85         | 8.10         | -0.07                 | -0.89       |
| Africa                       | 4.20         | 4.35         | 4.32         | 4.27         | 4.40         | 4.33         | 0.13                  | 3.13        |
| <b>Total DCs</b>             | <b>32.13</b> | <b>32.44</b> | <b>32.60</b> | <b>32.86</b> | <b>32.62</b> | <b>32.63</b> | <b>0.50</b>           | <b>1.57</b> |
| 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        |
| <b>Total "Other regions"</b> | <b>17.74</b> | <b>17.68</b> | <b>18.18</b> | <b>18.32</b> | <b>18.90</b> | <b>18.27</b> | <b>0.53</b>           | <b>2.99</b> |
| <b>Total world</b>           | <b>97.29</b> | <b>97.80</b> | <b>98.02</b> | <b>99.30</b> | <b>99.89</b> | <b>98.76</b> | <b>1.47</b>           | <b>1.51</b> |
| Previous estimate            | 97.29        | 97.80        | 98.02        | 99.35        | 99.94        | 98.78        | 1.50                  | 1.54        |
| Revision                     | 0.00         | 0.00         | 0.00         | -0.05        | -0.05        | -0.03        | -0.03                 | -0.03       |

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                     | 25.52        | 25.43        | 25.64        | 26.01         | 26.00         | 25.77         | 0.25           | 1.00        |
| of which US                  | 20.72        | 20.79        | 20.85        | 21.14         | 21.02         | 20.95         | 0.23           | 1.12        |
| Europe                       | 14.31        | 13.97        | 14.18        | 14.69         | 14.42         | 14.32         | 0.01           | 0.06        |
| Asia Pacific                 | 8.03         | 8.53         | 7.61         | 7.68          | 8.18          | 8.00          | -0.03          | -0.34       |
| <b>Total OECD</b>            | <b>47.86</b> | <b>47.94</b> | <b>47.43</b> | <b>48.38</b>  | <b>48.61</b>  | <b>48.09</b>  | <b>0.24</b>    | <b>0.49</b> |
| Other Asia                   | 13.67        | 13.91        | 14.21        | 13.75         | 14.28         | 14.04         | 0.37           | 2.71        |
| of which India               | 4.73         | 5.03         | 4.93         | 4.58          | 5.15          | 4.92          | 0.19           | 4.05        |
| Latin America                | 6.53         | 6.38         | 6.52         | 6.86          | 6.51          | 6.57          | 0.04           | 0.66        |
| Middle East                  | 8.10         | 8.23         | 7.99         | 8.45          | 7.89          | 8.14          | 0.04           | 0.49        |
| Africa                       | 4.33         | 4.46         | 4.42         | 4.36          | 4.50          | 4.44          | 0.10           | 2.33        |
| <b>Total DCs</b>             | <b>32.63</b> | <b>32.98</b> | <b>33.15</b> | <b>33.42</b>  | <b>33.18</b>  | <b>33.18</b>  | <b>0.55</b>    | <b>1.70</b> |
| 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        |
| <b>Total "Other regions"</b> | <b>18.27</b> | <b>18.11</b> | <b>18.63</b> | <b>18.77</b>  | <b>19.37</b>  | <b>18.72</b>  | <b>0.45</b>    | <b>2.46</b> |
| <b>Total world</b>           | <b>98.76</b> | <b>99.02</b> | <b>99.21</b> | <b>100.57</b> | <b>101.16</b> | <b>100.00</b> | <b>1.24</b>    | <b>1.26</b> |
| Previous estimate            | 98.78        | 99.10        | 99.26        | 100.67        | 101.25        | 100.08        | 1.29           | 1.31        |
| Revision                     | -0.03        | -0.08        | -0.05        | -0.09         | -0.10         | -0.08         | -0.05          | -0.05       |

Note: \* 2018 = Estimate and 2019 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

## OECD

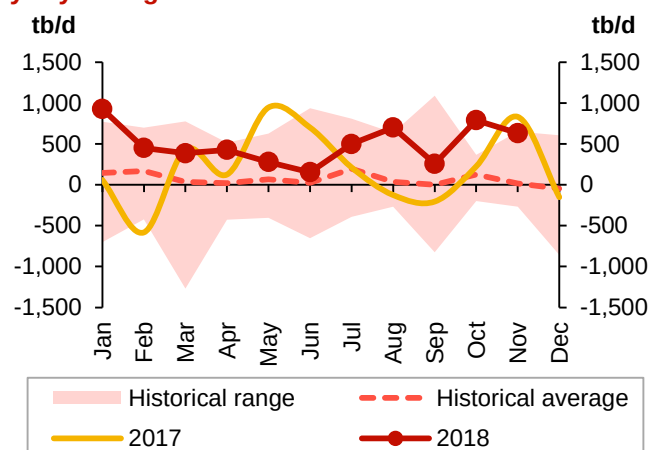
### OECD Americas

#### US

The latest available monthly 2018 data for the **US** implies a robust increase in oil requirements of around 0.59 mb/d in November or an equivalent of 3% y-o-y, rising for 13 consecutive months. This increase is mainly supported by a growing economy and healthy petrochemical feedstock consumption during the same month. Gains were essentially determined by increasing requirements for NGLs/LPG as feedstock for the petrochemical industry, as well as diesel fuel and gasoline. Total oil demand was partly offset by losses in requirements for jet kerosene and fuel oil. Consequently, oil demand has mostly been supported by the petrochemical and industrial sectors.

Data available for 11 months of 2018 shows that US oil demand has been growing strongly by around 0.56 mb/d y-o-y, with NGLs/LPG and diesel fuel accounting for the bulk of the growth.

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

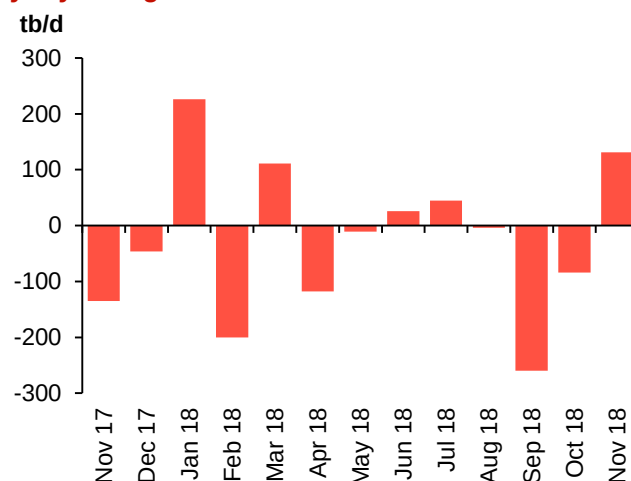


Sources: Joint Organisations Data Initiative and OPEC Secretariat.

Preliminary weekly data for December 2018 and January 2019 appear to extend the existing positive overall picture, with diverse developments in relation to main petroleum product categories. Gasoline's performance is flat y-o-y, while warmer weather did not support residual fuel oil and gas diesel fuel usage. Furthermore, despite a number of holidays during the months of December and January, jet kerosene remained sluggish, y-o-y.

The outlook for US oil demand in 2019 remains positive and dependent upon developments in the US economy, as well as oil prices. The oil price level may impact road transportation, as well as industrial sectors, particularly the upstream oil industry. The risks for 2019 US oil demand are balanced between the upside and downside, compared with last month's projections. For 2019, oil demand growth in the US is projected to be strong for another year, yet lower compared to 2017 and 2018.

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



Sources: US EIA and OPEC Secretariat.

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

|                | Nov 18        | Nov 17        | Change 2018/17<br>tb/d | %          |
|----------------|---------------|---------------|------------------------|------------|
| LPG            | 3,218         | 2,797         | 421                    | 15.1       |
| Naphtha        | 224           | 229           | -5                     | -2.2       |
| Gasoline       | 9,241         | 9,110         | 131                    | 1.4        |
| Jet/kerosene   | 1,682         | 1,688         | -6                     | -0.4       |
| Diesel oil     | 4,261         | 4,157         | 104                    | 2.5        |
| Fuel oil       | 278           | 394           | -116                   | -29.4      |
| Other products | 2,280         | 2,223         | 56                     | 2.5        |
| <b>Total</b>   | <b>21,184</b> | <b>20,598</b> | <b>585</b>             | <b>2.8</b> |

Sources: US EIA and OPEC Secretariat.

## Mexico

Oil demand in **Mexico** continued to fall sharply y-o-y in December 2018. Slight gains in demand for diesel fuel and naphtha have been more than offset by shrinking demand for LPG and residual fuel oil – mainly as a result of substitution with other energy commodities – as well as for gasoline and diesel. With complete monthly data in 2018, Mexican oil demand appears bearish compared with 2017, for the second consecutive year. LPG and jet kerosene usage implied gains, but have been more than offset by shrinking demand in all other petroleum product categories, notably gasoline and residual fuel oil.

Mexican oil demand is expected to remain flat in 2019, with risks skewed to the downside compared with last month's projections, as a result of the country's economy and the degree of fuel substitution with other energy commodities.

In 2018, **OECD Americas oil demand** grew by 0.46 mb/d compared with 2017. In 2019, OECD Americas oil demand is projected to gain an additional 0.26 mb/d compared with 2018.

## Canada

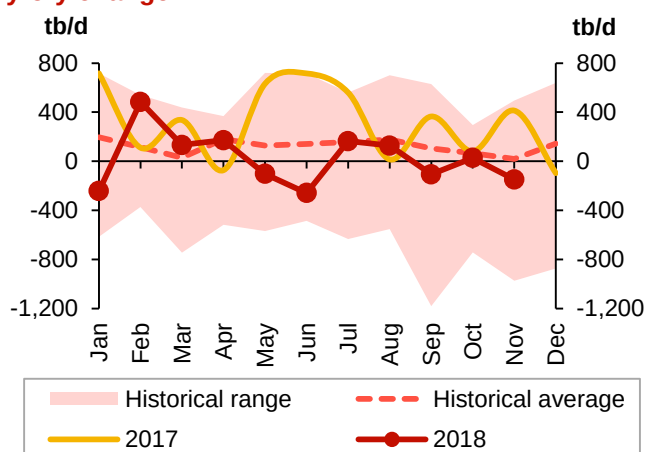
The latest **Canadian data** for November 2018 shows a slightly increase in oil demand y-o-y. Demand for the majority of main petroleum products grew y-o-y, the only exception being losses incurred for LPG and naphtha. The 2019 projections for Canadian oil demand are unchanged from those in the previous month's report with slight y-o-y growth foreseen and risks balanced between the upside and downside.

## OECD Europe

**European oil demand** continued to decline for another month in November 2018 y-o-y, despite the region's expanding economy, though there are growing concerns regarding economic developments in some of the region's main oil consuming countries.

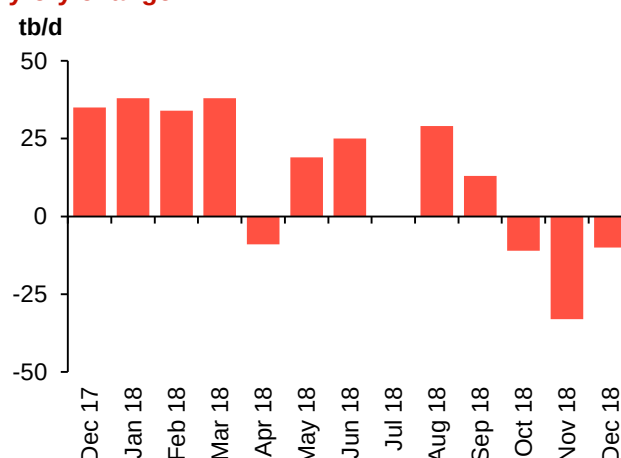
Oil demand during November 2018 was influenced by warmer weather compared with the same month in 2017. Oil demand grew in a number of countries in the region, such as Italy, the Netherlands, Spain and the UK with gain more than offset by sluggish demand in Germany, France, Turkey and Sweden. Gains were made in gasoline demand, reflecting a continued switch from diesel fuel in the transportation sector. Gains were more than offset by shrinking demand for LPG, naphtha, diesel fuel and fuel oil. Early indications for December 2018 imply flat demand y-o-y in Germany, France, Italy and the UK – **the European Big 4** oil consumers.

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



Sources: 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.

The outlook for the region's oil demand in 2019 is currently seen to be flat, with risks associated to uncertainties in the region's economy and the high historical baseline. Developments in economic activities – in addition to oil prices, efficiency and substitution policies and programmes – are anticipated to cap oil demand gains. The forecast risk for 2019 oil demand growth is therefore skewed to the downside.

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

|                | <u>Dec 18</u> | <u>Dec 17</u> | <u>Change 2018/17</u><br><u>tb/d</u> | <u>%</u>    |
|----------------|---------------|---------------|--------------------------------------|-------------|
| LPG            | 508           | 506           | 2                                    | 0.3         |
| Naphtha        | 586           | 658           | -72                                  | -10.9       |
| Gasoline       | 1,093         | 1,063         | 30                                   | 2.9         |
| Jet/kerosene   | 788           | 789           | -1                                   | -0.1        |
| Diesel oil     | 3,254         | 3,201         | 53                                   | 1.6         |
| Fuel oil       | 254           | 247           | 7                                    | 2.7         |
| Other products | 549           | 579           | -30                                  | -5.1        |
| <b>Total</b>   | <b>7,032</b>  | <b>7,043</b>  | <b>-11</b>                           | <b>-0.2</b> |

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

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

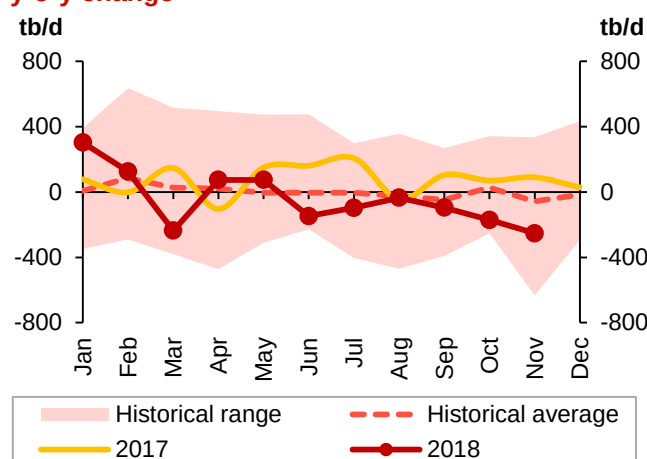
OECD Europe oil demand grew by 0.01 mb/d in 2018 and is forecast to grow by another 0.01 mb/d in 2019.

## OECD Asia Pacific

### Japan

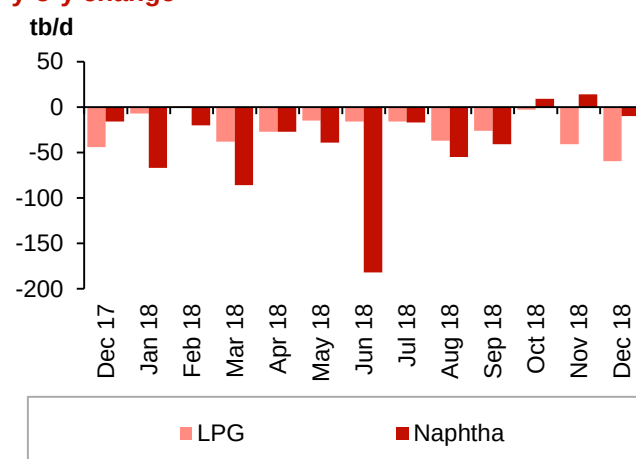
According to preliminary data from Japan's Ministry of Economy Trade, and Industry (METI), **Japanese oil demand** decreased sharply by 0.25 mb/d y-o-y in December 2018 y-o-y. This monthly decrease was the result of falling demand for all main petroleum product categories, particularly LPG, jet/kerosene and residual fuel oil, as well as direct burning of crude and residual fuel oil for electricity generation.

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



Sources: Joint Organisations Data Initiative 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.

Monthly data for all of 2018 implies a drop of approximately 2.5% in Japanese oil demand in 2018, with requirements for the majority of main petroleum categories shrinking, the only exception being diesel. Based on projections for the country's overall economy, Japanese oil demand is estimated to decline in the current year, with risk expectations slightly skewed to the downside.

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

|                | <u>Dec 18</u> | <u>Dec 17</u> | <u>Change 2018/17</u><br><u>tb/d</u> | <u>%</u>    |
|----------------|---------------|---------------|--------------------------------------|-------------|
| LPG            | 416           | 475           | -59                                  | -12.5       |
| Naphtha        | 811           | 821           | -10                                  | -1.2        |
| Gasoline       | 921           | 943           | -22                                  | -2.3        |
| Jet/kerosene   | 726           | 812           | -86                                  | -10.6       |
| Diesel oil     | 866           | 882           | -16                                  | -1.8        |
| Fuel oil       | 266           | 313           | -47                                  | -15.1       |
| Other products | 386           | 397           | -11                                  | -2.7        |
| <b>Total</b>   | <b>4,392</b>  | <b>4,643</b>  | <b>-251</b>                          | <b>-5.4</b> |

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

### South Korea

In **South Korea**, the latest available data shows sluggish oil demand growth in November 2018 y-o-y for the fifth-consecutive month. Almost all main petroleum product categories were sluggish, particularly naphtha, jet/kerosene and fuel oil. Naphtha demand shrunk in 2H18 as a result of maintenance/expansion in some of the country's petrochemical plants. Current indications imply a slight overall decline for 2018, y-o-y.

South Korean oil demand is expected to return to positive territory in 2019, mainly as a result of expectations for healthy developments in the country's economy.

## Australia

In **Australia**, oil demand increased strongly by 0.04 mb/d or 3.6% y-t-d, with the bulk of gains seen for diesel fuel used in industrial activities.

**OECD Asia Pacific oil demand** in 2018 fell slightly by 0.04 mb/d, contrary to initial forecasts and for the second year in a row. The region's oil demand is projected to slightly decline by 0.03 mb/d y-o-y in 2019.

## Non-OECD

### China

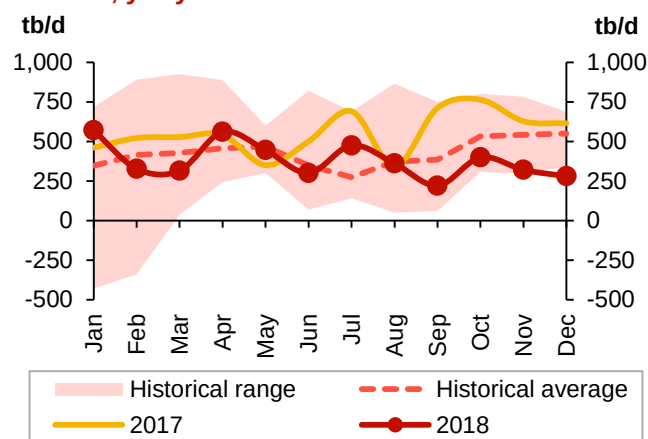
**China's oil demand** recorded growth figures in December 2018; however, the rate of growth has been slowing compared with 2H17 and 1H18. Demand growth was pegged at 0.28 mb/d compared with December 2017. In absolute figures, total oil demand for the country stood at 12.14 mb/d. Oil demand growth was determined by solid increases in jet/kerosene and light distillates LPG and naphtha. In contrast, diesel fuel and fuel oil consumption dropped by around 5% and 10% y-o-y, respectively.

LPG demand reached total consumption of around 1.84 mb/d, higher than that recorded in December 2017 by around 0.12 mb/d, mainly supported by steady utilization rates at propane dehydrogenations plants (PDH). Projections for LPG demand see an easing going forward, in line with expected maintenance activities at the Zhanjiagang plant, along with Tianjin Bohai and Ningbo Haiyue plants. Jet/kerosene demand was higher by 0.19 mb/d y-o-y during the month of December 2018, with total demand reaching 0.74 mb/d.

In cumulative terms, jet/kerosene demand increased by a solid 0.09 mb/d in 2018 to average 0.79 mb/d. Domestic air traffic increased by 12% y-o-y, despite moderating momentum in 4Q18. Gasoline demand grew steadily in December 2018, adding 0.06 mb/d y-o-y for total consumption of 2.77 mb/d. This increase took place in spite of dwindling car sales, which fell for the sixth consecutive year. Domestic passenger car sales reached 2.2 million units in December 2018, down by 19% y-o-y. As for passenger cars by type, sport utility vehicles (SUV) dipped by 19% y-o-y, while multi-purpose vehicle (MPV) sales declined by 33% y-o-y. Diesel fuel consumption decreased by around 0.04 mb/d, mainly in line with slower manufacturing activities compared with December 2017.

The manufacturing purchasing managers' index (PMI) was in the negative in December 2018, at 49.4. Similarly, initial data showed fuel oil consumption declining by around 0.04 mb/d 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.



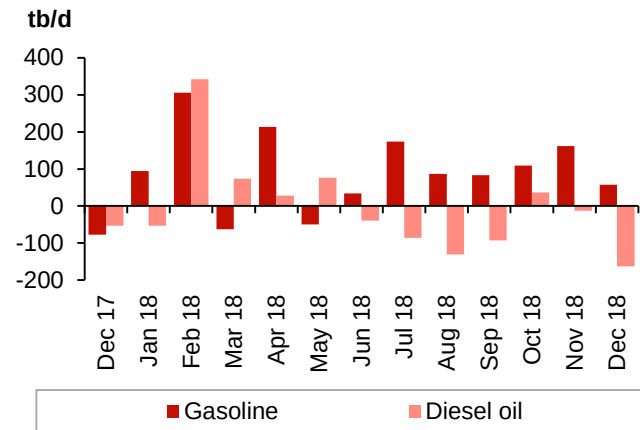
## World Oil Demand

China registered stable oil demand growth in 2018, despite signs of a slowdown in 2H18. Growth in oil demand was driven mainly by LPG, as well as gasoline.

For **2019**, the outlook is based on the following factors: possible fluctuations in economic environment, the performance of the petrochemical sector, expansion of projects in the refinery sector, and policies encouraging a reduction in transportation fuel consumption.

China's oil demand is expected to grow by 0.34 mb/d in 2019, compared to a 0.39 mb/d increase seen in 2018.

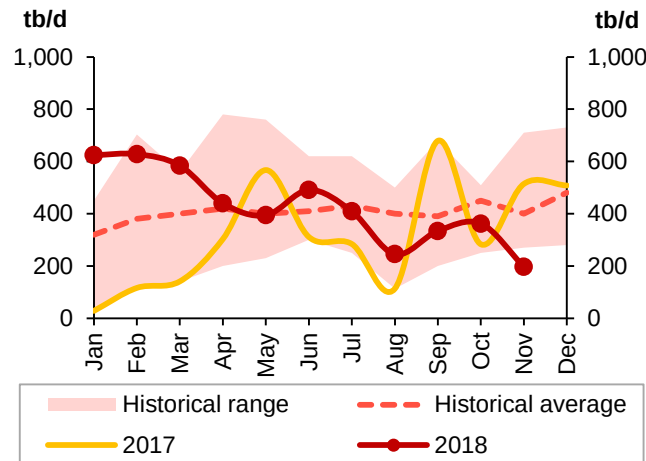
**Graph 4 - 8: China's diesel oil and gasoline demand growth y-o-y**



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

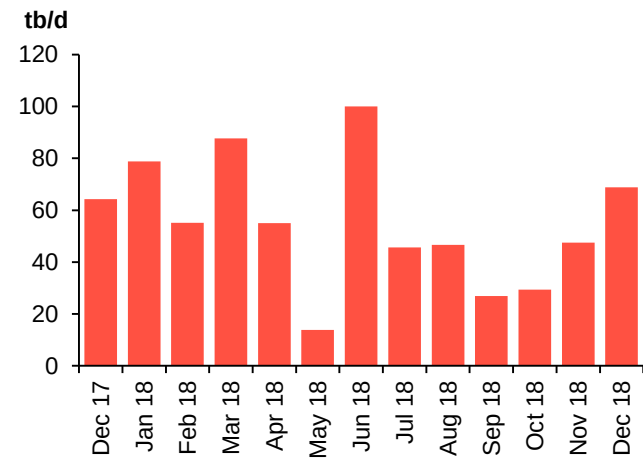
## Other Asia

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



Sources: Joint Organisations Data Initiative 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** rebounded in December 2018 to register an increase of around 0.16 mb/d, which equates to around 3% y-o-y, with total product demand reaching historically high levels of 5.2 mb/d. The performance of product markets was mainly positive, especially for gasoline and diesel fuel, with both rising by more than 0.06 mb/d y-o-y. The increase in gasoline demand growth is mainly as a result of greater consumer preference for gasoline vehicles over diesel vehicles, improvements in road connectivity leading to more miles driven, and increased driving during the holiday season in December.

In contrast, domestic passenger car sales decreased marginally by around 0.4% y-o-y in December, but gained around 4% y-o-y in cumulative terms from the period April–December 2018. Two-wheeler sales were around 2% y-o-y in December compared to an increase of around 10% y-o-y in cumulative terms for the period April–December 2018. An increase in diesel consumption growth can be linked to manufacturing activities, as infrastructure projects in addition to a good agriculture season provided support for diesel demand. Indian LPG, which rose by 0.04 mb/d or around 6%, saw total consumption of around 0.8 mb/d, supported by an uptick in the residential sector. Additionally, fuel oil demand growth was in positive territory after declining in October and November, due to higher-than-anticipated consumption in the steel sector.

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

|                | Dec 18       | Dec 17       | Change 2018/17<br>tb/d | %          |
|----------------|--------------|--------------|------------------------|------------|
| LPG            | 843          | 799          | 44                     | 5.6        |
| Naphtha        | 319          | 288          | 31                     | 10.8       |
| Gasoline       | 756          | 687          | 69                     | 10.0       |
| Jet/kerosene   | 249          | 245          | 4                      | 1.7        |
| Diesel oil     | 1,872        | 1,811        | 61                     | 3.4        |
| Fuel oil       | 284          | 267          | 17                     | 6.4        |
| Other products | 872          | 937          | -65                    | -6.9       |
| <b>Total</b>   | <b>5,195</b> | <b>5,033</b> | <b>162</b>             | <b>3.2</b> |

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

Going forward, the projection for Indian oil demand should be steady in 2019, supported by various factors, including steady economic conditions spurring various sectors, such as construction and transportation. As such, middle distillates, including diesel fuel and jet/kerosene, are anticipated to rise the most during the current year, followed by gasoline and LPG.

## Indonesia

In **Indonesia**, the latest data for November 2018 illustrates an increase of around more than 1% y-o-y, with all products rising at different magnitudes. The most gains were witnessed in middle distillates, with jet/kerosene and diesel increasing by around 9% and 2%, respectively.

## Thailand

**Thailand's** latest available data for the month of November 2018 indicate an increase in oil requirements by 0.01 mb/d y-o-y. The bulk of the increase came from gasoline and fuel oil, with some increases in middle distillate fuels, amid steady development in the industrial and transportation sectors.

Looking ahead, the picture for 2019 remains as highlighted in the previous month's report, with a major assumption of steady economic conditions. India is anticipated to be the major contributor to growth in the **Other Asia** category. Middle distillates, followed by gasoline, are the leading products behind oil demand growth in 2017.

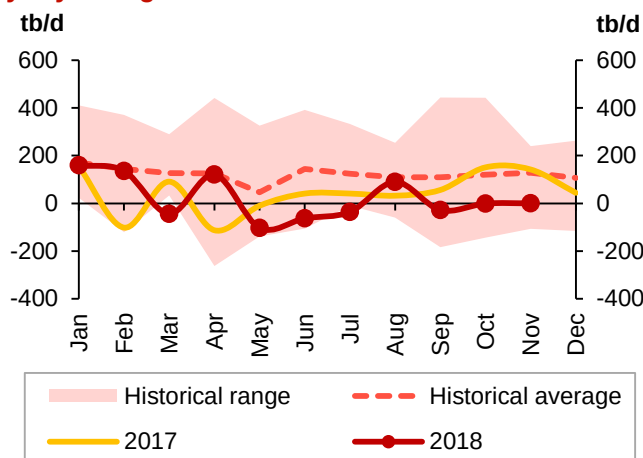
**Other Asia's oil demand** is estimated to have grown by 0.42 mb/d in 2018. As for 2019, oil demand is forecast at 0.37 mb/d.

## Latin America

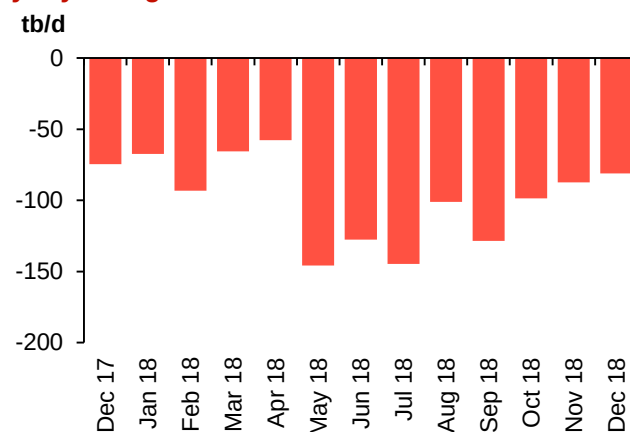
### Brazil

**Brazilian oil demand** increased in December 2018, adding around 0.06 mb/d or 2% y-o-y, with total product consumption averaging 2.65 mb/d. Mixed performance was observed among products with the greatest gains recorded in ethanol and diesel, while jet/kerosene and naphtha also registering some gains. Declines in gasoline demand, in addition to fuel oil and naphtha, counterbalanced these increases. The economic viability competition between gasoline and ethanol continued to favour ethanol demand over gasoline during the month of December. Ethanol retail prices were 2.82 reals/liter while gasoline retail prices were 3.5 reals/liter, allowing drivers to continue to take advantage of the price differential between the two products. As such, ethanol demand increased by more than 0.11 mb/d, while gasoline requirements fell sharply by around 0.08 mb/d.

Diesel demand gained momentum in December, adding around 0.03 mb/d y-o-y. This increase is in line with positive PMI Purchasing Manager Index data. Brazil's PMI for the month of December remained in positive territory for the third consecutive month at 52.4 from 51.6 a month earlier.

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

Sources: Joint Organisations Data Initiative and OPEC Secretariat.

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

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

In cumulative terms, 2018 oil demand growth in Brazil was flat, with gains in ethanol and middle distillates offset by declines in gasoline and fuel oil.

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

|                | <u>Dec 18</u> | <u>Dec 17</u> | <u>Change 2018/17</u><br><u>tb/d</u> | <u>%</u>   |
|----------------|---------------|---------------|--------------------------------------|------------|
| LPG            | 216           | 223           | -7                                   | -3.1       |
| Naphtha        | 147           | 145           | 2                                    | 1.4        |
| Gasoline       | 702           | 783           | -81                                  | -10.3      |
| Jet/kerosene   | 130           | 124           | 5                                    | 4.4        |
| Diesel oil     | 894           | 863           | 32                                   | 3.7        |
| Fuel oil       | 72            | 77            | -5                                   | -6.0       |
| Other products | 485           | 372           | 113                                  | 30.4       |
| <b>Total</b>   | <b>2,647</b>  | <b>2,587</b>  | <b>60</b>                            | <b>2.3</b> |

Note: \* = Inland deliveries.

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

## Argentina

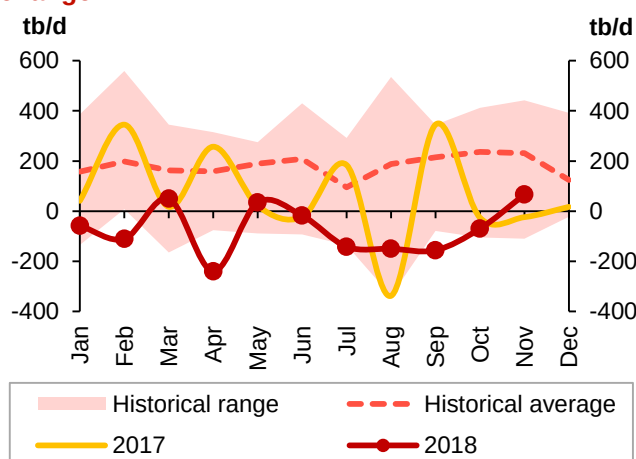
In **Argentina**, oil demand declined by 7% y-o-y in November 2018. All main petroleum product categories decreased, with the largest declines registered in fuel oil, diesel fuel and gasoline. Fuel oil declined by 46% while diesel fuel and gasoline shed 8% each y-o-y.

In 2019, projections for oil demand growth in **Latin America** were slightly lower than last month's projections as a result of economic growth adjustments for 2019. Brazil is projected to be the main contributor to growth with transportation fuels leading growth. In terms of products, diesel fuel and gasoline have higher growth potential and are expected to fuel the industrial and transportation sectors. The steady oil demand growth push is anticipated to extend to 2019, in line with economic projections.

**Oil demand growth in Latin America** increased by 0.02 mb/d during 2018, while the 2019 outlook sees oil demand growing by 0.04 mb/d.

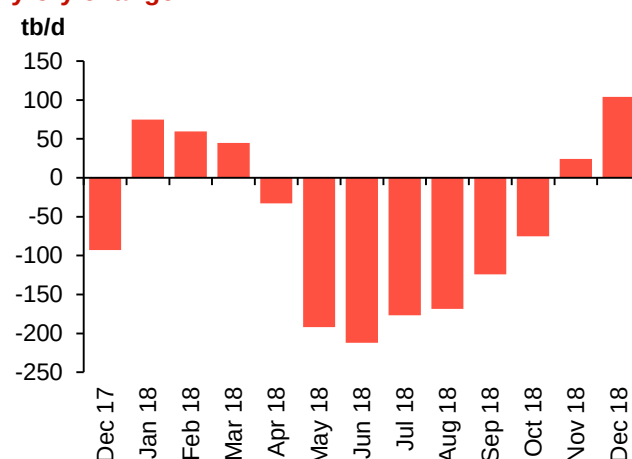
## Middle East

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



Sources: Joint Organisations Data Initiative, 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.

## Saudi Arabia

In **Saudi Arabia**, oil demand figures continued to decline for the 9th consecutive month during December. Oil requirements decreased by around 0.26 mb/d or by more than 11% compared with the same month in 2017.

All products declined at different rates, with the exception of crude oil for the purpose of burning in the power generation sector and in the Other Products category. The largest decline originated in transportation fuels as well as industrial fuels, with jet/kerosene and gasoline declining by 46% and 19% y-o-y, respectively. Additionally, diesel in the industrial sector, as well as fuel oil utilised mainly for direct burning for power generators, also declined, shedding around 12% each y-o-y.

In cumulative terms, oil demand in Saudi Arabia declined sharply in 2018, despite some positive momentum in naphtha and jet/kerosene demand.

Generally, 2018 oil demand declined by approximately 0.17 mb/d or more than 7.0% y-o-y. Substitution in the power generation sector led to a decline in demand for crude for direct burning. Additionally, slower construction activity and overall economic reforms, particularly in subsidy reductions for transportations fuels, led to steep declines of 12% and 6%, respectively, for diesel fuel and gasoline in 2018.

## Iraq

In **Iraq**, December 2018 oil demand data showed an increase of around 0.10 mb/d, with total product consumption now pegged at 0.74 mb/d. Demand for gasoline, diesel, crude oil for power generation and fuel oil increased over the course of the month, with declines in jet/kerosene consumption partially offsetting some of the gains. In cumulative terms, oil demand registered growth of around 0.06 mb/d y-o-y in 2018, with fuel oil and diesel taking the lion's share of the growth.

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

For 2018, Middle East oil demand declined by 0.07 mb/d y-o-y, while oil demand in 2019 is projected to grow by around 0.04 mb/d.

## World Oil Supply

**Non-OPEC oil supply growth in 2018** was revised up by 0.11 mb/d from the previous month's report and is now estimated to have grown by 2.72 mb/d to average 62.17 mb/d. The adjustment was mainly due to upward revisions in the US, UK, Malaysia and China as well as a higher supply forecast for the rest of 4Q18 for US and Canada. The expected y-o-y growth of 2.24 mb/d in the US along with Canada, Russia, Kazakhstan, Qatar, the UK 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 also revised up by 0.08 mb/d to average 2.18 mb/d, mainly due to a re-assessment on production forecast in the US Gulf of Mexico. Total supply is now forecast to average 64.34 mb/d. The US, Brazil, Russia, UK, Australia, Kazakhstan and Ghana are the main drivers for next year's growth, while Mexico, Norway, Canada, Indonesia and Vietnam are projected to see the largest declines. The 2019 non-OPEC supply forecast is faced with pipeline capacity constraints in North America, both in Texas and Alberta, as well as changes in the intensity of drilling and completion in the US shale industry.

**OPEC NGLs and non-conventional liquids** are expected to grow by 0.04 mb/d in 2018, unchanged from the previous estimate, to average 4.98 mb/d, and are forecast to grow by 0.09 mb/d in 2019 to average 5.07 mb/d after a m-o-m downward revision by 0.02 mb/d.

In January 2019, **OPEC crude oil production** decreased by 797 tb/d to average 30.81 mb/d, according to secondary sources.

According to preliminary **January data**, **non-OPEC supply, including OPEC NGLs**, decreased by 0.23 mb/d m-o-m to average 68.52 mb/d, higher by 2.86 mb/d y-o-y. As a result, preliminary data indicates that **global oil supply** decreased in January 2019 by 1.03 mb/d m-o-m to average 99.32 mb/d.

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

| Region                     | 2018         | Change<br>2018/17 | 2019         | Change<br>2019/18 |
|----------------------------|--------------|-------------------|--------------|-------------------|
| OECD Americas              | 23.93        | 2.44              | 25.56        | 1.63              |
| OECD Europe                | 3.77         | -0.06             | 3.77         | 0.00              |
| OECD Asia Pacific          | 0.41         | 0.02              | 0.46         | 0.05              |
| <b>Total OECD</b>          | <b>28.11</b> | <b>2.40</b>       | <b>29.79</b> | <b>1.68</b>       |
| Other Asia                 | 3.54         | -0.07             | 3.46         | -0.07             |
| 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              |
| <b>Total DCs</b>           | <b>13.43</b> | <b>0.05</b>       | <b>13.76</b> | <b>0.33</b>       |
| 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             |
| <b>Non-OPEC production</b> | <b>59.92</b> | <b>2.68</b>       | <b>62.07</b> | <b>2.15</b>       |
| <b>Processing gains</b>    | <b>2.25</b>  | <b>0.04</b>       | <b>2.28</b>  | <b>0.03</b>       |
| <b>Non-OPEC supply</b>     | <b>62.17</b> | <b>2.72</b>       | <b>64.34</b> | <b>2.18</b>       |

Note: \* 2018 = Estimate and 2019 = Forecast.

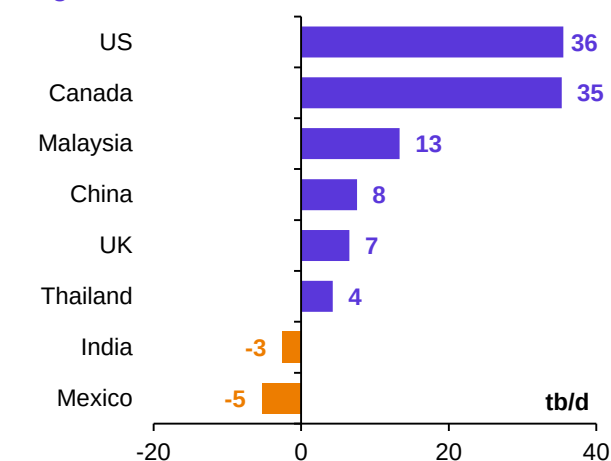
Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

## Monthly revisions to non-OPEC supply growth forecast

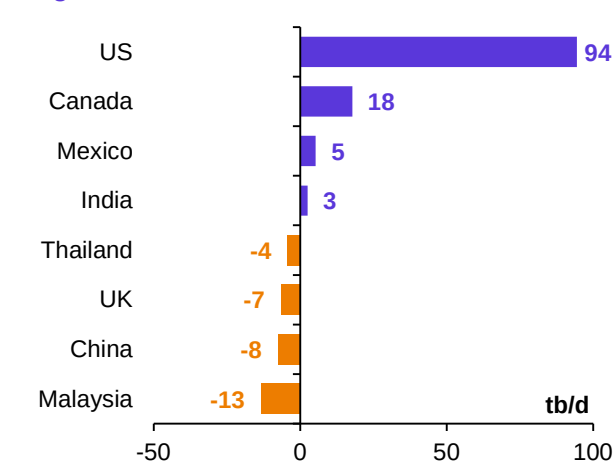
The non-OPEC oil supply growth forecast for **2018** was revised up by 0.11 mb/d to average 2.72 mb/d. On a country-by-country basis, cumulative expected growth in the US, Canada, Malaysia, China and the UK, was revised up by 0.11 mb/d in 2018, mostly in 4Q18, while the oil supply growth forecast for Mexico and India was revised down by 8 tb/d. As a result, y-o-y growth for non-OPEC supply in 2018 was revised up by 105 tb/d to average 2.72 mb/d (**Graph 5 - 1**).

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



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

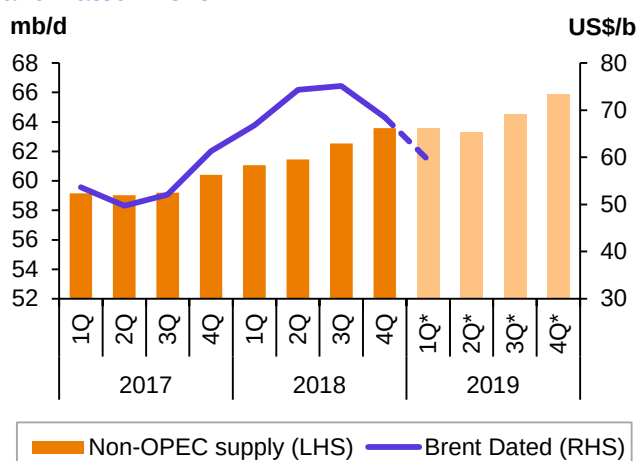
**Graph 5 - 2: Monthly oil market report**  
Feb 19/Jan 19 revisions in 2019\* annual supply changes



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

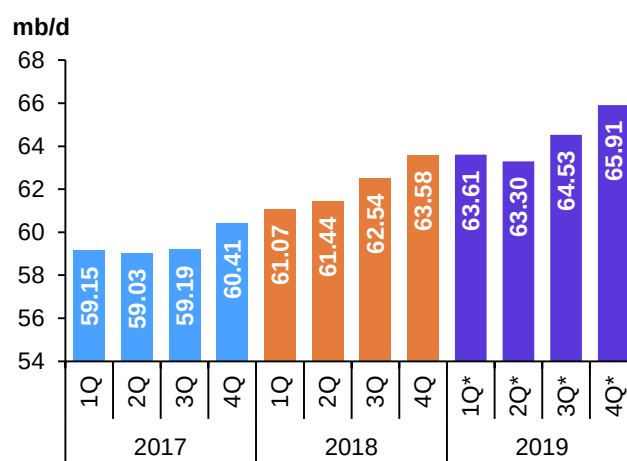
Revisions to non-OPEC oil supply growth for **2019**, as seen in **Graph 5 - 2**, indicate upward adjustments to the US, Canada Mexico and India, totalling 0.12 mb/d, while oil supply forecasts for Malaysia, China and the UK were revised down cumulatively by 0.03 mb/d. As a result, y-o-y growth for non-OPEC supply in 2019 was revised up by 78 tb/d to average 2.18 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

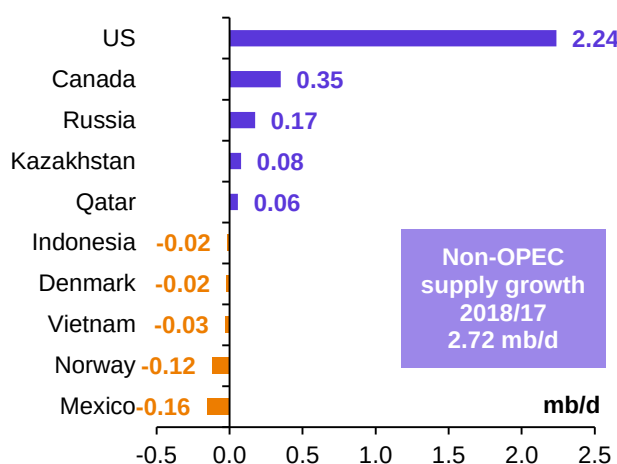
|                                  | 2017         | 1Q18         | 2Q18         | 3Q18         | 4Q18         | 2018         | Change 2018/17<br>Growth | %           |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|-------------|
| Americas                         | 21.49        | 22.93        | 23.36        | 24.51        | 24.89        | 23.93        | 2.44                     | 11.33       |
| of which US                      | 14.40        | 15.53        | 16.22        | 17.17        | 17.62        | 16.64        | 2.24                     | 15.53       |
| Europe                           | 3.83         | 3.92         | 3.73         | 3.63         | 3.80         | 3.77         | -0.06                    | -1.50       |
| Asia Pacific                     | 0.39         | 0.40         | 0.38         | 0.42         | 0.44         | 0.41         | 0.02                     | 4.49        |
| <b>Total OECD</b>                | <b>25.71</b> | <b>27.25</b> | <b>27.47</b> | <b>28.56</b> | <b>29.13</b> | <b>28.11</b> | <b>2.40</b>              | <b>9.32</b> |
| Other Asia                       | 3.61         | 3.60         | 3.55         | 3.48         | 3.53         | 3.54         | -0.07                    | -2.05       |
| 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         | 1.50         | 1.52         | 0.04                     | 2.64        |
| <b>Total DCs</b>                 | <b>13.38</b> | <b>13.41</b> | <b>13.47</b> | <b>13.34</b> | <b>13.49</b> | <b>13.43</b> | <b>0.05</b>              | <b>0.40</b> |
| FSU                              | 14.05        | 14.10        | 14.14        | 14.33        | 14.57        | 14.29        | 0.24                     | 1.67        |
| of which Russia                  | 11.17        | 11.14        | 11.18        | 11.44        | 11.61        | 11.35        | 0.17                     | 1.56        |
| Other Europe                     | 0.13         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | -0.01                    | -4.58       |
| China                            | 3.97         | 3.94         | 4.00         | 3.94         | 4.02         | 3.97         | 0.00                     | 0.07        |
| <b>Total "Other regions"</b>     | <b>18.15</b> | <b>18.17</b> | <b>18.25</b> | <b>18.39</b> | <b>18.71</b> | <b>18.38</b> | <b>0.23</b>              | <b>1.28</b> |
| <b>Total non-OPEC production</b> | <b>57.24</b> | <b>58.83</b> | <b>59.20</b> | <b>60.29</b> | <b>61.33</b> | <b>59.92</b> | <b>2.68</b>              | <b>4.68</b> |
| Processing gains                 | 2.21         | 2.25         | 2.25         | 2.25         | 2.25         | 2.25         | 0.04                     | 1.67        |
| <b>Total non-OPEC supply</b>     | <b>59.45</b> | <b>61.07</b> | <b>61.44</b> | <b>62.54</b> | <b>63.58</b> | <b>62.17</b> | <b>2.72</b>              | <b>4.57</b> |
| Previous estimate                | 59.45        | 61.07        | 61.44        | 62.53        | 63.18        | 62.06        | 2.61                     | 4.39        |
| Revision                         | 0.00         | 0.00         | 0.01         | 0.01         | 0.41         | 0.11         | 0.11                     | 0.18        |

Note: \* 2018 = Estimate.

Non-OPEC supply includes Qatar.

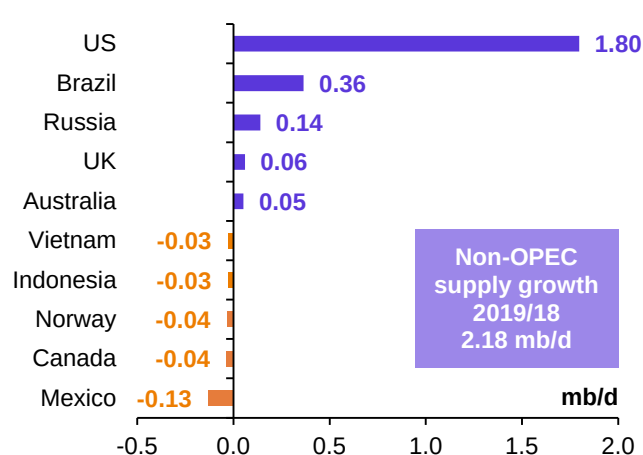
Source: OPEC Secretariat.

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



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

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



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

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

|                                  | 2018         | 1Q19         | 2Q19         | 3Q19         | 4Q19         | 2019         | Change 2019/18<br>Growth | %           |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|-------------|
| Americas                         | 23.93        | 24.86        | 24.93        | 25.84        | 26.57        | 25.56        | 1.63                     | 6.81        |
| of which US                      | 16.64        | 17.73        | 17.98        | 18.63        | 19.40        | 18.44        | 1.80                     | 10.80       |
| Europe                           | 3.77         | 3.81         | 3.62         | 3.71         | 3.94         | 3.77         | 0.00                     | -0.01       |
| Asia Pacific                     | 0.41         | 0.44         | 0.45         | 0.47         | 0.49         | 0.46         | 0.05                     | 13.28       |
| <b>Total OECD</b>                | <b>28.11</b> | <b>29.10</b> | <b>29.01</b> | <b>30.03</b> | <b>31.00</b> | <b>29.79</b> | <b>1.68</b>              | <b>5.99</b> |
| Other Asia                       | 3.54         | 3.49         | 3.44         | 3.46         | 3.46         | 3.46         | -0.07                    | -2.09       |
| 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                     | 3.08        |
| <b>Total DCs</b>                 | <b>13.43</b> | <b>13.59</b> | <b>13.60</b> | <b>13.80</b> | <b>14.05</b> | <b>13.76</b> | <b>0.33</b>              | <b>2.48</b> |
| 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                    | -0.60       |
| <b>Total "Other regions"</b>     | <b>18.38</b> | <b>18.64</b> | <b>18.41</b> | <b>18.42</b> | <b>18.58</b> | <b>18.51</b> | <b>0.13</b>              | <b>0.71</b> |
| <b>Total non-OPEC production</b> | <b>59.92</b> | <b>61.33</b> | <b>61.03</b> | <b>62.25</b> | <b>63.63</b> | <b>62.07</b> | <b>2.15</b>              | <b>3.58</b> |
| Processing gains                 | 2.25         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | 0.03                     | 1.25        |
| <b>Total non-OPEC supply</b>     | <b>62.17</b> | <b>63.61</b> | <b>63.30</b> | <b>64.53</b> | <b>65.91</b> | <b>64.34</b> | <b>2.18</b>              | <b>3.50</b> |
| Previous estimate                | 62.06        | 63.34        | 63.13        | 64.29        | 65.84        | 64.16        | 2.10                     | 3.38        |
| Revision                         | 0.11         | 0.26         | 0.17         | 0.24         | 0.06         | 0.18         | 0.08                     | 0.12        |

Note: \* 2018 = Estimate and 2019 = Forecast.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

## OECD

**Total OECD oil supply** in 2018 is estimated to have grown by 2.40 mb/d to average 28.11 mb/d, up by 76 tb/d since the last month's report. OECD Americas, following an upward revision by 66 tb/d m-o-m, is expected to have increased by 2.44 mb/d y-o-y to average 23.93 mb/d. Oil supply in OECD Europe, despite an upward revision by 11 tb/d, shows a contraction of 0.06 mb/d to average 3.77 mb/d (of which 3.02 mb/d is from the North Sea). Supply from OECD Asia Pacific is expected to have grown by 0.02 mb/d y-o-y to average 0.41 mb/d, unchanged from last month's assessment.

Yearly growth of 1.68 mb/d is forecast for OECD oil supply in 2019 to average 29.79 mb/d. While OECD Americas and OECD Asia Pacific are both projected to grow by 1.63 mb/d and 0.05 mb/d to average 25.56 mb/d and 0.46 mb/d, respectively, oil production in OECD Europe is anticipated to remain flat at 3.77 mb/d.

## OECD Americas

### US

**US crude oil output** (including lease condensate) in November 2018 showed robust growth of 345 tb/d to average 11.90 mb/d, higher by 1.80 mb/d, or 17.8%, y-o-y. This increases the possibility that in December 2018 output would have reached 12 mb/d for the first time. The m-o-m increase in November came as output in Texas (PADD 3) rose by 115 tb/d to average 4.835 mb/d, mainly from the prolific Permian Basin and also from New Mexico, by 32 tb/d. Among the major states, New Mexico had the steepest y-o-y growth rate in percentage terms. Oil production in the state increased by more than 50% from 522 tb/d in November 2017 to 803 tb/d in November 2018. Oil production from the Gulf of Mexico (GoM) showed significant m-o-m

growth, by 188 tb/d, to average 1.92 mb/d, higher than forecast, as a more conservative increase was expected regarding output recovery after seasonal disruptions in September-October.

Following a seasonal production slowdown in the northern territories, oil output saw a slight decline in North Dakota, where crude oil output fell by 11 tb/d, to average 1.36 mb/d, mainly from the Bakken shale play in the Williston Basin. There were only 63 well completions in November, down from 103 in October and 135 in September, according to the state's Department of Mineral Resources. Operators plan to add one to five rigs in 2019, depending on workforce and infrastructure constraints, according to the state's top oil and gas regulator. On the West Coast, Alaska's production increased m-o-m in November by 10 tb/d to average 0.50 mb/d.

Looking ahead, US crude oil production in December 2018 is likely to have remained flat compared to November or drop to 11.87 mb/d due to reduced fracking activity in November, while it is expected to climb to nearly 13.30 mb/d by December 2019.

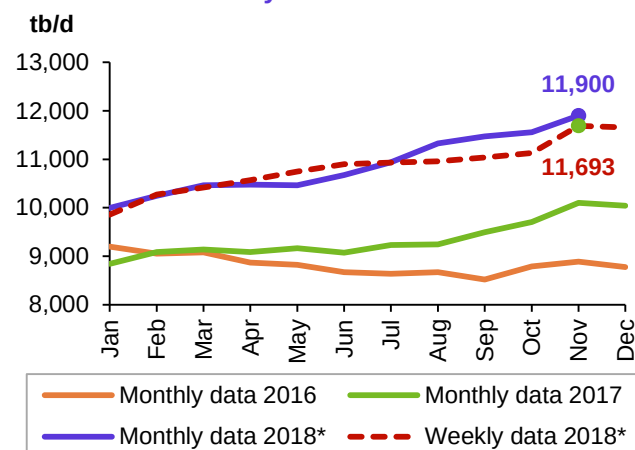
2019 is forecast to see further improvement in the **GoM**, which is experiencing its first increase in drilling in four years, its first-ever production from a Jurassic play, key new project sanctions and an uptick in M&A, according to Wood Mackenzie. Shell's Appomattox development, with peak capacity of 0.18 mb/d in the Mississippi Canyon block 392, is due onstream in 2019, marking the first production ever from a Jurassic reservoir in the GoM. With a production ramp-up for the Big Foot project operated by Chevron, which has a peak capacity of 0.15 mb/d and started up in November, oil output from the GoM is expected to grow by 0.15 mb/d y-o-y in 2019. In addition to new project sanctions, which could usher in more than \$10 billion of investment into the region, several single or two-well tiebacks in offshore fields such as Constellation and Thunder Horse (Northwest Expansion) are expected to add a total of 45 tb/d in 1Q19. Moreover, the Nearly Headless Nick field will tieback to the Delta House platform, the Stonefly will tieback to the Ram Powell platform and the Buckskin will tieback to Lucius Spar. After four years of steady declines, exploration activity is expected to increase in 2019 by 30%. Shell and Chevron will lead the way, but the actual growth in exploration will come from new entrants – Kosmos Energy, Equinor, Total, Murphy and Fieldwood. While drilling activity and investment are returning to the region, a key factor to ensuring a strong year ahead and beyond will be holding on to the industry-wide efficiency gains made since 2014.

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

| State                                      | Oct 18        | Nov 18        | Change<br>Nov 18/Oct 18 |
|--------------------------------------------|---------------|---------------|-------------------------|
| Alaska                                     | 487           | 497           | 10                      |
| Colorado                                   | 496           | 511           | 15                      |
| Oklahoma                                   | 576           | 580           | 4                       |
| New Mexico                                 | 771           | 803           | 32                      |
| North Dakota                               | 1,375         | 1,364         | -11                     |
| Federal Offshore -<br>Gulf of Mexico (GoM) | 1,734         | 1,922         | 188                     |
| Texas                                      | 4,720         | 4,835         | 115                     |
| <b>Total US crude oil<br/>production</b>   | <b>11,555</b> | <b>11,900</b> | <b>345</b>              |

Sources: US EIA and OPEC Secretariat.

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



Note: \* 2018 = Estimate.

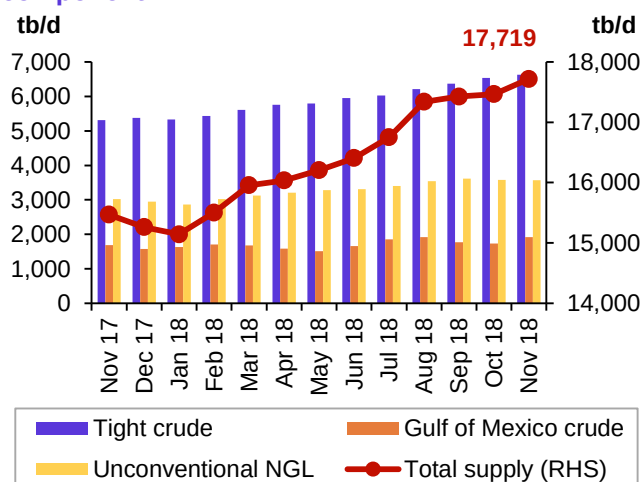
Sources: US EIA and OPEC Secretariat.

**US crude oil production in 2018** is likely to have increased by 1.60 mb/d, y-o-y to average 10.95 mb/d. In the first eleven months of 2018, more than 57% of total crude oil output in the US, at an average of 6.22 mb/d, came from shale plays, mainly from the Permian Basin in Texas, which amounted to approximately 2.82 mb/d. Total output at the Permian Basin, including conventional oil, reached 3.76 mb/d in November, exceeding pipeline capacity in the region.

**US liquids output in November** (excluding processing gains) showed an increase of 0.25 mb/d m-o-m to average 17.72 mb/d, up by 2.25 mb/d y-o-y. According to the EIA, m-o-m US liquids supply growth in November was supported by growth in crude oil production of 0.35 mb/d, while NGL output showed a minor

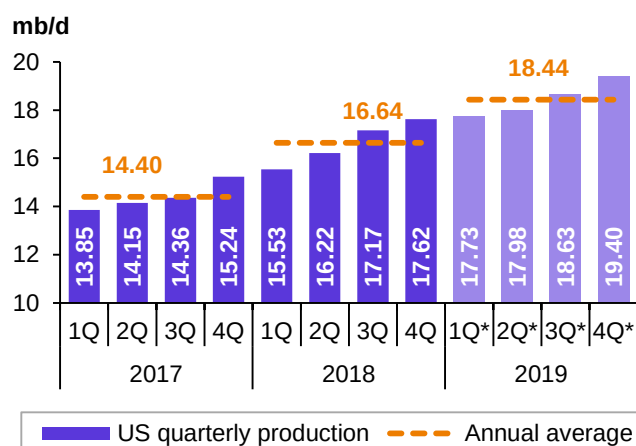
decline of 9 tb/d m-o-m to 4.57 mb/d. The output of other non-conventional liquids, mainly biofuels, is estimated to have decreased m-o-m by 83 tb/d to 1.25 mb/d.

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



Source: US EIA and OPEC Secretariat.

**Graph 5 - 9: US total liquids supply quarterly**

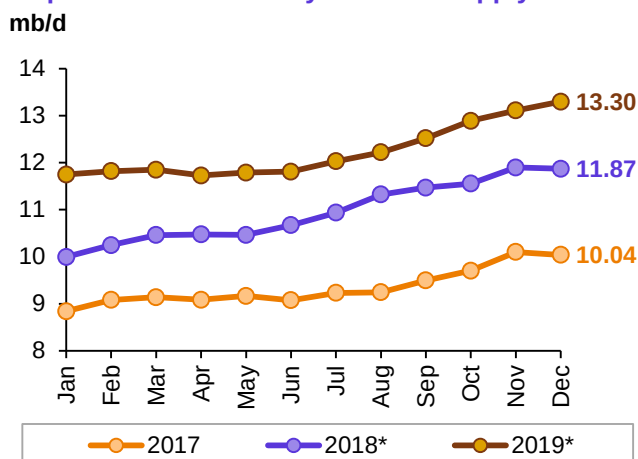


Note: \* 1Q19-4Q19 = Forecast.

Sources: US EIA and OPEC Secretariat.

**US liquids supply in 2018** is estimated to have grown by 2.24 mb/d to average 16.64 mb/d, revised up by 36 tb/d from the previous month's report, following a robust q-o-q increase in 4Q18 of 141 tb/d to a new quarterly record of 17.62 mb/d, up by 2.38 mb/d y-o-y.

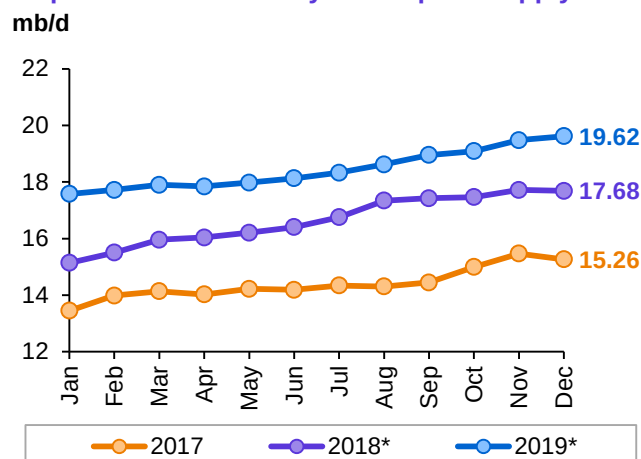
**Graph 5 - 10: US monthly crude oil supply**



Note: \* 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

**Graph 5 - 11: US monthly total liquids supply**



Note: \* 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

Consequently, **US liquids supply in 2019** is now forecast to reach an average of 18.44 mb/d, representing y-o-y growth of 1.80 mb/d, showing an upward revision of 94 tb/d compared with last month's report, mainly due to a reassessment of the production forecast for the GoM.

**US tight crude output in November 2018** is estimated to have grown by 95 tb/d m-o-m to average 6.83 mb/d, an increase of 1.52 mb/d y-o-y, according to preliminary shale play and tight oil production estimates. M-o-m US tight crude growth in November was lower than the monthly growth achieved in October (172 tb/d), September (151 tb/d) and in August (190 tb/d) 2018. Crude output from shale and tight formations through horizontal wells in the Permian Basin was up by 72 tb/d in November m-o-m to average 3.15 mb/d, followed by an increase of 22 tb/d m-o-m at the Eagle Ford to average 1.26 mb/d. Oil output from the Niobrara play showed a mild increase of 3 tb/d to average 0.48 mb/d, while a m-o-m decline of 15 tb/d was seen in the Bakken shale play to average 1.35 mb/d. Tight crude output in other shale plays increased by a total of 12 tb/d m-o-m in November to average 0.59 mb/d.

On a yearly basis, **US tight crude for 2018** is estimated to have grown by 1.56 mb/d to average 6.27 mb/d, revised up by 0.04 mb/d from last month's assessment. Indeed, counting unconventional NGLs as a part of US liquids supply, 2018 was another outperforming year for US shale oil production with total expected growth of 2.05 mb/d. However, market conditions in 4Q18 had a negative impact on drilling activity of small-to medium-sized companies. While the number of active oil rigs was up by 15 in 4Q18 to average 878 rigs, completion operations decreased by more than 9% q-o-q to a total of 2,860 completed wells during this period. At the same time, there were 2,764 wells – a drop of 182 wells – starting production compared to 3Q18.

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

|                                 | <u>2016</u>  | <u>2017</u>  | <u>Change</u><br><u>2017/16</u> | <u>2018*</u> | <u>Change</u><br><u>2018/17</u> | <u>2019*</u> | <u>Change</u><br><u>2019/18</u> |
|---------------------------------|--------------|--------------|---------------------------------|--------------|---------------------------------|--------------|---------------------------------|
| <b>Tight crude</b>              | 4.24         | 4.71         | 0.47                            | 6.27         | 1.56                            | 7.44         | 1.17                            |
| <b>Gulf of Mexico crude</b>     | 1.60         | 1.68         | 0.08                            | 1.74         | 0.06                            | 1.89         | 0.15                            |
| <b>Conventional crude oil</b>   | 2.99         | 2.96         | -0.03                           | 2.94         | -0.02                           | 2.91         | -0.03                           |
| <b>Unconventional NGLs</b>      | 2.58         | 2.77         | 0.19                            | 3.26         | 0.49                            | 3.69         | 0.43                            |
| <b>Conventional NGLs</b>        | 0.93         | 1.01         | 0.08                            | 1.10         | 0.09                            | 1.15         | 0.05                            |
| <b>Biofuels + Other liquids</b> | 1.27         | 1.27         | 0.00                            | 1.33         | 0.06                            | 1.36         | 0.03                            |
| <b>US total supply</b>          | <b>13.61</b> | <b>14.40</b> | <b>0.80</b>                     | <b>16.64</b> | <b>2.24</b>                     | <b>18.44</b> | <b>1.80</b>                     |

Note: \* 2018 = Estimate and 2019 = Forecast.

Sources: US EIA, Rystad Energy and OPEC Secretariat.

Tight crude production from the Permian Basin in 2018 is estimated to have grown by 0.94 mb/d y-o-y to reach an average of 2.85 mb/d. The Permian's share of US tight crude growth in 2018 is around 60%. It is worth pointing out that tight crude production from the Bakken shale play in North Dakota is expected to grow by 0.18 mb/d y-o-y to average 1.24 mb/d, while tight oil output in the Eagle Ford and Niobrara-Codell plays are estimated, respectively, at 0.09 mb/d to average 1.18 mb/d and by 0.10 mb/d to average 0.44 mb/d. (see **Table 5 – 6**).

**Table 5 - 6: 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><br><u>change</u> | <u>Production</u> | <u>Y-o-y</u><br><u>change</u> | <u>Production</u> | <u>Y-o-y</u><br><u>change</u> |
| <b>Permian tight</b>     | 1.91              | 0.45                          | 2.85              | 0.94                          | 3.45              | 0.60                          |
| <b>Bakken shale</b>      | 1.06              | 0.03                          | 1.24              | 0.18                          | 1.46              | 0.22                          |
| <b>Eagle Ford shale</b>  | 1.09              | -0.08                         | 1.18              | 0.09                          | 1.30              | 0.12                          |
| <b>Niobrara shale</b>    | 0.34              | 0.04                          | 0.44              | 0.10                          | 0.55              | 0.11                          |
| <b>Other tight plays</b> | 0.31              | 0.02                          | 0.57              | 0.26                          | 0.69              | 0.12                          |
| <b>Total</b>             | <b>4.71</b>       | <b>0.47</b>                   | <b>6.27</b>       | <b>1.56</b>                   | <b>7.44</b>       | <b>1.17</b>                   |

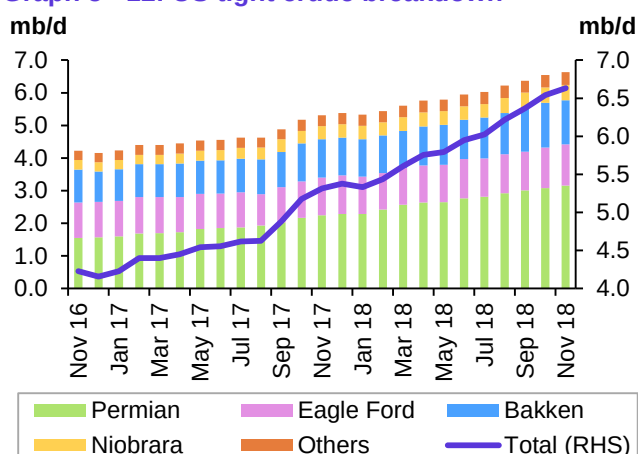
Note: \* 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

Y-o-y growth in **US tight crude output for 2019** is forecast a slower pace of 1.17 mb/d to average 7.44 mb/d, which is 0.39 mb/d less than estimated for 2018, due to fundamental constraints, mainly limited pipeline capacity to transfer Permian oil to the USGC as well as less drilling activity outside of the main shale plays.

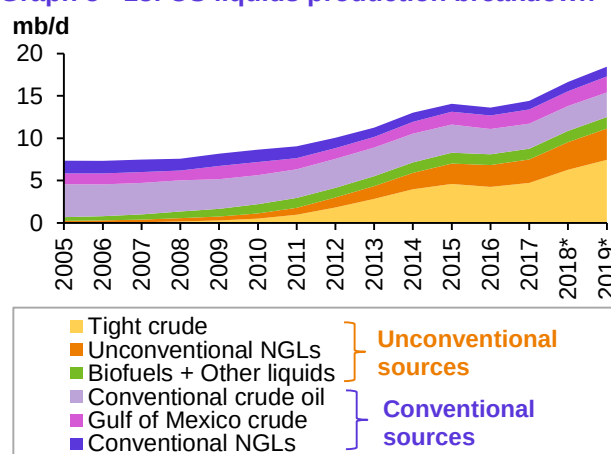
Tight crude production from the Permian Basin is anticipated to grow by 0.60 mb/d in 2019 to average 3.45 mb/d, which is 36%, or 0.34 mb/d, less than seen a year earlier. In North Dakota, production growth from the Bakken shale is projected at 0.22 mb/d to average 1.46 mb/d, while the Eagle Ford shale is anticipated to grow by 0.12 mb/d to reach an average 1.30 mb/d. The Niobrara is forecast to grow by 0.11 mb/d to average 0.55 mb/d, and other shale regions are projected to increase by 0.12 mb/d to average 0.69 mb/d.

Graph 5 - 12: US tight crude breakdown



Sources: US EIA and OPEC Secretariat.

Graph 5 - 13: US liquids production breakdown



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

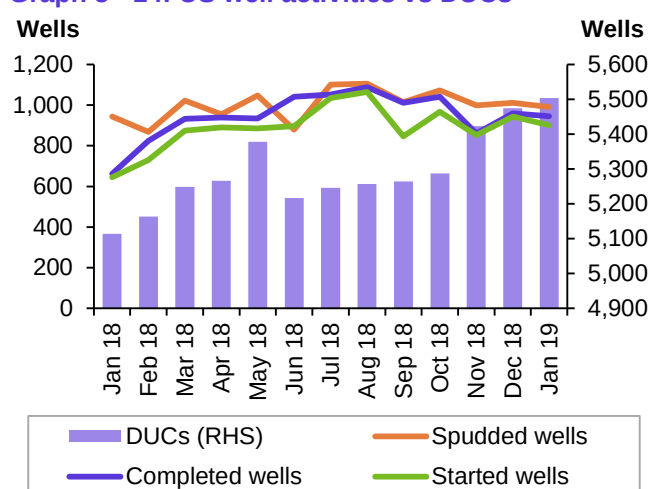
## US horizontal drilled, but uncompleted, wells (DUCs)

From January 2018 to end January 2019, overall **DUCs** in all US shale and tight plays (27 shale and tight plays, including the five key regions of Permian Delaware, Permian Midland, Eagle Ford, Bakken and Niobrara) increased by 390 units to 5,504 wells.

Looking at the last three months shows that the DUC count grew strongly compared to previous months. Moreover, while DUCs increased in the Niobrara and Permian Midland Tight plays, the DUC inventories in other regions either declined, or were steady.

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

Graph 5 - 14: US well activities vs DUCs



Sources: Rystad Energy and OPEC Secretariat.

## US oil rig count

The **total US oil and gas rig count** was down by 14 units w-o-w to 1,045 rigs in the week ending 1 February 2019.

Concerning the **oil and gas split**, there was a drop of 15 units in oil fields to reach 847 rigs, while gas rigs increased by only 1 unit w-o-w to reach 198 rigs. The corresponding y-o-y increase for oil rigs was 82 units, or approximately 11%.

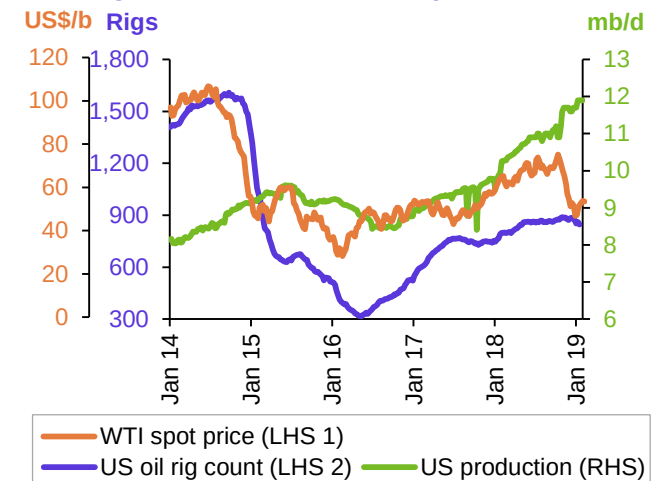


Regarding the **drilling trajectory**, the number of horizontal rigs (active in oil and gas fields) was down by 7 units w-o-w to reach 925 rigs. However, compared to a year ago, 117 more rigs, or around 14%, are active in horizontal drilling.

By **basin**, the oil rig count in the Permian Basin declined by 3 units w-o-w to average 481 rigs, while in the Eagle Ford region and the Williston Basin, the oil rig count remained unchanged w-o-w at 72 and 58 rigs, respectively.

The largest number of added oil rigs was seen in the Permian Basin, up y-o-y by 54 rigs (+13%).

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

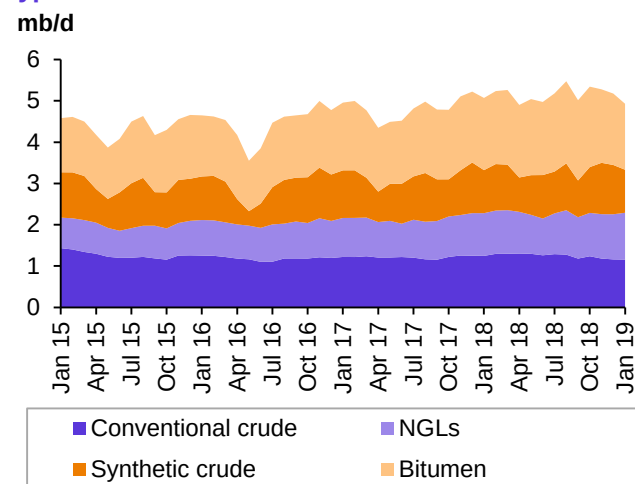


Sources: Baker Hughes, US EIA and OPEC Secretariat.

## Canada

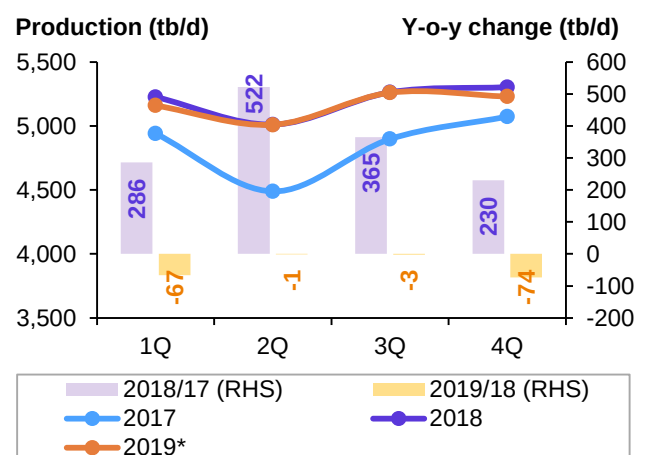
**Canada's liquids supply** rose by 0.33 mb/d in October m-o-m to average 5.38 mb/d, following a m-o-m decline of 0.46 mb/d in September. This is higher by 0.56 mb/d y-o-y based on official data, mainly due to an increase in oil sands – mainly synthetic crude – output of 475 tb/d y-o-y to average 3.05 mb/d. In second place, Canada's NGLs rose by 71 tb/d in October y-o-y to average 1.05 mb/d, and, finally, conventional crude oil production also inched up by 16 tb/d y-o-y to average 1.24 mb/d.

**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.

Preliminary indications for November and December show a production decline in oil sands by 0.03 mb/d and 0.09 mb/d, respectively, compared with October. While conventional crude likely declined in the last two months of 2018 owing to the beginning of the seasonal rig reduction in onshore regions, NGL output likely grew m-o-m by the end of the year to finish at 1.09 mb/d. Oil production in East Coast offshore fields was halted during part of November, but recovered soon. Total output was estimated to decline by 19 tb/d, mainly due to declines in the White Rose and Terra Nova offshore fields. Production from the Hibernia field partially offset the declines.

Canada's liquids supply in 2018, following an upward revision of 163 tb/d in 4Q18, is estimated to have increased by 0.35 mb/d y-o-y to average 5.20 mb/d, revised up by 35 tb/d compared with the previous month's assessment. Canada has been the fourth-largest oil producer in the world since 2015.

Following the mandate of the government of Alberta to cut WCS crude production to eliminate storage shortages, Canadian WCS differentials to WTI began to narrow. According to secondary sources, WCS averaged around \$11/b less than WTI in the February 2019 trade month. Canada has announced a reduction in oil production by an initial 325 tb/d, or nearly 9%, of overall output that was achieved in August 2018, starting in January 2019.

Canada's oil supply in 2019, in a continuation of mandated cuts in production by the end of year, is forecast to decline by 0.04 mb/d to average 5.17 mb/d, representing an upward revision of 0.01 mb/d m-o-m.

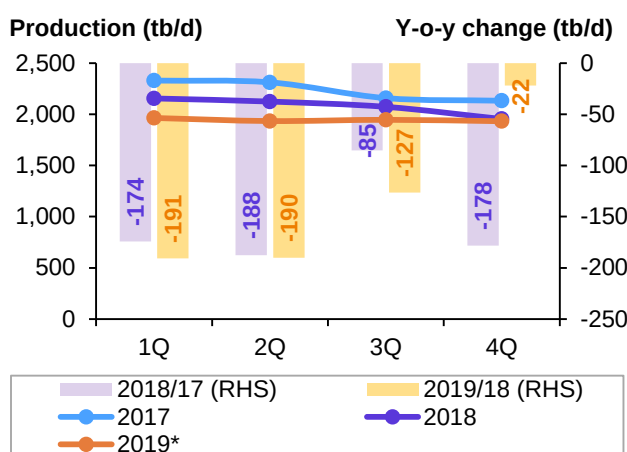
## Mexico

**Mexico's liquids supply in 2018** is estimated to have declined by 0.16 mb/d to average 2.08 mb/d, revised down by 0.01 mb/d compared to last month's assessment, following a downward revision of 27 tb/d in 4Q18.

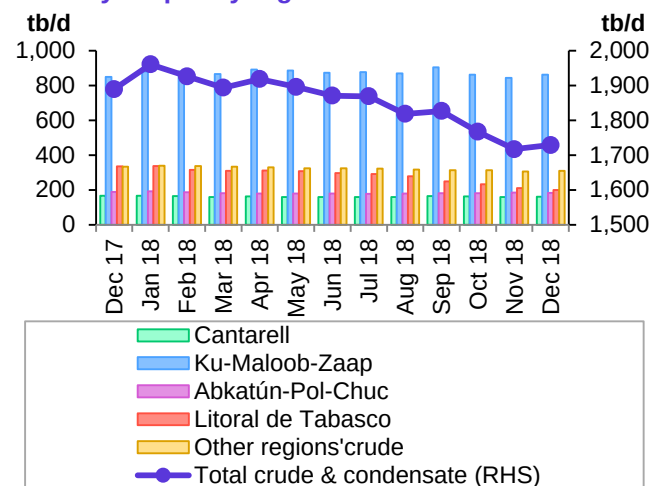
Average liquids output in **December** was steady at 1.93 mb/d compared to November, leading to the first-ever level below 2.0 mb/d in Mexico since 1995 on a quarterly basis, and lower by 0.19 mb/d over 4Q17. Heavy crude oil production was up by 13 tb/d m-o-m to average 1.71 mb/d, while light and super-light crude output declined by a total of 6 tb/d m-o-m to average 0.64 mb/d. NGL output in December also declined by 15 tb/d to average 0.20 mb/d. All types of light crude in Mexico have declined since the beginning of the year to December by 0.14 mb/d while heavy crude rose by 0.02 mb/d m-o-m and was higher by 45 tb/d y-o-y. The only Mexican oil field to see an increase was the offshore complex of Ku-Maloob-Zaap, while all of the others were in decline.

Mexico's oil supply in **2019** is forecast to decline by 0.13 mb/d to average 1.94 mb/d in a continuation of the annual natural decline, as well as outages occurring during maintenance.

**Graph 5 - 18: Mexico's quarterly liquids supply**



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



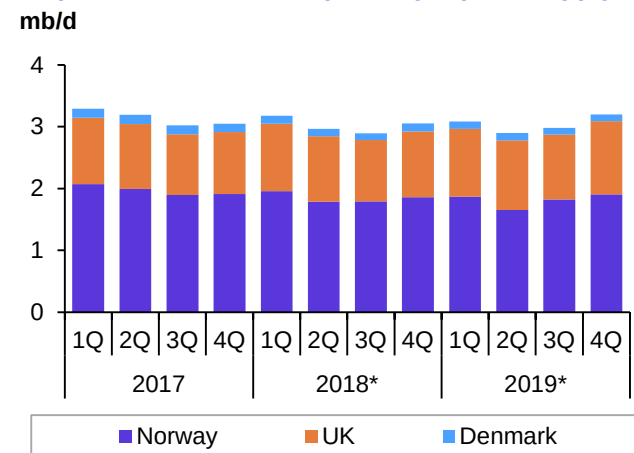
## OECD Europe

**OECD Europe's preliminary oil supply** was down by 0.04 mb/d m-o-m in December to reach 3.79 mb/d, while it was up by 0.19 mb/d y-o-y.

The region's oil supply in **2018** is estimated to have reached 3.77 mb/d, indicating a y-o-y contraction of 0.06 mb/d. While production in Norway and Denmark is estimated to have declined by 0.12 mb/d and 0.02 mb/d to average 1.85 mb/d and 0.12 mb/d, respectively, oil supply in the UK and Other OECD Europe is likely to have grown by 0.03 mb/d and 0.06 mb/d to average 1.05 mb/d and 0.75 mb/d, respectively.

For **2019**, oil supply is forecast to see a stagnant trend, at 3.77 mb/d, to show an increase of 0.06 mb/d for the UK, while production is likely to decline in other countries of the region.

**Graph 5 - 20: North Sea quarterly liquids supply**



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

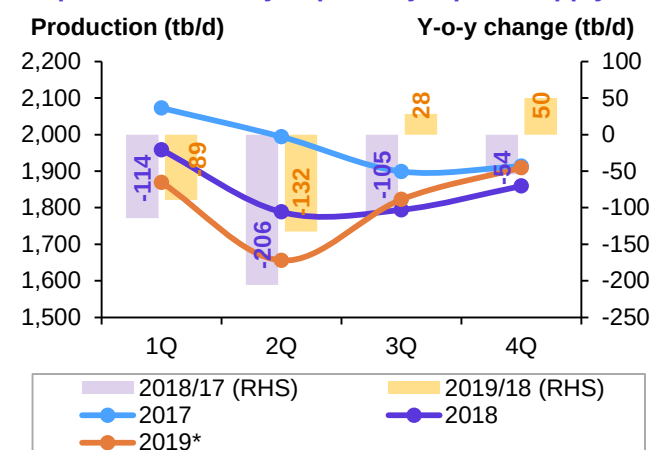
## Norway

**Norway's oil supply for 2018** is estimated to have declined by 0.12 mb/d or ~6% y-o-y to average 1.85 mb/d, due to limited new field start-ups and steep natural declines, unchanged from the previous month's report. Preliminary production figures for December 2018 show average daily production of 1.85 mb/d of crude, NGLs and condensate, contrary to a higher forecast, indicating a decrease of 26 tb/d m-o-m following declining NGL production. Liquids production in December declined by 0.08 mb/d y-o-y to average 1.85 mb/d.

In **December**, crude oil output recovered by 8 tb/d m-o-m to average 1.50 mb/d, yet was lower by 31 tb/d y-o-y. NGL output in December declined by 34 tb/d to average 0.35 mb/d, which is 49 tb/d less than December 2017 output. According to the Norwegian Petroleum Directorate (NPD), low average liquids output across 2018 was due to weaker-than-expected field performance, in particular below-capacity output from new fields.

Looking at NPD's forecast for **2019**, despite an increase of 13% in investment in the offshore for the current year, crude oil production is projected to decline by 60-70 tb/d, compared to the average of 1.49 mb/d achieved in 2018, with a slower y-o-y decline rate than the contraction of 100 tb/d seen in 2018. However, with more spending in offshore facilities, improved production performance from new fields such as Goliat and some possible incremental production in late 2019 from the start-up of the giant Johan Sverdrup field in 4Q19 are expected. A contraction of 0.04 mb/d y-o-y is anticipated for Norwegian oil supply in 2019, representing an annual average liquids supply of 1.81 mb/d.

**Graph 5 - 21: Norway's quarterly liquids supply**



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

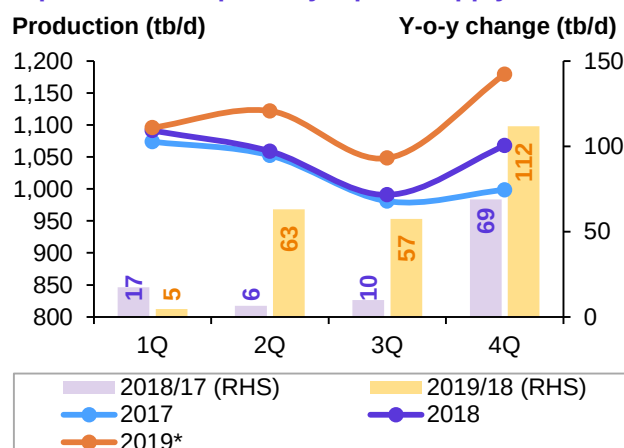
## UK

**UK oil supply** is projected to rise by 0.03 mb/d y-o-y to average 1.05 mb/d in **2018**, which is lower than expected in the original forecast, as production from new projects was mostly offset by heavy declines in mature fields as well as consecutive field shutdowns. UK liquids production in December 2018 was down by 7 tb/d m-o-m to average 1.06 mb/d, but 0.23 mb/d higher than in December 2017, when the Forties Pipeline System was shutdown.

In **December 2018**, crude oil output decreased by 15 tb/d to average 0.93 mb/d, and was offset by declining NGL production, which dropped by 22 tb/d to average 96 tb/d. However, improved field performance led to higher 4Q18 production at 1.07 mb/d, compared to 3Q18 and 2Q18. The supply growth forecast in 2018 was thus revised up by 7 tb/d, following stronger-than-expected output for 3Q18 as well as 4Q18. As highlighted in the last month's report, on 23 November 2018 first oil was produced from the second phase of development of the giant Clair Ridge project in the West of Shetland region offshore UK.

Production ramp-ups in **2019** are expected to come from the Catcher field, Western Isles, Clair Ridge, Beryl, Mariner and Quad 204 WoS. Liquids supply in 2019 is forecast to reach an average of 1.11 mb/d, adding 0.06 mb/d y-o-y, unchanged from last month's assessment.

**Graph 5 - 22: UK quarterly liquids supply**



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

## Developing Countries (DCs)

**Total developing countries' (DCs) oil supply for 2018** is estimated to have reached an average of 13.43 mb/d, revised up by 0.02 mb/d, following an upward revision by the same amount in the Other Asia region. Overall y-o-y growth thus improved to 0.05 mb/d. While Africa, Latin America and the Middle East regions show y-o-y growth of 0.04 mb/d, 0.02 mb/d and 0.07 mb/d, respectively, oil supply in the Other Asia region shows a y-o-y contraction of 0.07 mb/d.

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

|              | 1Q    | 2Q    | 3Q    | 4Q    | Yearly | Change<br>Y-o-y |
|--------------|-------|-------|-------|-------|--------|-----------------|
| <b>2017</b>  | 13.24 | 13.35 | 13.45 | 13.46 | 13.38  | -0.15           |
| <b>2018*</b> | 13.41 | 13.47 | 13.34 | 13.49 | 13.43  | 0.05            |
| <b>2019*</b> | 13.59 | 13.60 | 13.80 | 14.05 | 13.76  | 0.33            |

Note: \* 2018 = Estimate and 2019 = Forecast.

Source: OPEC Secretariat.

For **2019**, following the anticipation of 0.34 mb/d y-o-y growth in Latin America owing to the planned new project production start-ups and ramp ups at the recently installed FPSOs in Brazil, oil supply in DCs is forecast to grow by 0.33 mb/d to average 13.76 mb/d. Indeed, the expected y-o-y growth coming from Latin America, Africa and the Middle East will be partially offset by expected continuous declines in the Other Asia region.

## Latin America

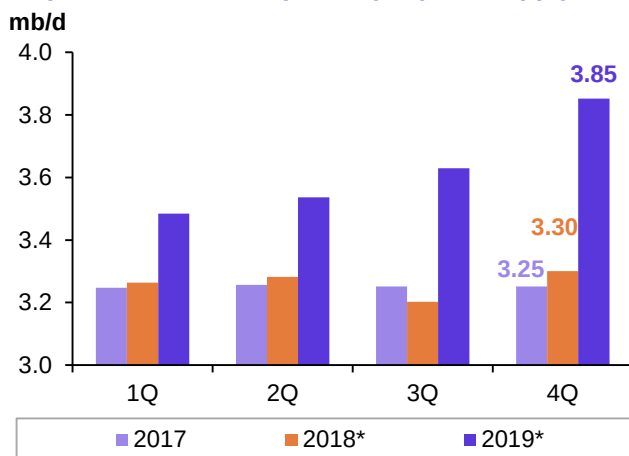
### Brazil

**Brazil's crude oil output** jumped by 99 tb/d m-o-m to average 2.67 mb/d in **December 2018**, the highest output level since June 2017, which is also 54 tb/d higher y-o-y. Preliminary crude oil production data shows further m-o-m growth of 38 tb/d in January 2019 to average 2.70 mb/d. The main reason for this incremental output was the return of production in the Campos Basin, owing to higher oil production from the Tartaruga Verde field, which is now connected to the FPSO Cidade de Campos dos Goytacazes through the new wells. Petrobras has also reported the end of maintenance at the Marlim and Sapinhola fields in December.

However, despite increasing crude oil production in 4Q18 by 0.09 mb/d q-o-q, Brazilian crude oil output is estimated to have declined by 0.04 mb/d y-o-y to average 2.58 mb/d in **2018**. Heavy maintenance last summer and sharp decline rates at mature fields in the Campos Basin, coupled with the delayed start-up of several pre-salt projects in the Santos Basin, have weighed on output. Brazilian output has failed to increase at the pace anticipated at the beginning of this year, but new output is finally coming on line. Start-up production through P-69 FPSO in the Santos Basin's Lula field in late October, was the second of seven planned production facilities at the Lula field, which will enable it to potentially produce 1 mb/d by 2020. Petrobras produced an average of 2.03 mb/d in Brazil last year, just below the company's target of 2.1 mb/d. Petrobras' total production of oil and natural gas was 2.63 boe/d, with 101 tboe/d produced abroad. The company had targeted 2.7 mboe/d, and now they aim to produce 2.8 mboe/d in 2019.

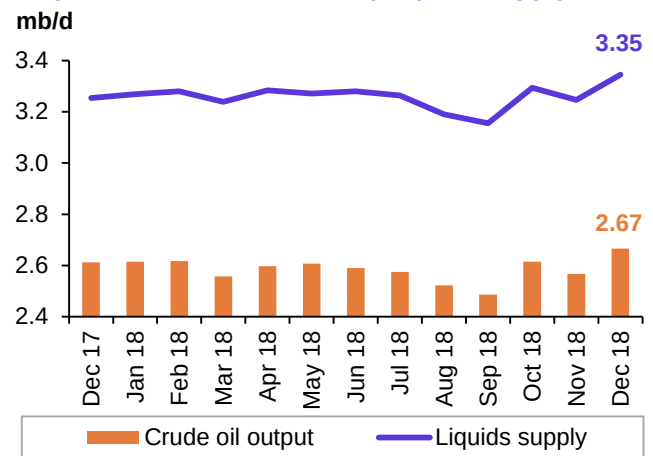
Brazil has never exported as much crude oil as in 2018. 1.12 mb/d were sold abroad, which corresponds to a 13.3% increase compared to 2017, according to Secex (Secretariat of Foreign Trade). The number represents about 40% of all production for the year. The main buyers of Brazilian oil in 2018 were China (56.5%), the US (11.9%) and Chile (8.43%). Energy Research Company (EPE) linked to the Ministry of Mines and Energy, estimates that oil production in the pre-salt regions will double over the next eight years and that the country will become one of the five largest exporters in the world.

**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.

Brazil's **liquids output in December 2018** increased by 0.10 mb/d to average 3.35 mb/d. As a result, liquids supply in 2018 is estimated to have grown by only 0.01 mb/d y-o-y to average 3.26 mb/d, unchanged compared to the previous month's report.

Oil production could rise substantially in **2019** if the delayed FPSO vessels and other scheduled facilities come on line in time during the year. Liquids supply is expected to rise by 0.36 mb/d to average 3.63 mb/d in 2019, largely supported by the ramp-up of the Lula South expansion (P-69) and the start of production on Berbigao/Sururu (P-68) and Lula North (P-67) in 1Q19. Petrobras was due to begin production from the P-68 platform in the Berbigao field by the end of 2018, but this has been delayed to 1Q19. The firm began producing from the 150 tb/d P-75 FPSO at the Buzios pre-salt field — in the Transfer of Rights region of the Santos basin — in early November. 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 the company's 2018-2022 Business and Management Plan.

## Africa

### South Sudan

According to secondary sources, **South Sudan** has increased its oil production by 34% at its Unity region's oil fields. Production has increased to 175 tb/d from 130 tb/d in January, after drilling resumed in the Unity region for the first time since operations were disrupted in 2013. Previously the country had produced 350 tb/d of oil. At their peak, the Unity fields, located on the border with Sudan, produced 45 tb/d of Nile Blend crude, a light, sweet, but waxy crude popular among Asian refiners. The fields are operated by Malaysia's Petronas, India's Oil & Natural Gas Corp., and China's CNPC. South Sudan has proven reserves of 3.5 billion barrels of oil, the fifth-largest in Africa. So far, foreign involvement has been dominated by Asian investors — Chinese, Malaysian and Indian firms. But giant Russian oil companies such as Zarubezhneft, Gazprom Neft and Rosneft have also expressed interest in investing. In cooperation with African countries, Nigeria's Oronto and the government of South Africa have recently signed MoUs with the government of South Sudan.

## FSU

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

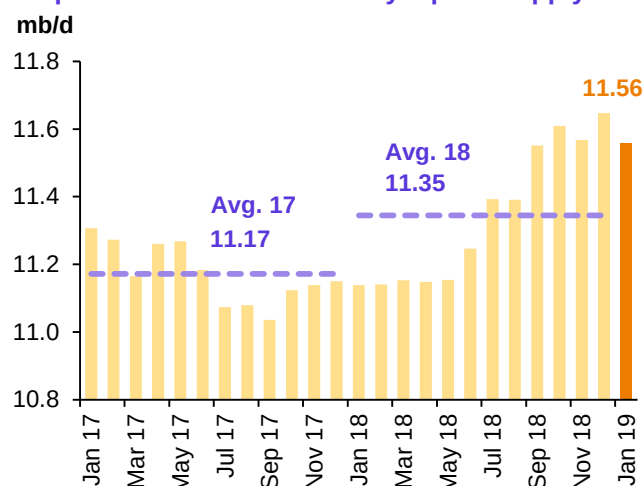
For **2019**, FSU oil supply is forecast to reflect the voluntary production adjustments under the Declaration of Cooperation (DoC). FSU oil supply in 2019 is forecast to increase by 0.16 mb/d to average 14.44 mb/d. Oil supply in Russia and Kazakhstan, based on running projects' ramp ups and assuming annual natural declines and voluntary downward adjustments to the agreed-upon production levels, is expected to increase by 0.14 mb/d and 0.04 mb/d, respectively, while Azeri supply will be steady at 0.80 mb/d.

## Russia

**Russia's preliminary liquids supply** stood at 11.56 mb/d in **January**, lower by 0.09 mb/d m-o-m and also lower by 0.05 mb/d compared to October 2018, yet up by 0.41 mb/d y-o-y. Oil supply hit a new post-Soviet record, at 11.65 mb/d, in November, according to secondary sources. Consequently, Russia's annual oil supply in **2018** reached the highest-ever record to average 11.35 mb/d, representing y-o-y growth of 0.17 mb/d.

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

**Graph 5 - 25: Russia's monthly liquids supply**



Sources: Nefta Compass and OPEC Secretariat.



Russian oil supply in 1H19 is adjusted down by 230 tb/d below 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.

Russia's fifth-largest crude oil producer Tatneft aims to boost investments by over one-third, or 36.7%, in 2019 to \$1.9B, in line with its recently approved growth strategy through 2030. This year, the company aims to boost upstream investments in its home Republic of Tatarstan by 33.5% to \$0.41B, although final plans will depend on developments in the coming months. Russian oil pipeline exports in January fell to 4.313 mb/d from 4.496 mb/d in December. Rosneft, the world's largest oil producer by output, reduced its production by 0.1% last month from December, while the second-largest Russian oil producer, Lukoil, saw production cuts of 0.8%. Output at Rosneft's largest unit, RN-Yuganskneftegaz, declined by 0.8% after a blaze ripped through the Priobskoye oilfield in early January, according to secondary sources.

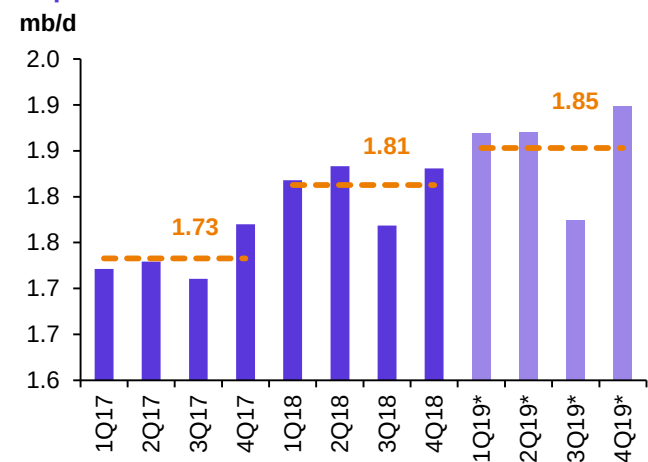
## Caspian

### Kazakhstan

In **Kazakhstan**, the **December** liquids output declined from November's record high by 0.02 mb/d to average 1.89 mb/d, higher y-o-y by 0.08 mb/d. Liquids production was higher y-o-y by 0.08 mb/d, representing an annual average production of 1.81 mb/d. Crude oil output in December was down by 20 tb/d to average 1.62 mb/d, mainly in the Kashagan field.

According to officials of the North Caspian Operating Co (NCOC), oil output at the giant Kashagan field in the Caspian has already surpassed 300 tb/d in November. Oil production at the field averaged around 0.27 mb/d in 2018 and now is set to exceed the target level of 370 tb/d after an equipment upgrade next year, while Kazakhstan recently agreed to adjust down their production and keep the level at approximately 1.85 mb/d in 1H19. If all goes to plan, it will hit its targeted plateau of 0.37 mb/d by the second half of this year.

**Graph 5 - 26: Kazakhstan's quarterly liquids output**



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

However, based on planned maintenance, production operation will shut down for 45 days this spring as maintenance work is carried out on the offshore island "D" and onshore processing facilities.

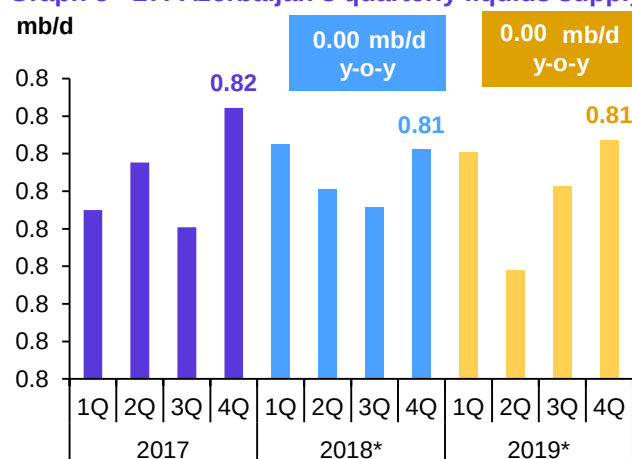
## Azerbaijan

**Azerbaijan's liquids output** decreased by 0.01 mb/d m-o-m to average 0.81 mb/d in **December**, following a decrease of 12 tb/d in crude oil production to average 712 tb/d, while NGL output was up by a minor increase to average 94 tb/d.

Azerbaijan oil supply in **2018** was stagnant y-o-y at 0.80 mb/d. Recent growth in condensate produced at the Shah Deniz complex is offsetting continuous declines at the ACG complex, Azerbaijan's largest field.

For **2019**, liquids production in Azerbaijan is forecast to remain unchanged compared to last year, representing an annual production at 0.80 mb/d. However, a heavy y-o-y decline in the country's production is anticipated due to potential maintenance on two platforms at the ACG complex across 2019 according to BP's plan.

**Graph 5 - 27: Azerbaijan's quarterly liquids supply**

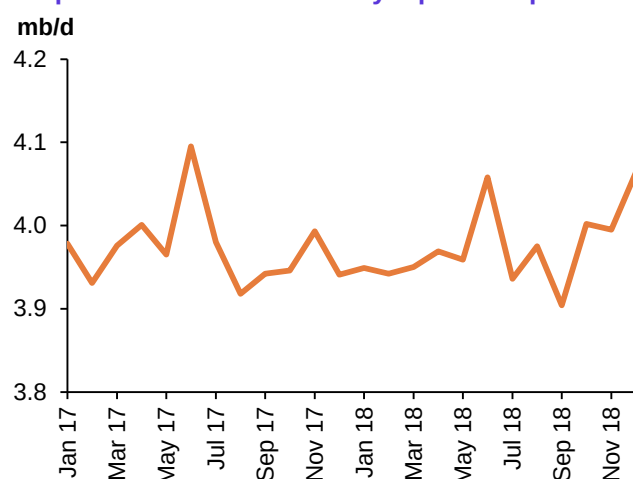


Note: \* 2018 = Estimate and 2019 = Forecast.  
Source: OPEC Secretariat.

## China

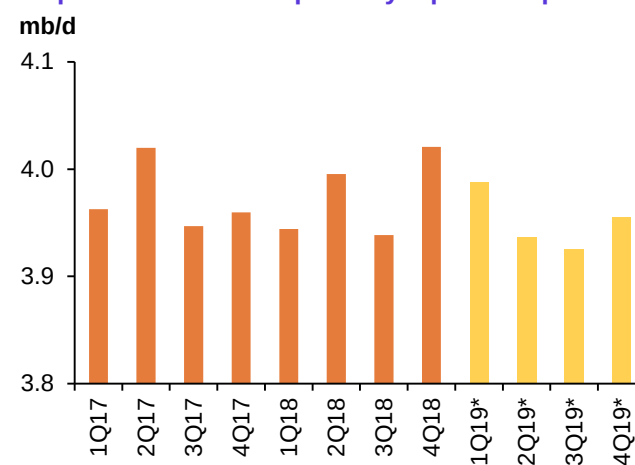
**China's liquids production in December** increased by 69 tb/d m-o-m to average 4.06 mb/d, higher by 0.12 mb/d y-o-y. Crude oil output in December rose by 66 tb/d to average 3.85 mb/d, the highest since June 2018. As a result, Chinese crude output averaged 3.77 mb/d, lower y-o-y by 0.05 mb/d (-1.3%), compared to the 0.16 mb/d (-4.1%) y-o-y drop in 2017.

**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.

Chinese oil companies, by increasing drilling activity, are trying to slow declines. For example, PetroChina has done this at its Xinjiang field in order to boost oil production. Year to December, China's liquids output remained stagnant y-o-y at 3.97 mb/d. Production of non-conventional liquids, mainly CTL, compensated for the decline of crude oil production during the same period. The Chinese government has mandated the national companies to increase domestic production through higher investments and more exploration activities, particularly in unconventional sources.

Hence, for example, China National Offshore Oil Corp. (CNOOC) plans to devote more capex in 2019 to domestic oil production with an emphasis on exploration. Four new domestic projects from CNOOC are expected this year with a peak capacity of 69 tboe/d. CNOOC plans to hike capital spending this year by at least 11% to \$10.3B-\$11.8B. It is expected to spend an estimated 63 billion yuan in 2018, up 26% y-o-y, but below an initial 70-80 billion yuan budget. Output for 2019 is forecast to rise by at least 1.1% y-o-y to 480-490 mboe. Oil production will continue to dominate, accounting for 81% of total output.

Oil supply in the current year is estimated to see a mild contraction of 0.02 mb/d to average 3.95 mb/d compared to last year's steady production.

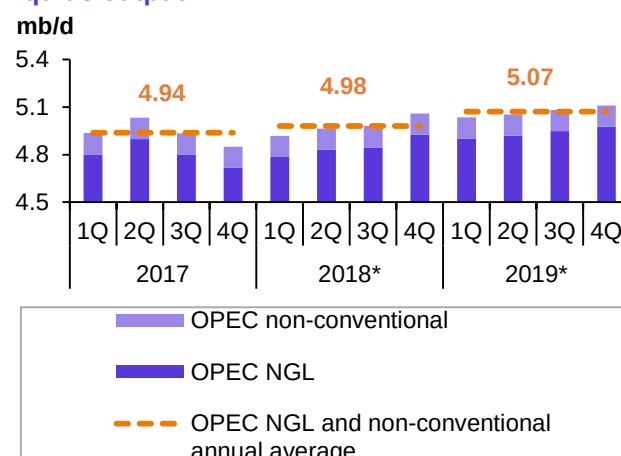
## OPEC NGLs and non-conventional oils

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

For **2019**, they are likely to grow by 0.09 mb/d to average 5.07 mb/d, revised down by 0.02 mb/d from last month's assessment.

Preliminary production data in **January 2019** shows steady output at 5.08 mb/d compared to December, higher by 0.21 mb/d y-o-y. In January 2019, the volume of 0.13 mb/d is classified as OPEC non-conventional liquids, and the largest share, at 4.95 mb/d, is from NGL production in January.

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



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

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

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

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 30.81 mb/d in January, a decrease of 797 tb/d over the previous month. Crude oil output decreased mostly in Saudi Arabia, UAE, Kuwait and Angola, while production increased in Nigeria.

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

|                          | <u>2017</u>   | <u>2018</u>   | <u>2Q18</u>   | <u>3Q18</u>   | <u>4Q18</u>   | <u>Nov 18</u> | <u>Dec 18</u> | <u>Jan 19</u> | <u>Jan/Dec</u> |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| <b>Algeria</b>           | 1,047         | 1,042         | 1,031         | 1,059         | 1,054         | 1,056         | 1,050         | 1,041         | -9             |
| <b>Angola</b>            | 1,634         | 1,506         | 1,493         | 1,470         | 1,501         | 1,498         | 1,491         | 1,416         | -75            |
| <b>Congo</b>             | 252           | 318           | 324           | 320           | 321           | 310           | 331           | 310           | -21            |
| <b>Ecuador</b>           | 530           | 521           | 519           | 528           | 521           | 522           | 521           | 515           | -6             |
| <b>Equatorial Guinea</b> | 133           | 126           | 127           | 124           | 118           | 121           | 110           | 117           | 8              |
| <b>Gabon</b>             | 200           | 186           | 183           | 184           | 183           | 170           | 194           | 193           | -1             |
| <b>Iran, I.R.</b>        | 3,813         | 3,559         | 3,818         | 3,603         | 3,004         | 2,921         | 2,758         | 2,754         | -4             |
| <b>Iraq</b>              | 4,446         | 4,549         | 4,481         | 4,606         | 4,664         | 4,626         | 4,712         | 4,669         | -43            |
| <b>Kuwait</b>            | 2,708         | 2,746         | 2,707         | 2,797         | 2,775         | 2,772         | 2,800         | 2,710         | -90            |
| <b>Libya</b>             | 811           | 951           | 883           | 892           | 1,058         | 1,107         | 947           | 895           | -52            |
| <b>Nigeria</b>           | 1,658         | 1,719         | 1,653         | 1,704         | 1,744         | 1,731         | 1,740         | 1,792         | 52             |
| <b>Saudi Arabia</b>      | 9,954         | 10,308        | 10,114        | 10,422        | 10,737        | 11,021        | 10,562        | 10,213        | -350           |
| <b>UAE</b>               | 2,915         | 2,983         | 2,873         | 2,982         | 3,224         | 3,274         | 3,223         | 3,078         | -146           |
| <b>Venezuela</b>         | 1,911         | 1,341         | 1,388         | 1,250         | 1,185         | 1,183         | 1,165         | 1,106         | -59            |
| <b>Total OPEC</b>        | <b>32,013</b> | <b>31,855</b> | <b>31,594</b> | <b>31,941</b> | <b>32,090</b> | <b>32,312</b> | <b>31,603</b> | <b>30,806</b> | <b>-797</b>    |

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

Source: OPEC Secretariat.

**Table 5 - 10: OPEC crude oil production based on direct communication, tb/d**

|                          | <u>2017</u> | <u>2018</u> | <u>2Q18</u> | <u>3Q18</u> | <u>4Q18</u> | <u>Nov 18</u> | <u>Dec 18</u> | <u>Jan 19</u> | <u>Jan/Dec</u> |
|--------------------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|----------------|
| <b>Algeria</b>           | 1,059       | 1,041       | 1,025       | 1,066       | 1,067       | 1,068         | 1,063         | 1,033         | -30            |
| <b>Angola</b>            | 1,632       | 1,478       | 1,477       | 1,475       | 1,440       | 1,417         | 1,445         | 1,470         | 25             |
| <b>Congo</b>             | 263         | 327         | 328         | 329         | 332         | 334           | 328           | ..            | ..             |
| <b>Ecuador</b>           | 531         | 517         | 516         | 524         | 516         | 515           | 520           | 524           | 4              |
| <b>Equatorial Guinea</b> | 129         | 120         | 124         | 118         | 112         | 119           | 111           | 109           | -2             |
| <b>Gabon</b>             | 210         | 194         | 185         | 192         | 206         | 199           | 209           | 209           | 0              |
| <b>Iran, I.R.</b>        | 3,867       | ..          | 3,804       | 3,789       | ..          | ..            | ..            | ..            | ..             |
| <b>Iraq</b>              | 4,469       | 4,410       | 4,360       | 4,460       | 4,460       | 4,455         | 4,465         | 4,575         | 110            |
| <b>Kuwait</b>            | 2,704       | 2,737       | 2,704       | 2,784       | 2,755       | 2,730         | 2,802         | 2,715         | -87            |
| <b>Libya</b>             | ..          | ..          | ..          | ..          | ..          | ..            | ..            | ..            | ..             |
| <b>Nigeria</b>           | 1,536       | 1,605       | 1,526       | 1,611       | 1,671       | 1,579         | 1,797         | 1,687         | -110           |
| <b>Saudi Arabia</b>      | 9,959       | 10,317      | 10,128      | 10,399      | 10,790      | 11,093        | 10,643        | 10,243        | -401           |
| <b>UAE</b>               | 2,967       | 3,001       | 2,876       | 2,998       | 3,285       | 3,336         | 3,250         | 3,070         | -180           |
| <b>Venezuela</b>         | 2,035       | 1,516       | 1,523       | 1,451       | 1,469       | 1,464         | 1,511         | 1,488         | -23            |
| <b>Total OPEC</b>        | <b>..</b>   | <b>..</b>   | <b>..</b>   | <b>..</b>   | <b>..</b>   | <b>..</b>     | <b>..</b>     | <b>..</b>     | <b>..</b>      |

Notes: .. Not available.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

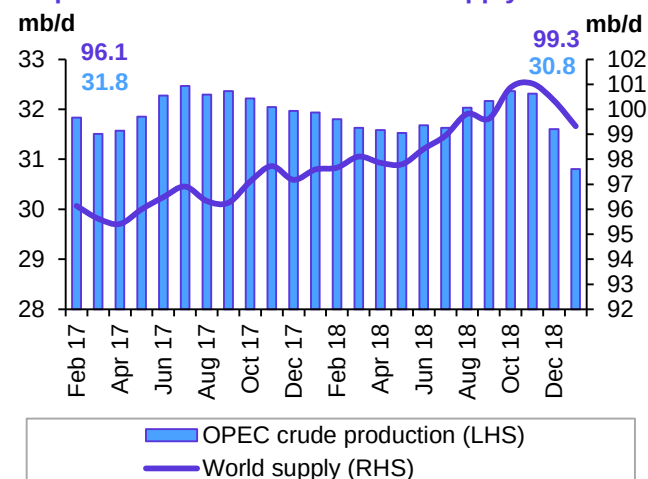
## World oil supply

Preliminary data indicates that **global oil supply** decreased by 1.03 mb/d to average 99.32 mb/d in January 2019, compared with the previous month.

A decrease in non-OPEC supply (including OPEC NGLs) of 0.23 mb/d compared with the previous month was mainly driven by Canada, FSU and China. Along with a remarkable decline in OPEC crude oil production of 797 tb/d in January, this equates to a total decrease in global oil output of 1.73 mb/d y-o-y.

The **share of OPEC crude oil in total global production** declined by 0.5% to 31.0% in January 2019 compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

**Graph 5 - 31: OPEC and world oil supply**



Source: OPEC Secretariat.

# Product Markets and Refinery Operations

Global product markets continued to lose ground in January for the second consecutive month. In the **US**, soaring gasoline stocks, along with poor fuel oil performance affected by lower fluid catalytic cracking (FCC), margins were offset by support from strong heating oil demand and higher product prices, caused by weather-related refinery outages.

In **Europe**, product markets weakened across the barrel as arbitrage openings into the region pressured margins and outweighed support from a pick-up in diesel and fuel oil demand.

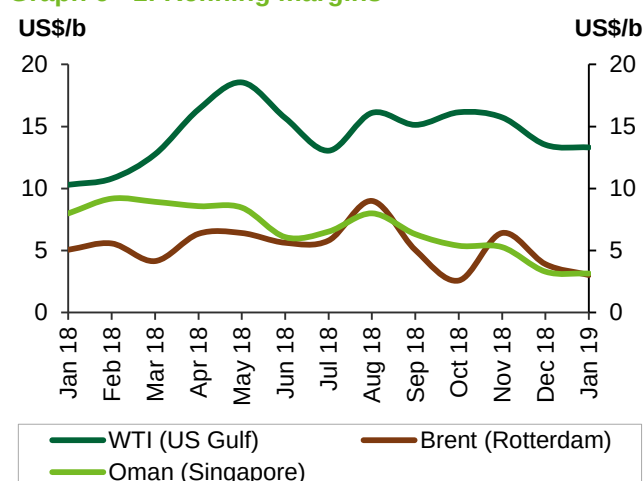
In **Asia**, weakening in the naphtha and jet/kerosene markets dragged down margins, as a growing gasoline surplus pushed gasoline margins to new multi-year lows.

## Refinery margins

**US** refinery margins saw slight overall losses as oil inventory levels rose, particularly gasoline stocks, which soared to multi-year highs. Among bearish factors was lower fuel consumption, caused by disruptions in industrial and transportation activities due to the polar vortex that swept the US.

On the positive side, several refinery outages caused by harsh winter weather restricted product output, which, in turn, supported product prices. Moreover, in the diesel market, higher heating oil demand lifted diesel cracks. US refinery margins for WTI averaged \$13.31/b in January, which was down by 21¢ m-o-m but higher by \$3.01 y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

Refinery margins in **Europe** suffered losses amid limited product demand and a rise in ARA inventories. Diesel demand for heating in the region registered a rise during the month, and cold weather in the US also prompted arbitrage openings across the Atlantic, although this support proved insufficient to lift margins. Refinery margins for Brent in Europe averaged \$3.03/b in January, down by 87¢ compared with a month earlier and lower by \$2.03 y-o-y.

**Asian** refinery margins weakened the least compared with the other main trading hubs, pressured mostly by poor performance in the naphtha and jet/kerosene markets on the back of weaker demand. Meanwhile, the growing gasoline regional surplus continued to weigh on margins and drove cracks to multi-year lows. Refinery margins for Oman in Asia dipped by 15¢ m-o-m to average \$3.15/b in January, which was lower by \$4.84 y-o-y.



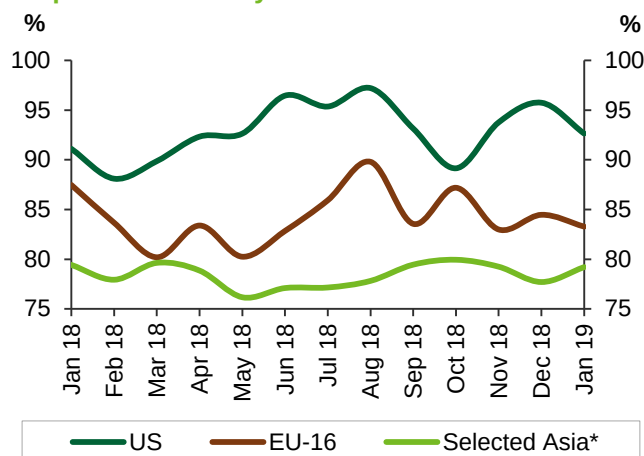
## Refinery operations

In the **US**, refinery utilization rates decreased in January to average 92.6%, which corresponds to a throughput of 16.94 mb/d. This represented a drop of 3.1 pp and 870 tb/d, respectively, compared with the previous month. Y-o-y, the January refinery utilization rate was up by 1.5 pp, with throughputs showing a rise of 24 tb/d.

**European** refinery utilization averaged 83.28%, corresponding to a throughput of 10.44 mb/d. This is a m-o-m drop of 1.2 pp and 150 tb/d, respectively. On a y-o-y basis, utilization rates decreased by 4.2 pp while throughput was slightly up by 11 tb/d.

In **selected Asia** — comprising Japan, China, India and Singapore — refinery utilization rates declined, averaging 79.21% in January, corresponding to a throughput of 21.80 mb/d. Compared with the previous month, throughputs were up by 1.5 pp and by 410 tb/d. Meanwhile, y-o-y utilization rates were down by 0.2 pp, but throughput was up by 306 tb/d.

**Graph 6 - 2: Refinery utilization rates**



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

## Product markets

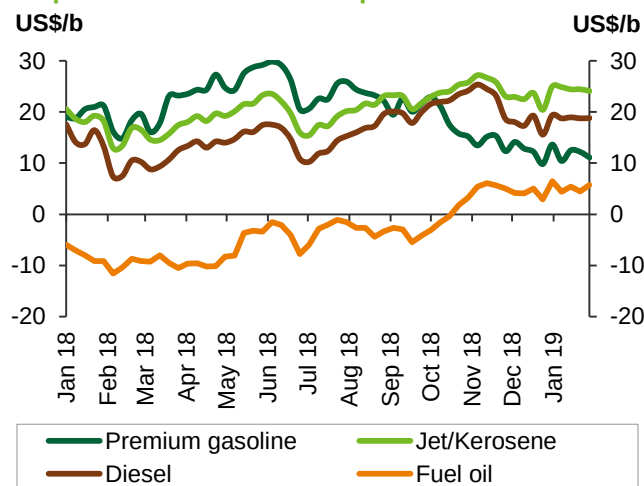
### US market

The **US gasoline** market weakened in January, in line with rising inventories amid seasonally lower demand. Gasoline inventory levels soared by 17.9 mb during the month and reached record-high levels not seen since February 2017. Additional pressure emerged from strong refinery throughput, which exacerbated gasoline inventory levels.

Despite the high throughput seen early in the month, arctic weather conditions caused several refinery outages, which restricted output towards the end of the month, preventing further losses. This led to an 86¢ average monthly gasoline price recovery, ending a seven-month downward trend.

In January, the US gasoline crack spread against WTI averaged \$11.52/b, down by \$1.25 m-o-m and \$8.61/b y-o-y.

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



Sources: Argus Media and OPEC Secretariat.

The USGC **jet/kerosene** cracks strengthened, supported by a \$3.47 m-o-m price rise and firm exports, despite a mild stock build. Disruptions in aviation activity – as more than 600 flight cancellations and 200 flight delays were reported in the busiest airports of Atlanta and Illinois together, caused by the polar vortex – did not seem to have dented demand badly, as the cut in refinery output helped offset the weakness. The US jet/kerosene crack spread against WTI averaged \$24.22/b, up by \$1.36 m-o-m, and higher by \$5.22 y-o-y.

The US **gasoil** crack spread against WTI gained some ground due to bullish sentiment fuelled by severe cold weather, refinery outages and higher prices, despite a considerable rise in inventory levels recorded over the month. The US gasoil crack spread against WTI averaged \$18.57/b, up by 57¢ m-o-m and \$3.33 y-o-y.

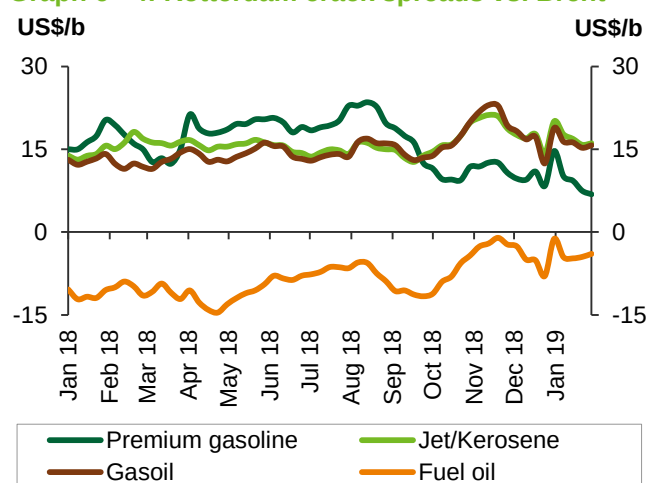
The US **fuel oil** crack spread against WTI in January strengthened slightly as inventory levels came down towards the end of the month, despite FCC outages. Unfavourable FCC margins encouraged refiners to cut FCC throughput, which drove inventory levels higher in the week ended 18 January. However, inventories fell thereafter, due to disruptions in refinery output, amid a m-o-m rise in exports by 61 tb/d to average 175.5 tb/d. In January, the US fuel oil crack spread against WTI averaged \$4.91/b, up by 49 ¢/b m-o-m and up by \$12.73 y-o-y.

## European market

The **gasoline crack spread in Rotterdam** narrowed, as arbitrage windows to the US and the Middle East remained mostly closed, while exports to West Africa returned to normal levels after some months of strong stock building in Nigeria. The gasoline glut and high inventory levels in the US weighed on gasoline prices there, placing them at a discount to European gasoline. This opened an unusual arbitrage window for US volumes into Europe, further exacerbating the pressure on European gasoline cracks.

Moreover, new record-high ethanol consumption in France for the E10 gasoline blend also depressed gasoline demand, contributing to the weakening witnessed during the month. The gasoline crack spread against Brent averaged \$8.86/b in January, down by \$1.77 m-o-m and \$7.61 y-o-y.

**Graph 6 - 4: Rotterdam crack spreads vs. Brent**



Sources: Argus Media and OPEC Secretariat.

The **jet/kerosene** crack spread against Brent fell over the month, pressured by increased imports and higher inventory levels on the back of lower jet/kerosene prices in Asia. A \$4.32/b discount of Asian vs European gasoil provided an arbitrage opening into Northwest Europe, contributing to a stronger surplus. The Rotterdam jet/kerosene crack spread against Brent averaged \$16.70/b, down by \$1.15 m-o-m, but up by \$2.73 y-o-y.

European **gasoil** crack spreads against Brent dropped, as robust supplies from Russia resulted in a rise in ARA inventory levels, outweighing support from higher export opportunities and regional demand on the back of strong heating oil demand due to cold weather. The gasoil crack spread against Brent averaged \$15.87/b, which was lower by \$1.77 m-o-m but up by \$2.85 y-o-y.

At the bottom of the barrel, **fuel oil 3.5%** continued to be under pressure, owing to large volume deliveries from Russia to Northwest Europe. A \$1.50/b recovery in price, along with an arbitrage opening to Asia within the month, kept losses contained and prevented further weakening. In Europe, fuel oil cracks averaged minus \$8.99/b in January, losing 92¢ m-o-m, but gaining \$5.73 y-o-y.

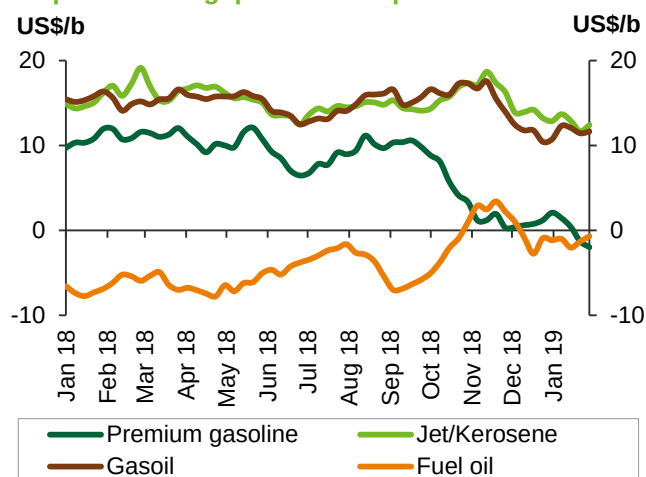
## Asian market

The **Asian gasoline 92 crack spread** against Dubai continued to trend downward, reaching multi-year record lows as the gasoline market remains oversupplied. In January, gasoline stocks reached record-high levels in Japan, while remaining high in Singapore.

Among the bearish factors were strong gasoline outputs in China to replenish stocks ahead of the Lunar New Year driving season. In addition, closed arbitrage windows to Europe due to muted import requirements from the US and West Africa further contributed to negative performance.

The Singapore gasoline crack spread against Oman in January averaged 5¢/b, down by 64¢ m-o-m and \$10.45 y-o-y.

**Graph 6 - 5: Singapore crack spreads vs. Dubai**



Sources: Argus Media and OPEC Secretariat.

Singapore light distillate **naphtha crack spreads** also fell, shadowing gasoline weakness amid tempered demand from the petrochemical industry. Stream cracker outages in Asia due to maintenance exerted pressure on cracks by keeping naphtha intakes low. In addition, Iranian condensate arrivals in South Korea reported during the month provided an alternative source for petrochemical feedstock and further contributed to the weakness. The Singapore naphtha crack spread against Oman averaged minus \$7.11/b, having declined by \$1.95 m-o-m, showing a drop of \$7.22 y-o-y.

At the middle of the barrel, **jet/kerosene** crack spreads in Asia continued under pressure as fuel demand for heating remained subdued due to a warmer-than-normal winter witnessed in January. However, most recent data points to some upside potential in the coming month, as peak travelling season in China during the Lunar New Year is expected to support cracks. The Singapore jet/kerosene crack spread against Oman averaged \$12.68/b, down by \$1.20 m-o-m and by \$2.17 y-o-y.

The Singapore **gasoil crack spread** strengthened during the month on the back of export opportunities to Europe. Although the price differential between gasoil in Asia vs Europe narrowed in January, the \$3.23/b discount along with European gasoil market tightness encouraged trade flows from Asia to the West, providing support to the regional market. The Singapore gasoil crack spread against Oman averaged \$12.94/b, slightly up by 37¢ m-o-m, but down by \$2.61 y-o-y.

The Singapore **fuel oil crack spread** lost some ground, pressured by weak demand and unseasonably high imports into Asia. In January, fuel oil imports increased by 210 tb/d compared with the previous month. Signs of a tightening balance towards the end of the month, due to declining output from China, prevented a steeper downturn. Singapore fuel oil cracks against Oman averaged minus \$1.28/b, down by 43¢ m-o-m, but were up by \$5.98 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>                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chinese Lunar New Year                                                           | Feb 19            | ↑ Some positive impact on product cracks                         | -                                         | -                                         | <p>The expected surge in trips (3 billion) between 4 February and 1 March will most likely boost transportation fuel demand.</p> <p>Estimated 3 billion trips composed of:</p> <ul style="list-style-type: none"> <li>• Road trips 2.46 billion</li> <li>• Train 413 million</li> <li>• Air travel 73 million</li> <li>• Boats 43 million</li> </ul> |
| IMO* 2020 experience-building phase (EBP) implementation and global expectations | 2019              | ↓ Negative impact on marine gasoil and open loop scrubber demand | -                                         | -                                         | <p>The EBP implementation in China is viewed as a pilot study and can provide solid information on global-level expectations. In China, shipowners are relying on low sulphur fuel oil (LSFO) despite the higher price, rather than marine gas oil (MGO) to stay clear of stability and compatibility issues.</p>                                    |
| Spring peak maintenance season                                                   | Feb 19 – May 19   | ↑ Some positive impact on product markets                        | ↑ Some positive impact on product markets | ↑ Some positive impact on product markets | Support expected to be softened by high global stock levels, particularly at the top of the barrel as well as a slow-down in demand.                                                                                                                                                                                                                 |

Note: \* International Marine Organization.  
Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

|                | Refinery throughput, mb/d |               |               |                       | Refinery utilization, % |               |               |                       |
|----------------|---------------------------|---------------|---------------|-----------------------|-------------------------|---------------|---------------|-----------------------|
|                | <u>Nov 18</u>             | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change Jan/Dec</u> | <u>Nov 18</u>           | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change Jan/Dec</u> |
| US             | 17.35                     | 17.81         | 16.94         | -0.87                 | 93.77                   | 95.74         | 92.64         | -3.1 pp               |
| Euro-16        | 10.40                     | 10.59         | 10.44         | -0.15                 | 82.99                   | 84.47         | 83.28         | -1.2 pp               |
| France         | 1.07                      | 1.11          | 1.13          | 0.02                  | 85.55                   | 88.42         | 90.26         | 1.8 pp                |
| Germany        | 1.61                      | 1.74          | 1.77          | 0.02                  | 73.40                   | 79.66         | 80.71         | 1.1 pp                |
| Italy          | 1.40                      | 1.32          | 1.34          | 0.02                  | 68.38                   | 64.47         | 65.59         | 1.1 pp                |
| UK             | 1.08                      | 1.07          | 1.06          | -0.01                 | 82.48                   | 81.57         | 80.73         | -0.8 pp               |
| Selected Asia* | 21.77                     | 21.39         | 21.80         | 0.41                  | 79.25                   | 77.71         | 79.21         | 1.5 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**

|                          | 2016         | 2017         | 2018         | 1Q18         | 2Q18         | 3Q18         | 4Q18         | 1Q19         |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total OECD</b>        | <b>37.46</b> | <b>38.15</b> | <b>38.07</b> | <b>37.65</b> | <b>37.62</b> | <b>38.93</b> | <b>38.07</b> | <b>37.87</b> |
| <b>OECD Americas</b>     | <b>18.78</b> | <b>19.09</b> | <b>19.33</b> | <b>18.79</b> | <b>19.50</b> | <b>19.81</b> | <b>19.22</b> | <b>19.08</b> |
| of which US              | 16.51        | 16.88        | 17.31        | 16.75        | 17.50        | 17.68        | 17.30        | 17.07        |
| <b>OECD Europe</b>       | <b>11.91</b> | <b>12.24</b> | <b>11.99</b> | <b>11.89</b> | <b>11.69</b> | <b>12.43</b> | <b>11.95</b> | <b>12.02</b> |
| of which:                |              |              |              |              |              |              |              |              |
| France                   | 1.14         | 1.17         | 1.10         | 1.12         | 0.94         | 1.21         | 1.13         | 1.01         |
| Germany                  | 1.93         | 1.91         | 1.79         | 1.89         | 1.86         | 1.78         | 1.62         | 1.82         |
| Italy                    | 1.30         | 1.40         | 1.35         | 1.35         | 1.33         | 1.37         | 1.34         | 1.37         |
| UK                       | 1.09         | 1.10         | 1.05         | 0.93         | 1.04         | 1.14         | 1.10         | 0.86         |
| <b>OECD Asia Pacific</b> | <b>6.78</b>  | <b>6.82</b>  | <b>6.75</b>  | <b>6.97</b>  | <b>6.43</b>  | <b>6.69</b>  | <b>6.90</b>  | <b>6.77</b>  |
| of which Japan           | 3.28         | 3.23         | 3.11         | 3.33         | 2.85         | 3.07         | 3.20         | 3.19         |
| <b>Total Non-OECD</b>    | <b>41.26</b> | <b>41.92</b> | <b>42.97</b> | <b>42.61</b> | <b>42.87</b> | <b>43.47</b> | <b>43.93</b> | <b>43.73</b> |
| of which:                |              |              |              |              |              |              |              |              |
| China                    | 10.77        | 11.35        | 12.03        | 11.75        | 12.04        | 12.10        | 12.25        | 12.17        |
| Middle East              | 6.91         | 7.04         | 7.16         | 6.99         | 7.10         | 7.54         | 7.73         | 7.60         |
| Russia                   | 5.58         | 5.59         | 5.72         | 5.69         | 5.65         | 5.81         | 5.73         | 5.78         |
| Latin America            | 4.56         | 4.38         | 4.24         | 4.24         | 4.32         | 4.21         | 3.77         | 3.85         |
| India                    | 4.93         | 4.98         | 5.09         | 5.19         | 5.05         | 5.03         | 5.08         | 5.20         |
| Africa                   | 2.19         | 2.16         | 2.09         | 2.13         | 2.20         | 2.01         | 2.18         | 2.18         |
| <b>Total world</b>       | <b>78.72</b> | <b>80.07</b> | <b>81.04</b> | <b>80.26</b> | <b>80.49</b> | <b>82.40</b> | <b>82.01</b> | <b>81.61</b> |

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

|                                     | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change<br/>Jan/Dec</u> | <u>Average<br/>2018</u> | <u>Year-to-date<br/>2019</u> |
|-------------------------------------|---------------|---------------|---------------------------|-------------------------|------------------------------|
| <b>US Gulf (Cargoes FOB):</b>       |               |               |                           |                         |                              |
| Naphtha*                            | 49.60         | 51.22         | 1.62                      | 68.51                   | 51.22                        |
| Premium gasoline (unleaded 93)      | 62.29         | 63.15         | 0.86                      | 85.78                   | 63.15                        |
| Regular gasoline (unleaded 87)      | 57.77         | 57.63         | -0.14                     | 80.17                   | 57.63                        |
| Jet/Kerosene                        | 72.38         | 75.85         | 3.47                      | 85.35                   | 75.85                        |
| Gasoil (0.2% S)                     | 67.52         | 70.20         | 2.68                      | 80.99                   | 70.20                        |
| Fuel oil (3.0% S)                   | 51.58         | 54.94         | 3.36                      | 60.17                   | 54.94                        |
| <b>Rotterdam (Barges FoB):</b>      |               |               |                           |                         |                              |
| Naphtha                             | 50.95         | 50.52         | -0.43                     | 66.47                   | 50.52                        |
| Premium gasoline (unleaded 98)      | 67.58         | 68.23         | 0.65                      | 87.34                   | 68.23                        |
| Jet/Kerosene                        | 74.80         | 76.07         | 1.27                      | 86.93                   | 76.07                        |
| Gasoil/Diesel (10 ppm)              | 74.59         | 75.24         | 0.65                      | 85.94                   | 75.24                        |
| Fuel oil (1.0% S)                   | 53.08         | 54.90         | 1.82                      | 62.33                   | 54.90                        |
| Fuel oil (3.5% S)                   | 48.88         | 50.38         | 1.50                      | 59.04                   | 50.38                        |
| <b>Mediterranean (Cargoes FOB):</b> |               |               |                           |                         |                              |
| Naphtha                             | 49.32         | 49.09         | -0.23                     | 65.79                   | 49.09                        |
| Premium gasoline**                  | 58.44         | 59.22         | 0.78                      | 79.08                   | 59.22                        |
| Jet/Kerosene                        | 72.64         | 73.81         | 1.17                      | 85.10                   | 73.81                        |
| Diesel                              | 73.24         | 74.88         | 1.64                      | 85.66                   | 74.88                        |
| Fuel oil (1.0% S)                   | 54.58         | 57.80         | 3.22                      | 63.53                   | 57.80                        |
| Fuel oil (3.5% S)                   | 49.67         | 51.91         | 2.24                      | 60.36                   | 51.91                        |
| <b>Singapore (Cargoes FOB):</b>     |               |               |                           |                         |                              |
| Naphtha                             | 52.13         | 51.96         | -0.17                     | 67.24                   | 51.96                        |
| Premium gasoline (unleaded 95)      | 60.02         | 61.07         | 1.05                      | 79.93                   | 61.07                        |
| Regular gasoline (unleaded 92)      | 57.98         | 59.12         | 1.14                      | 77.66                   | 59.12                        |
| Jet/Kerosene                        | 71.17         | 71.75         | 0.58                      | 84.81                   | 71.75                        |
| Gasoil/Diesel (50 ppm)              | 69.86         | 72.01         | 2.15                      | 84.67                   | 72.01                        |
| Fuel oil (180 cst)                  | 56.44         | 57.79         | 1.35                      | 65.24                   | 57.79                        |
| Fuel oil (380 cst 3.5% S)           | 56.63         | 58.10         | 1.47                      | 64.74                   | 58.10                        |

Note: \* Barges.

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

Sources: Argus Media and OPEC Secretariat.



## Tanker Market

Following gains registered in the tanker market in the previous quarter, average **dirty tanker spot freight rates** declined by 28% in January, reversing all earlier profits. Lower rates were seen in all reported dirty classes in January, which was mainly attributed to thin market activity in general, while vessel supply remained abundant. Dirty tanker average freight rates showed a drop from the previous month as VLCC, Suezmax and Aframax rates fell 36%, 31% and 24%, respectively.

**Clean tanker spot freight rates** were no exception, as they were impacted by the general downward trend which overtook the tanker market in January. A lack of activity was seen dominating different classes, leading to a decline in average clean tanker spot freight rates by 18% from a month before.

### Spot fixtures

According to preliminary data, **global fixtures** dropped by 3.8% in January compared with the previous month. **OPEC spot fixtures** were down by 3%, or 0.43 mb/d, to average 13.78 mb/d.

Fixtures on the **Middle East-to-East** route averaged 7.90 mb/d in January, down by 0.14 mb/d from one month ago, and those on the **Middle East-to-West** route averaged 1.41 mb/d.

**Outside of the Middle East** fixtures averaged 4.47 mb/d in January, dropping by 0.19 mb/d m-o-m. Compared with the same period a year before, most destinations showed higher fixtures than in 2018.

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

|                     | <b>Nov 18</b> | <b>Dec 18</b> | <b>Jan 19</b> | <b>Change<br/>Jan 19/Dec 18</b> |
|---------------------|---------------|---------------|---------------|---------------------------------|
| <b>All areas</b>    | <b>21.98</b>  | <b>20.55</b>  | <b>19.76</b>  | <b>-0.79</b>                    |
| OPEC                | 14.44         | 14.21         | 13.78         | -0.43                           |
| Middle East/East    | 8.33          | 8.04          | 7.90          | -0.14                           |
| Middle East/West    | 1.58          | 1.51          | 1.41          | -0.10                           |
| Outside Middle East | 4.53          | 4.66          | 4.47          | -0.19                           |

Sources: Oil Movements and OPEC Secretariat.

### Sailings and arrivals

Preliminary data shows **OPEC sailings** were 0.2% higher m-o-m in January, averaging 25.33 mb/d. This was 1.01 mb/d above the same month a year ago. **Middle East sailings** also went up by 0.2% from the previous month and by 5.1% from a year ago.

January **crude arrivals** were mixed, registering increases in most areas. Arrivals in North American, Far Eastern and European ports increased by 7.2%, 3.5% and 0.3%, respectively, from one month ago, while arrivals in West Asia declined by 2.1% m-o-m to average 4.44 mb/d in January.

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

|                 | <u>Nov 18</u> | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change<br/>Jan 19/Dec 18</u> |
|-----------------|---------------|---------------|---------------|---------------------------------|
| <b>Sailings</b> |               |               |               |                                 |
| OPEC            | 25.25         | 25.28         | 25.33         | 0.05                            |
| Middle East     | 18.50         | 18.48         | 18.53         | 0.04                            |
| <b>Arrivals</b> |               |               |               |                                 |
| North America   | 9.62          | 9.55          | 10.24         | 0.69                            |
| Europe          | 11.73         | 11.68         | 11.71         | 0.03                            |
| Far East        | 9.12          | 8.89          | 9.21          | 0.32                            |
| West Asia       | 4.51          | 4.54          | 4.44          | -0.10                           |

Sources: Oil Movements and OPEC Secretariat.

## Dirty tanker freight rates

### Very large crude carriers (VLCCs)

Following an increase in 4Q18, **VLCC freight rates** saw softer sentiment at the beginning of the year as the month started with rates decreasing. Tonnage availability was building and activities were declining, which is normal during the month as a result of the holidays.

In January, spot freight rates declined on all reported routes. A tonnage build up in the east drove freight rates down significantly and delays in Eastern ports did not support freight rates. As a result, freight rates registered for tankers operating on the **Middle East-to-East route** fell by 36% from the previous month to stand at WS56 points in January.

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

|                  | <u>Size<br/>1,000 DWT</u> | <u>Nov 18</u> | <u>Dec 18</u> | <u>Jan 19</u> | <u>Change<br/>Jan 19/Dec 18</u> |
|------------------|---------------------------|---------------|---------------|---------------|---------------------------------|
| Middle East/East | 230-280                   | 93            | 87            | 56            | -32                             |
| Middle East/West | 270-285                   | 41            | 38            | 24            | -14                             |
| West Africa/East | 260                       | 91            | 87            | 56            | -31                             |

Sources: Argus Media and OPEC Secretariat.

Similarly, **West Africa-to-East routes** dropped by 35% from a month ago to average WS56 points in January as the West African market was mostly quiet.

**Middle East-to-West routes** declined by WS14 points from the previous month to stand at WS24 points, impacted by general downward pressure in the region, though rates dropped to a relatively lower degree.

The softening trend for VLCC spot freight rates stabilised by month end, yet vessel supply in different areas remained more than sufficient to prevent rates from increasing. Nevertheless, average VLCC freight rates in January remained 23% above those of the same month a year before.

## Suezmax

**Suezmax average spot freight rates** experienced a higher drop than those of VLCCs in January. On average, Suezmax rates fell by WS32 points from a month earlier.

Rates for tankers operating on the **West Africa-to-USGC route** decreased by WS33 points to average WS77 points. Rates on the **Northwest Europe (NWE)-to-USGC route** fell by 32% in January from the previous month to average WS65 points.

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

|                                | Size<br>1,000 DWT | Nov 18 | Dec 18 | Jan 19 | Change<br>Jan 19/Dec 18 |
|--------------------------------|-------------------|--------|--------|--------|-------------------------|
| West Africa/US Gulf Coast      | 130-135           | 120    | 111    | 77     | -33                     |
| Northwest Europe/US Gulf Coast | 130-135           | 101    | 95     | 65     | -30                     |

Sources: Argus Media and OPEC Secretariat.

The drop in freight rates came as a result of weak tonnage demand and a subsequent tonnage build-up due to slower activities in the holiday season. Delays at the Turkish Straits increased steadily as well as cancellations at Çanakkale, however tonnage was sufficient to absorb the effect of any delays in January.

## Aframax

**Aframax spot freight rates** saw the largest decline compared with other tankers in the dirty segment. Freight rates on all reported routes showed a drop from the previous month, with no exception. Aframax spot freight rates often fluctuated during the month and in several areas, however they showed an average general decline.

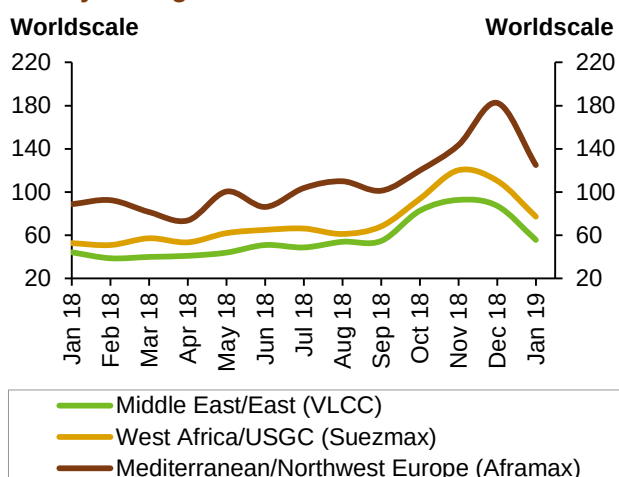
**Table 7 - 5: Dirty Aframax spot tanker freight rates, WS**

|                                | Size<br>1,000 DWT | Nov 18 | Dec 18 | Jan 19 | Change<br>Jan 19/Dec 18 |
|--------------------------------|-------------------|--------|--------|--------|-------------------------|
| Indonesia/East                 | 80-85             | 133    | 138    | 112    | -26                     |
| Caribbean/US East Coast        | 80-85             | 210    | 188    | 168    | -19                     |
| Mediterranean/Mediterranean    | 80-85             | 155    | 195    | 131    | -64                     |
| Mediterranean/Northwest Europe | 80-85             | 144    | 183    | 125    | -58                     |

Sources: Argus Media and OPEC Secretariat.

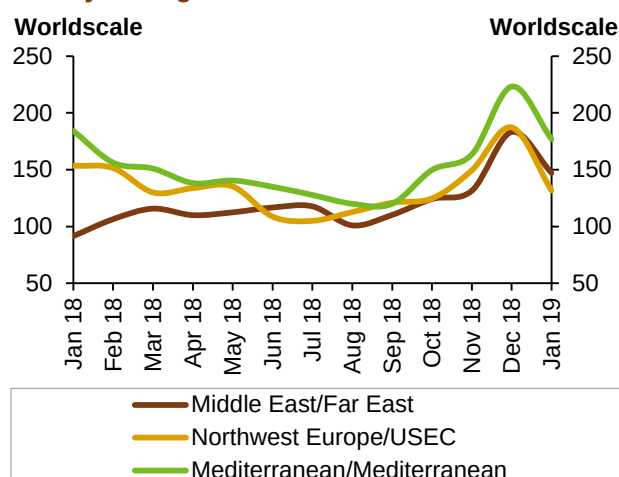
In the Caribbean, Aframax rates fluctuated as they faced weather delays in Mexico and port closures in the USGC. Nevertheless, monthly average Aframax rates on **Caribbean-to-US East Coast (USEC)** routes reported a drop of WS19 points m-o-m to stand at WS168 points in January.

**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.

In the Mediterranean, the Aframax market suffered from a lack of firm orders and an increase in prompt tonnage availability, as ballasters to the area increased, which eventually led to a drop in freight rates.

Freight rates for Aframax operating on both **Mediterranean-to-Mediterranean** and **Mediterranean-to-NWE routes** showed a decline of 33% and 32% in January, m-o-m, respectively.

Despite all the monthly rate drops, Aframax rates in January remained above those of the same month in 2018.

## Clean tanker freight rates

In January, **clean tanker spot freight rates** weakened on almost all reported routes. Similar to the dirty market, freight rates for clean tankers in different classes were under pressure as activity in the clean tanker market was affected by holidays.

Clean tanker rates declined by an average of 18% m-o-m in January, as both **East and West of Suez fixtures** dropped by 8% and 23%, m-o-m, respectively. The tonnage demand across the Mediterranean has been limited and inquiries from the Black Sea were mostly thin for medium-range (MR) vessels, which led to a decline in rates despite occasional hikes on the back of a temporary tightening in vessel availability for prompt requirements.

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

|                                | Size<br>1,000 DWT | Nov 18 | Dec 18 | Jan 19 | Change<br>Jan 19/Dec 18 |
|--------------------------------|-------------------|--------|--------|--------|-------------------------|
| <b>East of Suez</b>            |                   |        |        |        |                         |
| Middle East/East               | 30-35             | 132    | 183    | 147    | -36                     |
| Singapore/East                 | 30-35             | 147    | 180    | 186    | 6                       |
| <b>West of Suez</b>            |                   |        |        |        |                         |
| Northwest Europe/US East Coast | 33-37             | 150    | 187    | 132    | -56                     |
| Mediterranean/Mediterranean    | 30-35             | 164    | 223    | 177    | -46                     |
| Mediterranean/Northwest Europe | 30-35             | 172    | 233    | 187    | -46                     |

Sources: Argus Media and OPEC Secretariat.

In the **West of Suez**, clean tanker rates showed a significant drop for tankers trading on the NWE-to-USEC route, down by 30% from the month before in January.

Mediterranean chartering market performance ended negative as well, despite some requirement flows seen occasionally during the month, but this never persisted to create a lasting trend. Rates on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes dropped by 21% and 20%, m-o-m, respectively.

In the **East of Suez**, the drop was also great, mainly in the Middle Eastern market, where the Middle East-to-East route rate was down by 20% m-o-m in January. The Singapore-to-East route was the only exception, as rates registered a moderate increase of 3% m-o-m.

## Oil Trade

Preliminary data for January shows that **US** crude oil imports inched up by 41 tb/d from the previous month to average 7.5 mb/d, while remaining 468 tb/d, or 6%, below the previous year. US product imports also increased from a month ago by 405 tb/d, showing an annual decline of 72 tb/d, or 3%, from the same month last year.

**Japan's** crude oil imports dropped in December following a rise in the previous month, declining by 125 tb/d, or 4%, m-o-m, to average 3 mb/d. At the same time, crude imports were down by 530 tb/d, or 15%, y-o-y. Japan's product imports decreased in December by 65 tb/d, or 9%, m-o-m to average 664 tb/d, and remained stable from a year earlier.

**China's** crude imports dropped in December from the high level seen in the previous month, down by 123 tb/d, or 1%, to reach 10.3 mb/d. Crude oil imports showed a significant annual gain of 2.4 mb/d, or 30%. China's product imports rose to average 1.3 mb/d, up by 19 tb/d m-o-m from a month earlier, but down by 133 tb/d from the same month in the previous year.

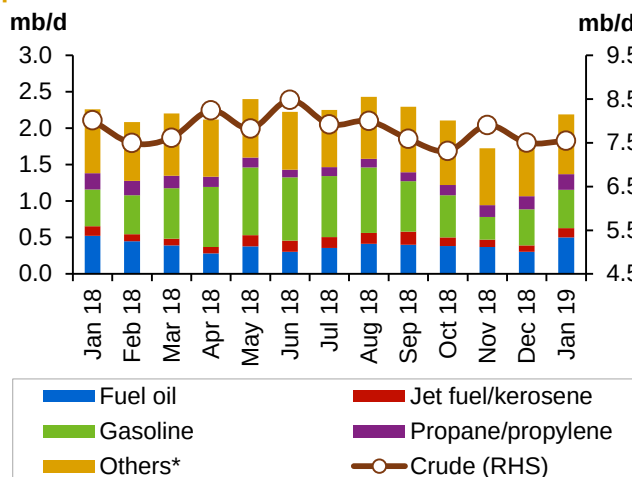
In December, **India's** crude imports increased by 463 tb/d from the previous month to stand at 4.6 mb/d. Moreover, crude imports reflected an annual gain of 48 tb/d, or 1%. India's product imports rose on a monthly basis by 75 tb/d, while dropping by 60 tb/d from a year before. Monthly product imports were supported by higher LPG and fuel oil imports.

## US

Preliminary January data shows that **US crude oil imports** increased slightly to average 7.5 mb/d, up by 41 tb/d from the previous month, but remained 468 tb/d, or 6%, below the previous year.

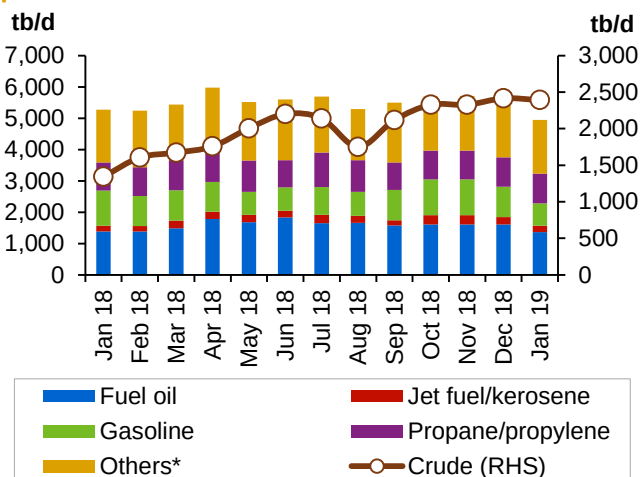
**US product imports** also rose from a month ago by 405 tb/d, but showed a decline of 72 tb/d, or 3%, from the same month a year earlier.

**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.

In January, **US crude exports** dropped by 24 tb/d to average 2.4 mb/d, and **product exports** were 554 tb/d less than a month ago to average 4.9 mb/d. In annual terms, crude exports were 1 mb/d higher than a year ago.

As a result, **total US net imports rose in January by 1 mb/d, or 74%, to average 2.4 mb/d.**

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

|                                 | <b>Nov 18</b> | <b>Dec 18</b> | <b>Jan 19</b> | <b>Change<br/>Jan 19/Dec 18</b> |
|---------------------------------|---------------|---------------|---------------|---------------------------------|
| Crude oil                       | 5,577         | 5,089         | 5,154         | 65                              |
| Total products                  | -3,988        | -3,712        | -2,753        | 959                             |
| <b>Total crude and products</b> | <b>1,589</b>  | <b>1,377</b>  | <b>2,401</b>  | <b>1,024</b>                    |

Sources: US EIA and OPEC Secretariat.

In November, the **top first and second suppliers to the US** maintained the same order as seen last month. Canada remained the premier crude supplier, accounting for 54% of total US crude imports, which were up from a month ago by 600 tb/d, or 17%. Saudi Arabia maintained its position as second-largest supplier to the US in November, although the volume was down from the previous month by 47 tb/d. Mexico came in as third-top supplier, accounting for 7% of total US crude imports, despite a drop of 102 tb/d, or 15%, from the previous month.

**US crude imports from OPEC Member Countries (MCs)** were higher in November from the previous month, up by 24 tb/d, or 1%, accounting for 31% of total US crude imports.

**US product imports from OPEC MCs** were lower by 47 tb/d, or 16%, from a month earlier, but 26 tb/d, or 11%, higher from the previous year.

Looking to overall **US product supplier shares**, Canada and Russia maintained their positions as first and second, accounting for 30% and 12% of total product imports, respectively. In November, Canada's product exports to the US were stable from the previous month, while US imports from Russia declined by 34 tb/d m-o-m. Algeria came in as third supplier to the US, holding a share of 7%, as it increased its exports to the country by 25 tb/d from the previous month.

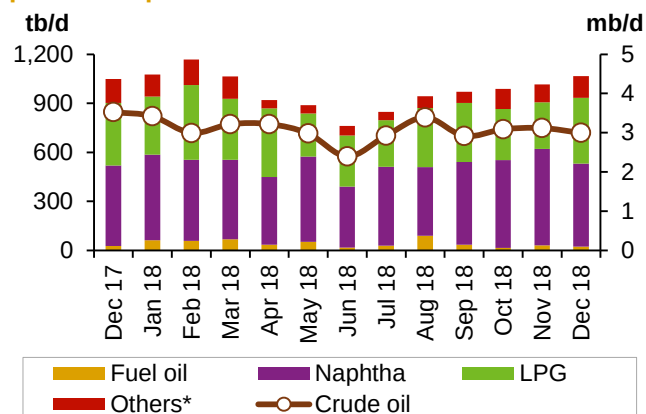
Looking into **US crude imports by region**, in November, the largest US crude import volumes continued to be sourced from North America, averaging 4.2 mb/d. Latin America was in second place with average imports of 1.6 mb/d in November. The Middle East came in third, with an average of 1.5 mb/d, while imports from Africa dropped from the previous month to average 237 tb/d.

## Japan

**Japan's crude oil imports** dropped in December following a rise in the previous month. Japan's crude imports declined by 125 tb/d, or 4%, m-o-m, to average 3 mb/d, and were down by 530 tb/d, or 15%, y-o-y. On the other hand, Japan's refinery crude intake increased slightly by 36 tb/d in December from a month earlier.

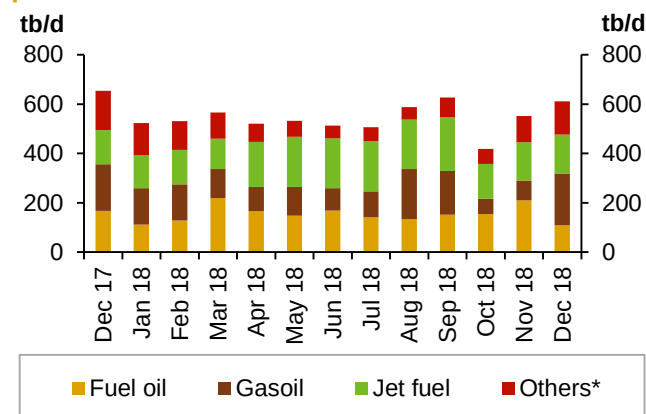
Looking at **Japan's crude supplier share**, Saudi Arabia continued being the first crude supplier to Japan in December, holding a share of 43% of the country's total crude imports, up by 121 tb/d from a month before. The UAE came as second-largest supplier to Japan, with a share of 25% of total Japan's crude imports, despite showing a m-o-m drop of 149 tb/d. Qatar was the third-largest supplier with a share of 10%, with slightly higher exports to Japan than in the previous month.



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

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

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

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

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

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

**Japan's product imports**, excluding LPG, dropped in December by 65 tb/d, or 9%, m-o-m to average 664 tb/d, and remained stable from a year earlier. Japan's domestic oil product sales rose in December, up by 11% from a year earlier.

**Japan's product exports** rose by 60 tb/d in December to average 611 tb/d, down by 43 tb/d, or 7%, from the same month a year earlier.

Accordingly, **Japan's net imports dropped in December by 250 tb/d to average 3.0 mb/d**, but remained 489 tb/d above the same month a year earlier.

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

|                                 | Oct 18       | Nov 18       | Dec 18       | Change<br>Dec 18/Nov 18 |
|---------------------------------|--------------|--------------|--------------|-------------------------|
| Crude oil                       | 3,088        | 3,120        | 2,995        | -125                    |
| Total products                  | 258          | 179          | 54           | -125                    |
| <b>Total crude and products</b> | <b>3,347</b> | <b>3,299</b> | <b>3,049</b> | <b>-250</b>             |

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

## China

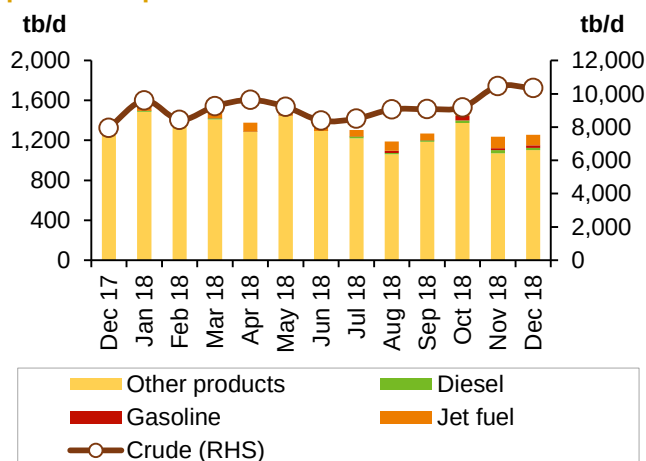
**China's crude oil imports** dropped in December from the high level seen in the previous month, down by 123 tb/d, or 1%, to settle at 10.3 mb/d. Remarkably, crude imports showed significant annual gains of 2.4 mb/d, or 30%. China's refinery crude intake declined in December from a month earlier by almost 230 tb/d.

**China's product imports** rose in December to average 1.3 mb/d, up by 19 tb/d m-o-m, but down by 133 tb/d from the same month in the previous year.

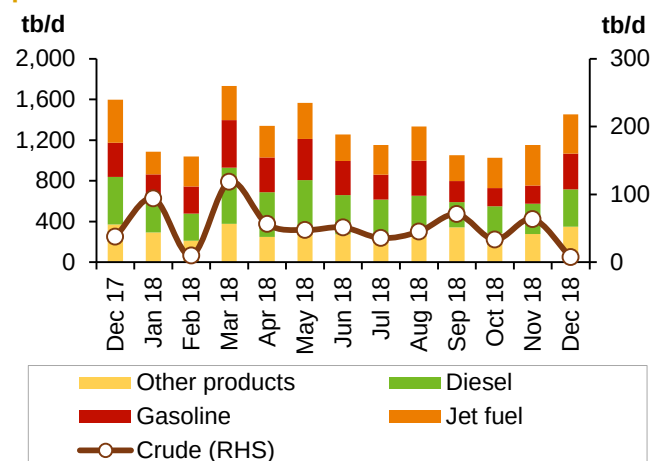
As for **China's crude oil supplier share**, Russia, Saudi Arabia and Iraq were the top suppliers to China in December, accounting for 17%, 16% and 10%, respectively, of China's total crude imports. Crude imports were up from the month before by 170 tb/d, 210 tb/d, and 160 tb/d, respectively.

**China's crude oil exports** stood at just 7 tb/d in December, down by 56 tb/d from the level seen a month earlier.

**China's product exports** rose by 301 tb/d in December m-o-m to average 1.5 mb/d.

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

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

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

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

As a result, **China's net oil imports dropped by 349 mb/d from the previous month to average 10.1 mb/d**, while they were higher by a notable 2.4 mb/d from the same month a year earlier.

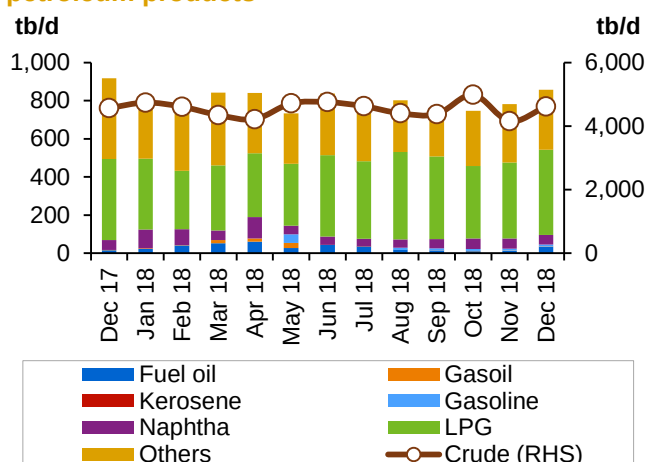
**Table 8 - 3: China's crude and product net imports, tb/d**

|                                 | Oct 18       | Nov 18        | Dec 18        | Change<br>Dec 18/Nov 18 |
|---------------------------------|--------------|---------------|---------------|-------------------------|
| Crude oil                       | 9,148        | 10,397        | 10,331        | -66                     |
| Total products                  | 501          | 87            | -195          | -283                    |
| <b>Total crude and products</b> | <b>9,648</b> | <b>10,484</b> | <b>10,135</b> | <b>-349</b>             |

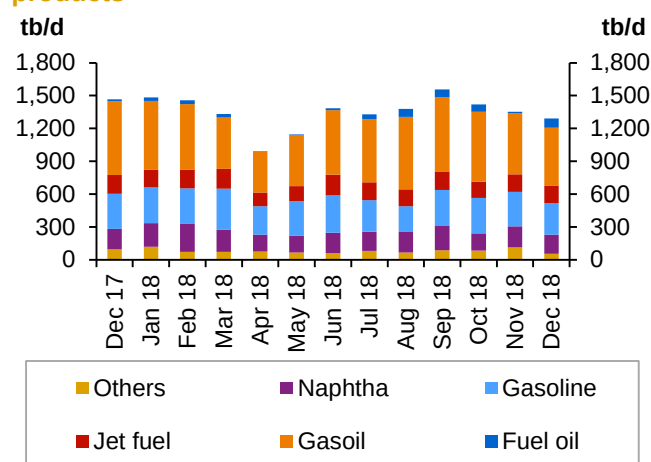
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

## India

In December, **India's crude imports** rose by 463 tb/d from the previous month to stand at 4.6 mb/d. Moreover, crude imports reflected an annual gain of 48 tb/d, or 1%. India's refinery crude intake declined by around 180 tb/d in December from the previous month.

**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.

**India's product imports** in December rose on a monthly basis by 75 tb/d, while dropping by 60 tb/d from a year before. Monthly imports were supported by higher LPG and fuel oil volumes.

**India's product exports** declined in December by 61 tb/d, or 5%, from a month earlier, to average 1.3 mb/d, as exports of most products dropped, except fuel oil.

Consequently, **India's net imports increased by 599 tb/d, or 17%, in December m-o-m to average 4.2 mb/d**, and were up by 4% from a year earlier.

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

|                                 | <u>Oct 18</u> | <u>Nov 18</u> | <u>Dec 18</u> | <u>Change<br/>Dec 18/Nov 18</u> |
|---------------------------------|---------------|---------------|---------------|---------------------------------|
| Crude oil                       | 4,983         | 4,152         | 4,615         | 463                             |
| Total products                  | -674          | -571          | -435          | 136                             |
| <b>Total crude and products</b> | <b>4,308</b>  | <b>3,580</b>  | <b>4,179</b>  | <b>599</b>                      |

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

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

## Former Soviet Union (FSU)

In December, **total crude oil exports from the FSU** rose by 323 tb/d, or 5%, to average 7.3 mb/d.

In the **Transneft system**, crude exports through Russian pipelines also increased, up by 194 tb/d, or 5%, to average 4.3 mb/d. Total shipments from the Black Sea increased by 128 tb/d, or 27%, to average 609 tb/d, as a result of higher shipments through the Novorossiysk port. Total Baltic Sea exports in December went up by 27 tb/d, mainly as shipments from the Primorsk port terminal increased following maintenance. The Druzhba pipeline's total shipments showed gains of 48 tb/d from a month earlier and averaged at 1 mb/d, while shipments from Kozmino dropped by a slight 8 tb/d to average 614 tb/d.

Exports through the **Lukoil system** were flat in the Barents Sea and the Baltic Sea.

Regarding other routes, **Russia's Far East** total exports were lower by 13 tb/d, or 3%, from the previous month.

**Black Sea total exports** rose by 189 tb/d m-o-m in December, mainly as supplies rose from the Novorossiysk port terminal by 172 tb/d, as well as from the Supsa port, which rose by 17 tb/d, from the previous month.

In the **Mediterranean Sea**, Baku–Tbilisi–Ceyhan (BTC) supplies decreased by 45 tb/d from a month earlier to average 677 tb/d.

**FSU total products exports** were higher in December than in the previous month by 150 tb/d, or 6%, to average 2.9 mb/d. The increase was mostly attributed to higher gasoline and fuel oil exports.

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

|                                   |                                        | 2018         | 3Q18         | 4Q18         | Nov 18       | Dec 18        |
|-----------------------------------|----------------------------------------|--------------|--------------|--------------|--------------|---------------|
| <b>Transneft system</b>           |                                        |              |              |              |              |               |
| <b>Europe</b>                     | <b>Black Sea total</b>                 | <b>544</b>   | <b>568</b>   | <b>550</b>   | <b>481</b>   | <b>609</b>    |
|                                   | Novorossiysk port terminal - total     | 544          | 568          | 550          | 481          | 609           |
|                                   | of which: Russian oil                  | 383          | 402          | 407          | 391          | 429           |
|                                   | Others                                 | 160          | 167          | 143          | 91           | 180           |
|                                   | <b>Baltic Sea total</b>                | <b>1,306</b> | <b>1,227</b> | <b>1,413</b> | <b>1,364</b> | <b>1,391</b>  |
|                                   | Primorsk port terminal - total         | 758          | 719          | 803          | 694          | 881           |
|                                   | of which: Russian oil                  | 758          | 719          | 803          | 694          | 881           |
|                                   | Others                                 | 0            | 0            | 0            | 0            | 0             |
|                                   | Ust-Luga port terminal - total         | 549          | 508          | 610          | 671          | 510           |
|                                   | of which: Russian oil                  | 375          | 352          | 446          | 503          | 348           |
|                                   | Others                                 | 173          | 156          | 164          | 168          | 162           |
| <b>Asia</b>                       | <b>Druzhba pipeline total</b>          | <b>997</b>   | <b>1,006</b> | <b>1,009</b> | <b>993</b>   | <b>1,040</b>  |
|                                   | of which: Russian oil                  | 965          | 973          | 977          | 960          | 1,009         |
|                                   | Others                                 | 32           | 32           | 32           | 32           | 32            |
|                                   | <b>Pacific ocean total</b>             | <b>619</b>   | <b>632</b>   | <b>628</b>   | <b>622</b>   | <b>614</b>    |
|                                   | Kozmino port terminal - total          | 619          | 632          | 628          | 622          | 614           |
|                                   | <b>China (via ESPO pipeline) total</b> | <b>577</b>   | <b>600</b>   | <b>601</b>   | <b>601</b>   | <b>601</b>    |
|                                   | China Amur                             | 577          | 600          | 601          | 601          | 601           |
|                                   | <b>Total Russia's crude exports</b>    | <b>4,043</b> | <b>4,032</b> | <b>4,202</b> | <b>4,061</b> | <b>4,255</b>  |
| <b>Lukoil system</b>              |                                        |              |              |              |              |               |
| <b>Europe &amp; North America</b> | <b>Barents Sea total</b>               | <b>135</b>   | <b>152</b>   | <b>121</b>   | <b>125</b>   | <b>124</b>    |
|                                   | Varandey offshore platform             | 135          | 152          | 121          | 125          | 124           |
| <b>Europe</b>                     | <b>Baltic Sea total</b>                | <b>7</b>     | <b>7</b>     | <b>7</b>     | <b>7</b>     | <b>6</b>      |
|                                   | Kalinigrad port terminal               | 7            | 7            | 7            | 7            | 6             |
| <b>Other routes</b>               |                                        |              |              |              |              |               |
| <b>Asia</b>                       | <b>Russian Far East total</b>          | <b>371</b>   | <b>353</b>   | <b>395</b>   | <b>402</b>   | <b>389</b>    |
|                                   | Aniva Bay port terminal                | 119          | 89           | 119          | 121          | 117           |
|                                   | De Kastri port terminal                | 252          | 264          | 276          | 281          | 272           |
|                                   | <b>Central Asia total</b>              | <b>233</b>   | <b>247</b>   | <b>222</b>   | <b>219</b>   | <b>222</b>    |
|                                   | Kenkiyak-Alashankou                    | 233          | 247          | 222          | 219          | 222           |
| <b>Europe</b>                     | <b>Black Sea total</b>                 | <b>1,386</b> | <b>1,299</b> | <b>1,457</b> | <b>1,409</b> | <b>1,598</b>  |
|                                   | Novorossiysk port terminal (CPC)       | 1,323        | 1,251        | 1,392        | 1,349        | 1,520         |
|                                   | Supsa port terminal                    | 61           | 45           | 65           | 60           | 77            |
|                                   | Batumi port terminal                   | 2            | 3            | 0            | 0            | 0             |
|                                   | Kulevi port terminal                   | 0            | 0            | 0            | 0            | 0             |
|                                   | <b>Mediterranean Sea total</b>         | <b>693</b>   | <b>696</b>   | <b>707</b>   | <b>721</b>   | <b>677</b>    |
|                                   | Baku–Tbilisi–Ceyhan (BTC)              | 693          | 696          | 707          | 721          | 677           |
| <b>Russian rail</b>               |                                        |              |              |              |              |               |
|                                   | <b>Russian rail</b>                    | <b>32</b>    | <b>30</b>    | <b>35</b>    | <b>35</b>    | <b>32</b>     |
|                                   | of which: Russian oil                  | 32           | 30           | 35           | 35           | 32            |
|                                   | Others                                 | 0            | 0            | 0            | 0            | 0             |
| <b>Total FSU crude exports</b>    |                                        | <b>6,901</b> | <b>6,816</b> | <b>7,145</b> | <b>6,979</b> | <b>7,303</b>  |
| <b>Products</b>                   |                                        |              |              |              |              |               |
|                                   | Gasoline                               | 212          | 211          | 208          | 194          | 204           |
|                                   | Naphtha                                | 517          | 505          | 487          | 487          | 451           |
|                                   | Jet                                    | 37           | 42           | 36           | 27           | 39            |
|                                   | Gasoil                                 | 1,006        | 972          | 920          | 879          | 1,001         |
|                                   | Fuel oil                               | 930          | 905          | 885          | 852          | 931           |
|                                   | VGO                                    | 277          | 261          | 250          | 269          | 232           |
| <b>Total FSU product exports</b>  |                                        | <b>2,980</b> | <b>2,896</b> | <b>2,786</b> | <b>2,708</b> | <b>2,858</b>  |
| <b>Total FSU oil exports</b>      |                                        | <b>9,881</b> | <b>9,712</b> | <b>9,931</b> | <b>9,687</b> | <b>10,161</b> |

Sources: Argus Nefte Transport and Argus Global Markets.

## Stock Movements

Preliminary data for December showed that **total OECD commercial oil stocks** fell by 10.8 mb m-o-m to stand at 2,851 mb. This was 2.5 mb lower than the same time one year ago, but 28 mb above the latest five-year average. Compared with the seasonal norm, crude indicated a surplus of around 50 mb, while product stocks showed a deficit of 22 mb. In terms of **days of forward cover**, OECD commercial stocks rose by 0.3 days m-o-m in December to stand at 59.5 days. This was 0.4 days below the same period in 2017 and 0.8 days below the latest five-year average.

Preliminary data for January showed that **US total commercial oil stocks** rose by 16.8 mb m-o-m to stand at 1,259 mb. At this level, total US commercial stocks stood at 43.8 mb above the same period a year ago, and 45.7 mb higher than the latest five-year average. Within components, crude and product stocks rose by 5.8 mb and 11.0 mb, m-o-m, respectively.

## OECD

Preliminary data for December shows that **total OECD commercial oil stocks** fell by 10.8 mb m-o-m, reversing the build of last month. At 2,851 mb, total OECD commercial oil stocks were 2.5 mb lower than the same time one year ago, but 28 mb above the latest five-year average.

Within components, crude stocks indicated a surplus of around 50 mb, while product stocks were 22 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 309 mb since January 2017.

In December, OECD commercial crude stocks fell by 12 mb m-o-m, while product stocks rose by 1.2 mb, m-o-m.

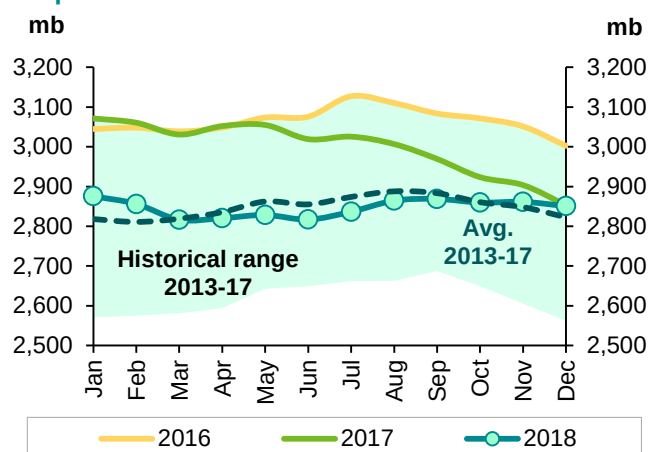
Within the regions, total OECD commercial oil stocks in OECD Americas and OECD Asia Pacific fell by 1.6 mb and 13.5 mb in December, respectively, while OECD Europe stocks increased by 4.4 mb, m-o-m.

OECD commercial **crude stocks** fell by 12.0 mb m-o-m in December, ending the month at 1,432 mb. This was 21.4 mb above the same time a year ago, and 50.5 mb higher than the latest five-year average. Compared with the previous month, OECD America and OECD Asia Pacific experienced a stock draw, while OECD Europe saw a stock build.

In contrast, OECD **total product inventories** rose by 1.2 mb m-o-m in December to stand at 1,418 mb. This was 24 mb below the same time a year ago, and 22 mb below the seasonal norm. Within OECD regions, OECD America and OECD Europe experienced a stock build, while OECD Asia Pacific witnessed a stock draw, m-o-m.

In terms of **days of forward cover**, OECD commercial stocks rose by 0.3 days m-o-m in December to stand at 59.5 days. This was 0.4 days below the same period in 2017 and 0.8 days below the latest five-year average.

Graph 9 - 1: OECD commercial oil stocks



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

Within the regions, OECD Americas days of forward cover was at 0.2 days higher than the historical average to stand at 60.0 days in December. OECD Europe's stocks stood at 3.1 days below the latest five-year average to finish the month of December at 66.0 days. OECD Asia Pacific indicated a deficit of 0.5 days below the seasonal norm to stand at 47.2 days in December.

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

|                              | <u>Oct 18</u> | <u>Nov 18</u> | <u>Dec 18</u> | <u>Change</u><br><u>Dec 18/Nov 18</u> | <u>Dec 17</u> |
|------------------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| <b>Crude oil</b>             | 1,429         | 1,444         | 1,432         | -12.0                                 | 1,411         |
| <b>Products</b>              | 1,430         | 1,417         | 1,418         | 1.2                                   | 1,442         |
| <b>Total</b>                 | <b>2,860</b>  | <b>2,861</b>  | <b>2,851</b>  | <b>-10.8</b>                          | <b>2,853</b>  |
| <b>Days of forward cover</b> | <b>59.5</b>   | <b>59.2</b>   | <b>59.5</b>   | <b>0.3</b>                            | <b>59.8</b>   |

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

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

## OECD Americas

**OECD Americas total commercial stocks** fell by 1.6 mb m-o-m in December, for the third consecutive month. At 1,526 mb, they stood 27 mb above a year ago, and 54 mb above the latest five-year average. Within components, crude stocks fell by 7.2 mb, while total product stocks rose by 5.6 mb, m-o-m.

Commercial **crude oil stocks** in OECD Americas fell by 7.2 mb m-o-m in December to stand at 803 mb. This was 39 mb higher than the same time a year ago, and 68 mb above the latest five-year average. The drop in crude oil stocks came from higher US crude throughput, which increased by 460 tb/d to average 17.8 mb/d. Lower US crude imports also contributed to the drop in crude oil stocks.

In contrast, **total product stocks** in OECD Americas rose by 5.6 mb m-o-m in December to stand at 723 mb. This was 11.6 mb below the same time one year ago, and 14.2 mb below the seasonal norm. Lower consumption was behind the product stock build.

## OECD Europe

**OECD Europe's total commercial stocks** rose by 4.4 mb m-o-m in December, ending the month at 922 mb. This was 20 mb lower than the same time a year ago, and 17 mb below the latest five-year average. Crude and product stocks increased by 2.3 mb and 2.0 mb, m-o-m, respectively.

OECD Europe's commercial **crude stocks** rose by 2.3 mb m-o-m in December, ending the month at 410 mb. This was 10 mb above a year earlier and 8.1 mb higher than the latest five-year average. The build in crude oil stocks could be attributed to higher crude supply from the region. However, higher refinery throughput limited a further build in OECD European crude oil stocks.

OECD Europe's commercial **product stocks** also increased by 2.0 mb m-o-m to end December at 513 mb. This was 30 mb below the same time a year ago and 25 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** fell significantly by 13.5 mb m-o-m in December to stand at 403 mb. At this level, they were 9.5 mb lower than a year ago and 9.2 mb below the latest five-year average. Within components, crude and product stocks dropped by 7.2 mb and 6.4 mb, m-o-m, respectively.

OECD Asia Pacific's **crude inventories** fell by 7.2 mb m-o-m to end the month of December at 220 mb, which was 27.6 mb below one year ago and 25.9 mb below the seasonal norm.



OECD Asia Pacific's **total product inventories** also declined by 6.4 mb m-o-m to end December at 183 mb, standing 18.1 mb above the same time a year ago, and 16.7 mb higher than the seasonal norm.

## US

Preliminary data for January showed that **US total commercial oil stocks** rose by 16.8 mb m-o-m to stand at 1,259.0 mb. At this level, total US commercial stocks stood at 43.8 mb, or 3.6%, above the same period a year ago, and 45.7 mb, or 3.8%, higher than the latest five-year average. Within components, crude and product stocks rose by 5.8 mb and 11.0 mb, m-o-m, respectively.

US commercial **crude stocks** rose in January to stand at 447.2 mb, which was 27.3 mb, or 6.5%, above last year at the same time, and 22.4 mb, or 5.3%, above the latest five-year average. This build came from higher crude imports, which increased by around 50 tb/d to stand at 7.54 mb/d. Lower crude throughput, which declined by 870 tb/d to average 16.9 mb/d, also contributed to the build in crude oil stocks. In January, crude inventories in Cushing, Oklahoma, rose by more than 0.7 mb to end the month at 42.26 mb.

**Total product stocks** also rose by 11.0 mb m-o-m in January to stand at 811.8 mb, which is 16.5 mb, or 2.1%, above the level seen at the same time in 2018, and 23.3 mb, or 3.0%, above the seasonal average. Within products, the picture was mixed; gasoline, distillates, residual fuel and jet fuel experienced stock builds, while propylene and other unfinished product inventories witnessed stock draws.

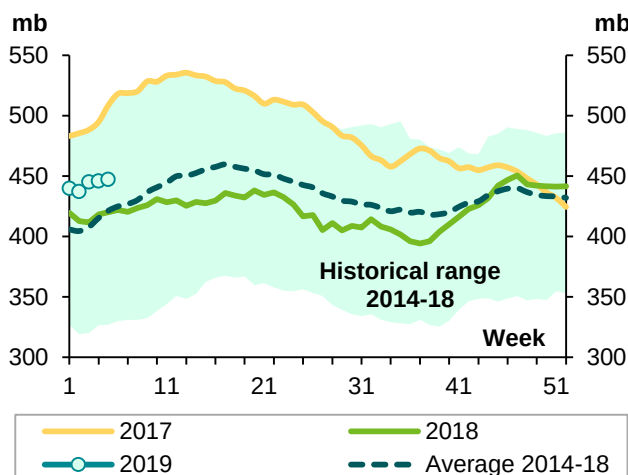
**Gasoline stocks** increased by 17.9 mb m-o-m in January to stand at 257.9 mb. At this level, they were 9.9 mb, or 4.0%, above levels at the same time last year, and 7.8 mb, or 3.1%, higher than the seasonal norm. This monthly build came on the back of lower gasoline consumption to average 9.0 mb/d.

**Distillate stocks** also rose by 9.6 mb m-o-m in January for the third consecutive month. At 139.0 mb, distillate stocks stood at 2.1 mb, or 1.5%, below the same period a year ago, and 4.8 mb, or 3.4%, below the latest five-year average. The stock build could be attributed to higher imports, which outpaced the increase in distillate demand.

**Jet fuel oil stocks** were up by 0.8 mb m-o-m to stand at 41.5 mb in January. At this level, they were 1.2 mb, or 2.7%, lower than a year ago at the same time, but 0.5 mb, or 1.3%, higher than the latest five-year average.

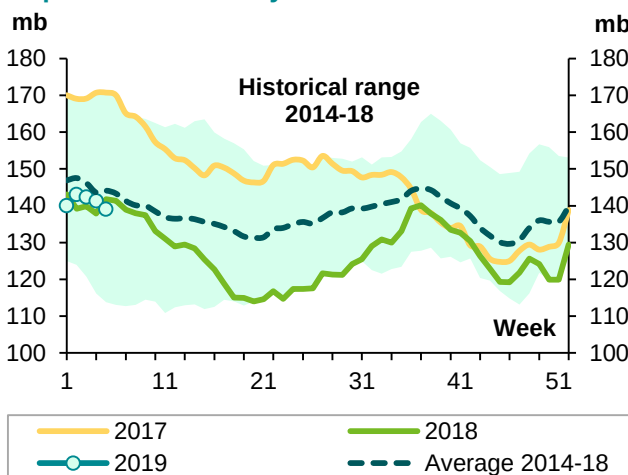
**Residual fuel stocks** rose by 0.9 mb m-o-m, ending January at 28.8 mb, which is 3.6 mb, or 11.0%, below the same time a year ago and 8.4 mb, or 22.7%, below the latest five-year average.

**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

|                       | Nov 18         | Dec 18         | Jan 19         | Change<br>Jan 19/Dec 18 | Jan 18         |
|-----------------------|----------------|----------------|----------------|-------------------------|----------------|
| <b>Crude oil</b>      | <b>448.6</b>   | <b>441.4</b>   | <b>447.2</b>   | <b>5.8</b>              | <b>419.9</b>   |
| Gasoline              | 230.0          | 240.0          | 257.9          | 17.9                    | 247.9          |
| Distillate fuel       | 126.4          | 129.4          | 139.0          | 9.6                     | 141.1          |
| Residual fuel oil     | 29.8           | 27.9           | 28.8           | 0.9                     | 32.4           |
| Jet fuel              | 39.3           | 40.7           | 41.5           | 0.8                     | 42.7           |
| <b>Total products</b> | <b>812.2</b>   | <b>800.7</b>   | <b>811.8</b>   | <b>11.0</b>             | <b>795.3</b>   |
| <b>Total</b>          | <b>1,260.8</b> | <b>1,242.2</b> | <b>1,259.0</b> | <b>16.8</b>             | <b>1,215.2</b> |
| <b>SPR</b>            | <b>649.6</b>   | <b>649.1</b>   | <b>649.1</b>   | <b>0.0</b>              | <b>664.2</b>   |

Sources: US EIA and OPEC Secretariat.

## Japan

In Japan, **total commercial oil stocks** fell by 13.5 mb m-o-m in December, reversing the build of the last two months. At 142.7 mb, they were 1.6 mb, or 1.1%, below one year ago, and 11.4 mb, or 7.4%, below the latest five-year average. Within components, crude and product stocks fell by 7.2 mb and 6.4 mb, m-o-m, respectively.

Japanese commercial **crude oil stocks** fell in December to stand at 79.4 mb. This was 8.1 mb, or 9.2%, below the same period a year ago, and 11.7 mb, or 12.9%, below the seasonal norm. The drop was driven by lower crude imports, which decreased by 4%. Higher refinery throughput also contributed to the drop.

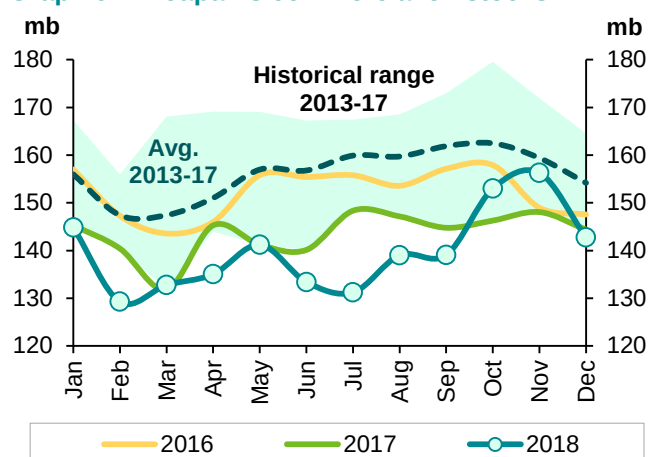
Japan's **total product inventories** also fell m-o-m by 6.4 mb to end December at 63.3 mb. This was 6.4 mb, or 11.3%, higher than the same month last year, but 0.3 mb, or 0.4%, above the seasonal norm. With the exception of residual fuel oil, all products witnessed stock draws.

**Gasoline stocks** fell by 1.8 mb m-o-m to stand at 9.3 mb in December. At this level, they were 0.2 mb or 1.7% lower than a year ago, and were 0.6 mb or 5.7% lower than the latest five-year average. The drop was mainly driven by higher domestic sales, which increased by 12.4% from the previous month. However, higher gasoline output, which increased by 11.6%, limited a further drop in gasoline stocks.

**Distillate stocks** also dropped by 4.6 mb m-o-m to stand at 29.4 mb in December. This was 2.3 mb, or 8.7%, above the same time a year ago, but 0.8 mb, or 2.8%, below the seasonal average. Within distillate components, jet fuel, kerosene and gasoil stocks fell m-o-m by 3.1%, 19.5% and 8.4%, respectively. Higher domestic sales were behind the drop in these three products.

In contrast, **total residual fuel oil stocks** rose by 0.3 mb m-o-m in December to stand at 14.2 mb. This was 1.7 mb, or 14.0%, above the same period a year ago, and 0.1 mb, or 0.9%, higher than the latest five-year average. Within fuel oil components, fuel oil A stocks fell by 1.5%, while fuel oil B.C stocks rose by 5.0%. The drop in fuel oil A was driven by higher domestic sales, while the build in fuel oil B.C could be attributed to higher output.

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**

|                           | <u>Oct 18</u> | <u>Nov 18</u> | <u>Dec 18</u> | <u>Change</u><br><u>Dec 18/Nov 18</u> | <u>Dec 17</u> |
|---------------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| <b>Crude oil</b>          | <b>88.6</b>   | <b>86.6</b>   | <b>79.4</b>   | <b>-7.2</b>                           | <b>87.5</b>   |
| <b>Gasoline</b>           | 10.5          | 11.1          | 9.3           | -1.8                                  | 9.4           |
| <b>Naphtha</b>            | 9.4           | 10.8          | 10.4          | -0.3                                  | 7.9           |
| <b>Middle distillates</b> | 31.2          | 34.0          | 29.4          | -4.6                                  | 27.1          |
| <b>Residual fuel oil</b>  | 13.3          | 13.9          | 14.2          | 0.3                                   | 12.5          |
| <b>Total products</b>     | <b>64.3</b>   | <b>69.7</b>   | <b>63.3</b>   | <b>-6.4</b>                           | <b>56.9</b>   |
| <b>Total**</b>            | <b>153.0</b>  | <b>156.3</b>  | <b>142.7</b>  | <b>-13.5</b>                          | <b>144.4</b>  |

Note: \* At the end of the month.

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

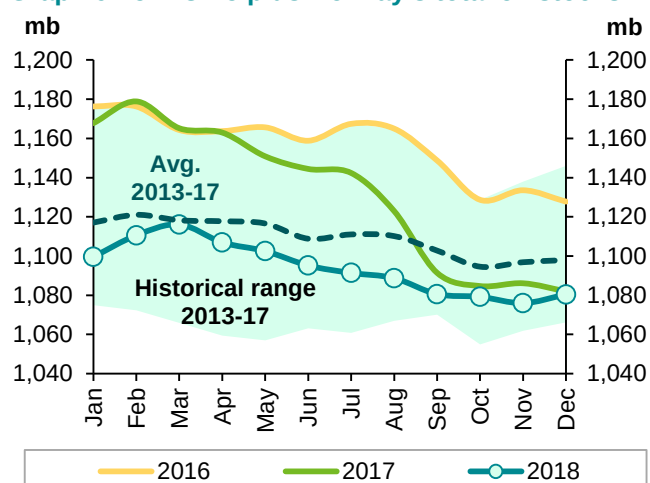
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

## EU plus Norway

Preliminary data for December show that **total European commercial oil stocks** rose by 4.4 mb m-o-m to stand at 1,080.4 mb. This was 1.6 mb, or 0.1% lower than the same time a year ago, and 17.6 mb, or 1.6%, lower than the latest five-year average. Within components, crude and products stocks rose by 2.3 mb and 2.0 mb, m-o-m, respectively.

European **crude inventories** rose in December to stand at 470.3 mb. This was 9.7 mb, or 2.1%, higher than the same period a year ago, but 3.6 mb, or 0.8%, less than the latest five-year average. The build in crude oil stocks could be attributed to higher crude supply from the region. Higher refinery throughput in EU countries, which increased by 190 tb/d to stand at 10.59 mb/d, limited a further build in crude oil stocks.

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



Sources: Argus, Euroilstock and OPEC Secretariat.

European **total product stocks** also increased by 2.0 mb m-o-m, ending December at 610 mb. This was 11.3 mb, or 1.8%, lower than the same time a year ago, and 14.0 mb, or 2.2%, lower than the seasonal norm. Within products, gasoline witnessed a stock build, while naphtha and residual fuel stocks experienced a stock draw. Distillate stocks remained unchanged in December.

**Gasoline stocks** rose by 2.8 mb in December to stand at 114.4 mb. At this level, they are 6.7 mb, or 5.5%, below the latest five year average, while they stood at 1.3 mb, or 1.1%, below the seasonal norm. This build was likely driven by lower domestic consumption in the region, combined with higher refinery output.

**Naphtha and residual fuel stocks** fell by 0.4 mb and 0.3 mb, m-o-m to end December at 29.9 mb and 66.6 mb, respectively. Naphtha stocks stood at 0.5 mb, or 1.6%, higher than last year's level at the same time, and were about 4.8 mb, or 19.2%, higher the latest five-year average. Residual fuel stocks were 2.4 mb, or 3.7%, higher than the same time one year ago, but 6.4 mb, or 8.8%, lower than the seasonal norm.

In contrast, **distillate stocks** in December remained unchanged when compared with the previous month, to stand at 399.2 mb. At this level, they were 7.5 mb, or 1.8%, lower than the same time a year ago, and 11.1 mb, or 2.7%, below the latest five-year average.

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

|                       | <u>Oct 18</u>  | <u>Nov 18</u>  | <u>Dec 18</u>  | <u>Change<br/>Dec 18/Nov 18</u> | <u>Dec 17</u>  |
|-----------------------|----------------|----------------|----------------|---------------------------------|----------------|
| <b>Crude oil</b>      | <b>472.0</b>   | <b>468.0</b>   | <b>470.3</b>   | <b>2.3</b>                      | <b>460.7</b>   |
| Gasoline              | 108.8          | 111.6          | 114.4          | 2.8                             | 121.1          |
| Naphtha               | 29.9           | 30.4           | 29.9           | -0.4                            | 29.4           |
| Middle distillates    | 403.8          | 399.2          | 399.2          | 0.0                             | 406.6          |
| Fuel oils             | 64.7           | 66.9           | 66.6           | -0.3                            | 64.2           |
| <b>Total products</b> | <b>607.2</b>   | <b>608.0</b>   | <b>610.0</b>   | <b>2.0</b>                      | <b>621.3</b>   |
| <b>Total</b>          | <b>1,079.2</b> | <b>1,076.0</b> | <b>1,080.4</b> | <b>4.4</b>                      | <b>1,082.0</b> |

Sources: Argus, Euroilstock and OPEC Secretariat.

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

### Singapore

At the end of December, **total product stocks in Singapore** rose by 3.1 mb m-o-m for the second consecutive month to stand at 47.2 mb. This was 0.6 mb, or 1.3%, above the same period a year ago. All refined product stocks experienced a stock build.

**Light distillate stocks** increased by 1.5 mb m-o-m for the third consecutive month to stand at 15.7 mb in December. This was 2.2 mb, or 16.3%, above the same time a year ago.

**Middle distillate and residual fuel stocks** also rose by 0.7 mb and 0.9 mb, m-o-m, ending the month of December at 11.4 mb and 20.1 mb, respectively. Middle distillate stocks were 2.1 mb below the same period a year ago, while residual fuel stocks stood at a deficit of 3.7 mb, compared with the same period last year.

### ARA

**Total product stocks in ARA** rose by 4.0 mb in December, m-o-m, reversing the stock draw of the last two months. At 40.9 mb, they were 3.1 mb, or 8.2%, above the same time a year ago. Refined product stocks were mixed, with gasoline, gasoil and fuel oil witnessing stock builds, while jet oil and naphtha saw stock draws.

**Gasoline and gasoil stocks** rose by 3.0 mb and 0.2 mb m-o-m in December to stand at 11.4 mb and 15.3 mb, respectively. Gasoline remained 4.1 mb above last year's level, while gasoil stocks were 1.3 mb below the same time last year.

**Fuel oil stocks** also rose by 1.4 mb m-o-m in December, ending the month at 7.4 mb, which is 1.5 mb above a year ago at the same time.

By contrast, **naphtha and jet oil stocks** fell by 0.1 mb and 0.5 mb m-o-m in December to stand at 7.40 mb and 4.6 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 31.6 mb/d, 1.3 mb/d lower than the 2017 level and 0.1 mb/d lower than in the previous month's assessment. 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 was in line with the demand for OPEC crude. In 3Q18, OPEC crude production averaged 31.9 mb/d, around 0.2 mb/d higher than the demand for OPEC crude. OPEC crude production stood at 32.1 mb/d in 4Q18, around 0.8 mb/d higher than the demand for OPEC crude.

**Demand for OPEC crude in 2019** is forecast to decline by 1.0 mb/d to average 30.6 mb/d, around 0.2 mb/d lower than the last month's assessment.

## Balance of supply and demand in 2018

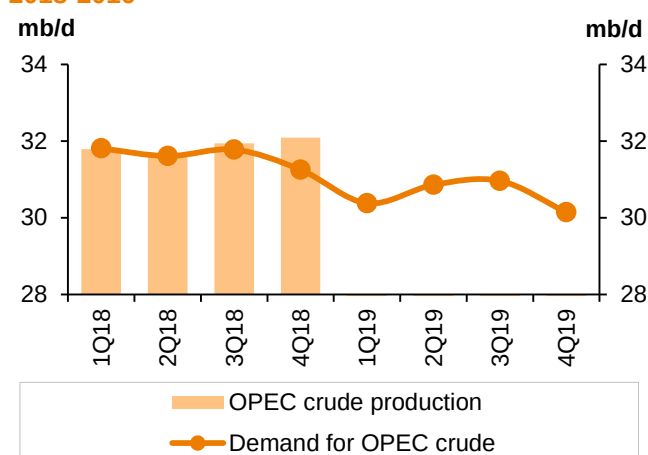
**Demand for OPEC crude for 2018** was revised down by 0.1 mb/d from the previous month's report to stand at 31.6 mb/d, 1.3 mb/d lower than the 2017 level.

Compared with the last month's report, 1Q18 and 2Q18 remained unchanged, while 3Q18 and 4Q18 were revised down by 0.1 mb/d and 0.5 mb/d, respectively.

Compared with the same quarters in 2017, 1Q18 was 0.2 mb/d higher, while 2Q18 was 1.1 mb/d lower. 3Q18 and 4Q18 are estimated to have fallen by 2.1 mb/d each.

In comparison, according to secondary sources, OPEC crude production averaged 31.8 mb/d and 31.6 mb/d in 1Q18 and 2Q18, respectively, which is in line with the demand for OPEC crude. In 3Q18, OPEC crude production averaged 31.9 mb/d, around 0.2 mb/d higher than the demand for OPEC crude. In 4Q18, OPEC crude production stood at 32.1 mb/d, around 0.8 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<br>2018/17 |
|------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|
| <b>(a) World oil demand</b>                    | <b>97.29</b> | <b>97.80</b> | <b>98.02</b> | <b>99.30</b> | <b>99.89</b> | <b>98.76</b> | <b>1.47</b>       |
| Non-OPEC supply                                | 59.45        | 61.07        | 61.44        | 62.54        | 63.58        | 62.17        | 2.72              |
| OPEC NGLs and non-conventionals                | 4.94         | 4.92         | 4.96         | 4.98         | 5.06         | 4.98         | 0.04              |
| <b>(b) Total non-OPEC supply and OPEC NGLs</b> | <b>64.39</b> | <b>65.99</b> | <b>66.41</b> | <b>67.52</b> | <b>68.64</b> | <b>67.15</b> | <b>2.76</b>       |
| <b>Difference (a-b)</b>                        | <b>32.90</b> | <b>31.81</b> | <b>31.61</b> | <b>31.78</b> | <b>31.25</b> | <b>31.61</b> | <b>-1.29</b>      |
| <b>OPEC crude oil production</b>               | <b>32.01</b> | <b>31.79</b> | <b>31.59</b> | <b>31.94</b> | <b>32.09</b> | <b>31.85</b> | <b>-0.16</b>      |
| <b>Balance</b>                                 | <b>-0.89</b> | <b>-0.02</b> | <b>-0.02</b> | <b>0.16</b>  | <b>0.84</b>  | <b>0.24</b>  | <b>1.13</b>       |

Notes: \* 2018 = Estimate.

Totals may not add up due to independent rounding.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

## Balance of supply and demand in 2019

**Demand for OPEC crude in 2019** was revised down by 0.2 mb/d from the previous report to stand at 30.6 mb/d, 1.0 mb/d lower than the 2018 level.

Compared with the last month's report, both 1Q19 and 3Q19 were revised down by 0.3 mb/d each, while 2Q19 and 4Q19 were revised down by 0.2 mb/d and 0.1 mb/d, respectively.

Compared with the same quarters in 2018, 1Q19 is forecast to fall by 1.4 mb/d, 2Q19 and 3Q19 are expected to decline by 0.8 mb/d each, and 4Q19 is expected to drop by 1.1 mb/d.

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

|                                                | 2018         | 1Q19         | 2Q19         | 3Q19          | 4Q19          | 2019          | Change<br>2019/18 |
|------------------------------------------------|--------------|--------------|--------------|---------------|---------------|---------------|-------------------|
| <b>(a) World oil demand</b>                    | <b>98.76</b> | <b>99.02</b> | <b>99.21</b> | <b>100.57</b> | <b>101.16</b> | <b>100.00</b> | <b>1.24</b>       |
| Non-OPEC supply                                | 62.17        | 63.61        | 63.30        | 64.53         | 65.91         | 64.34         | 2.18              |
| OPEC NGLs and non-conventionals                | 4.98         | 5.04         | 5.05         | 5.08          | 5.11          | 5.07          | 0.09              |
| <b>(b) Total non-OPEC supply and OPEC NGLs</b> | <b>67.15</b> | <b>68.64</b> | <b>68.35</b> | <b>69.61</b>  | <b>71.02</b>  | <b>69.41</b>  | <b>2.27</b>       |
| <b>Difference (a-b)</b>                        | <b>31.61</b> | <b>30.38</b> | <b>30.86</b> | <b>30.96</b>  | <b>30.14</b>  | <b>30.59</b>  | <b>-1.03</b>      |
| <b>OPEC crude oil production</b>               | <b>31.85</b> |              |              |               |               |               |                   |
| <b>Balance</b>                                 | <b>0.24</b>  |              |              |               |               |               |                   |

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          |
|------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| <b>World demand</b>                                  |              |              |              |              |              |              |              |              |              |              |               |               |               |
| <b>OECD</b>                                          | 46.52        | 46.97        | 47.42        | 47.69        | 47.24        | 48.11        | 48.37        | 47.86        | 47.94        | 47.43        | 48.38         | 48.61         | 48.09         |
| Americas                                             | 24.59        | 24.87        | 25.06        | 25.20        | 25.40        | 25.73        | 25.74        | 25.52        | 25.43        | 25.64        | 26.01         | 26.00         | 25.77         |
| Europe                                               | 13.83        | 13.99        | 14.30        | 13.95        | 14.19        | 14.68        | 14.42        | 14.31        | 13.97        | 14.18        | 14.69         | 14.42         | 14.32         |
| Asia Pacific                                         | 8.10         | 8.11         | 8.06         | 8.54         | 7.65         | 7.70         | 8.21         | 8.03         | 8.53         | 7.61         | 7.68          | 8.18          | 8.00          |
| <b>DCs</b>                                           | 30.89        | 31.51        | 32.13        | 32.44        | 32.60        | 32.86        | 32.62        | 32.63        | 32.98        | 33.15        | 33.42         | 33.18         | 33.18         |
| <b>FSU</b>                                           | 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          |
| <b>Other Europe</b>                                  | 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          |
| <b>China</b>                                         | 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         |
| <b>(a) Total world demand</b>                        | <b>94.16</b> | <b>95.61</b> | <b>97.29</b> | <b>97.80</b> | <b>98.02</b> | <b>99.30</b> | <b>99.89</b> | <b>98.76</b> | <b>99.02</b> | <b>99.21</b> | <b>100.57</b> | <b>101.16</b> | <b>100.00</b> |
| <b>Non-OPEC supply</b>                               |              |              |              |              |              |              |              |              |              |              |               |               |               |
| <b>OECD</b>                                          | 25.36        | 24.86        | 25.71        | 27.25        | 27.47        | 28.56        | 29.13        | 28.11        | 29.10        | 29.01        | 30.03         | 31.00         | 29.79         |
| Americas                                             | 21.08        | 20.57        | 21.49        | 22.93        | 23.36        | 24.51        | 24.89        | 23.93        | 24.86        | 24.93        | 25.84         | 26.57         | 25.56         |
| Europe                                               | 3.82         | 3.86         | 3.83         | 3.92         | 3.73         | 3.63         | 3.80         | 3.77         | 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          |
| <b>DCs</b>                                           | 13.79        | 13.53        | 13.38        | 13.41        | 13.47        | 13.34        | 13.49        | 13.43        | 13.59        | 13.60        | 13.80         | 14.05         | 13.76         |
| <b>FSU</b>                                           | 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         |
| <b>Other Europe</b>                                  | 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          |
| <b>China</b>                                         | 4.40         | 4.09         | 3.97         | 3.94         | 4.00         | 3.94         | 4.02         | 3.97         | 3.99         | 3.94         | 3.93          | 3.95          | 3.95          |
| <b>Processing gains</b>                              | 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          |
| <b>Total non-OPEC supply</b>                         | <b>59.55</b> | <b>58.66</b> | <b>59.45</b> | <b>61.07</b> | <b>61.44</b> | <b>62.54</b> | <b>63.58</b> | <b>62.17</b> | <b>63.61</b> | <b>63.30</b> | <b>64.53</b>  | <b>65.91</b>  | <b>64.34</b>  |
| <b>OPEC NGLs + non-conventional oils</b>             | 4.69         | 4.81         | 4.94         | 4.92         | 4.96         | 4.98         | 5.06         | 4.98         | 5.04         | 5.05         | 5.08          | 5.11          | 5.07          |
| <b>(b) Total non-OPEC supply and OPEC NGLs</b>       | <b>64.24</b> | <b>63.47</b> | <b>64.39</b> | <b>65.99</b> | <b>66.41</b> | <b>67.52</b> | <b>68.64</b> | <b>67.15</b> | <b>68.64</b> | <b>68.35</b> | <b>69.61</b>  | <b>71.02</b>  | <b>69.41</b>  |
| <b>OPEC crude oil production (secondary sources)</b> | 31.24        | 32.21        | 32.01        | 31.79        | 31.59        | 31.94        | 32.09        | 31.85        |              |              |               |               |               |
| <b>Total supply</b>                                  | 95.48        | 95.68        | 96.40        | 97.78        | 98.00        | 99.46        | 100.73       | 99.00        |              |              |               |               |               |
| <b>Balance (stock change and miscellaneous)</b>      | 1.32         | 0.07         | -0.89        | -0.02        | -0.02        | 0.16         | 0.84         | 0.24         |              |              |               |               |               |
| <b>OECD closing stock levels, mb</b>                 |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Commercial                                           | 2,989        | 3,002        | 2,853        | 2,816        | 2,817        | 2,869        | 2,851        | 2,851        |              |              |               |               |               |
| SPR                                                  | 1,588        | 1,600        | 1,568        | 1,575        | 1,570        | 1,565        | 1,550        | 1,550        |              |              |               |               |               |
| <b>Total</b>                                         | <b>4,577</b> | <b>4,602</b> | <b>4,421</b> | <b>4,391</b> | <b>4,386</b> | <b>4,434</b> | <b>4,401</b> | <b>4,401</b> |              |              |               |               |               |
| <b>Oil-on-water</b>                                  | 1,017        | 1,102        | 1,025        | 1,036        | 1,014        | 1,041        | 1,062        | 1,062        |              |              |               |               |               |
| <b>Days of forward consumption in OECD, days</b>     |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Commercial onland stocks                             | 64           | 63           | 60           | 60           | 59           | 59           | 59           | 59           |              |              |               |               |               |
| SPR                                                  | 34           | 34           | 33           | 33           | 33           | 32           | 32           | 32           |              |              |               |               |               |
| <b>Total</b>                                         | <b>97</b>    | <b>97</b>    | <b>92</b>    | <b>93</b>    | <b>91</b>    | <b>92</b>    | <b>92</b>    | <b>92</b>    |              |              |               |               |               |
| <b>Memo items</b>                                    |              |              |              |              |              |              |              |              |              |              |               |               |               |
| <b>(a) - (b)</b>                                     | <b>29.92</b> | <b>32.14</b> | <b>32.90</b> | <b>31.81</b> | <b>31.61</b> | <b>31.78</b> | <b>31.25</b> | <b>31.61</b> | <b>30.38</b> | <b>30.86</b> | <b>30.96</b>  | <b>30.14</b>  | <b>30.59</b>  |

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

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

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

|                                                      | 2015 | 2016 | 2017 | 1Q18  | 2Q18  | 3Q18  | 4Q18  | 2018  | 1Q19  | 2Q19  | 3Q19  | 4Q19  | 2019  |
|------------------------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>World demand</b>                                  |      |      |      |       |       |       |       |       |       |       |       |       |       |
| <b>OECD</b>                                          | -    | -    | -    | -     | -     | -0.05 | 0.01  | -0.01 | -0.04 | -0.01 | -0.06 | -     | -0.03 |
| Americas                                             | -    | -    | -    | -     | -     | -     | 0.10  | 0.03  | -0.03 | -     | -     | 0.10  | 0.02  |
| Europe                                               | -    | -    | -    | -     | -     | -0.05 | -0.04 | -0.02 | -0.01 | -0.01 | -0.06 | -0.05 | -0.03 |
| Asia Pacific                                         | -    | -    | -    | -     | -     | -     | -0.05 | -0.01 | -     | -     | -     | -0.05 | -0.01 |
| <b>DCs</b>                                           | -    | -    | -    | -     | -     | -     | -0.06 | -0.02 | -0.03 | -0.03 | -0.04 | -0.10 | -0.05 |
| <b>FSU</b>                                           | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Other Europe</b>                                  | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>China</b>                                         | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>(a) Total world demand</b>                        | -    | -    | -    | -     | -     | -0.05 | -0.05 | -0.03 | -0.07 | -0.04 | -0.09 | -0.09 | -0.08 |
| <b>Non-OPEC supply</b>                               |      |      |      |       |       |       |       |       |       |       |       |       |       |
| <b>OECD</b>                                          | -    | -    | -    | -     | 0.01  | -0.02 | 0.31  | 0.08  | 0.26  | 0.17  | 0.24  | 0.06  | 0.18  |
| Americas                                             | -    | -    | -    | -     | 0.01  | -0.02 | 0.28  | 0.07  | 0.26  | 0.17  | 0.24  | 0.06  | 0.18  |
| Europe                                               | -    | -    | -    | -     | -     | 0.01  | 0.04  | 0.01  | -     | -     | -     | -     | -     |
| Asia Pacific                                         | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>DCs</b>                                           | -    | -    | -    | -     | -     | 0.02  | 0.06  | 0.02  | -     | -     | -     | -     | -     |
| <b>FSU</b>                                           | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Other Europe</b>                                  | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>China</b>                                         | -    | -    | -    | -     | -     | -     | 0.03  | 0.01  | -     | -     | -     | -     | -     |
| <b>Processing gains</b>                              | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Total non-OPEC supply</b>                         | -    | -    | -    | -     | 0.01  | 0.01  | 0.41  | 0.11  | 0.26  | 0.17  | 0.24  | 0.06  | 0.18  |
| <b>OPEC NGLs + non-conventionals</b>                 | -    | -    | -    | -     | -     | -     | 0.01  | -     | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| <b>(b) Total non-OPEC supply and OPEC NGLs</b>       | -    | -    | -    | -     | 0.01  | 0.01  | 0.41  | 0.11  | 0.24  | 0.15  | 0.22  | 0.04  | 0.16  |
| <b>OPEC crude oil production (secondary sources)</b> | -    | 0.01 | -    | -0.01 | -     | -0.03 | 0.01  | -0.01 | -     | -     | -     | -     | -     |
| <b>Total supply</b>                                  | -    | 0.01 | -    | -0.01 | 0.01  | -0.02 | 0.42  | 0.10  | -     | -     | -     | -     | -     |
| <b>Balance (stock change and miscellaneous)</b>      | -    | 0.01 | -    | -0.01 | 0.01  | 0.03  | 0.47  | 0.12  | -     | -     | -     | -     | -     |
| <b>OECD closing stock levels (mb)</b>                |      |      |      |       |       |       |       |       |       |       |       |       |       |
| Commercial                                           | -    | -    | -    | -     | -     | 3     | -     | -     | -     | -     | -     | -     | -     |
| SPR                                                  | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Total</b>                                         | -    | -    | -    | -     | -     | 3     | -     | -     | -     | -     | -     | -     | -     |
| <b>Oil-on-water</b>                                  | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Days of forward consumption in OECD</b>           |      |      |      |       |       |       |       |       |       |       |       |       |       |
| Commercial onland stocks                             | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| SPR                                                  | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Total</b>                                         | -    | -    | -    | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| <b>Memo items</b>                                    |      |      |      |       |       |       |       |       |       |       |       |       |       |
| <b>(a) - (b)</b>                                     | -    | -    | -    | -     | -0.01 | -0.06 | -0.46 | -0.13 | -0.32 | -0.19 | -0.31 | -0.14 | -0.24 |

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

This table shows only where changes have occurred.

Non-OPEC supply includes Qatar.

Source: OPEC Secretariat.

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

|                                                  | <u>2016</u>  | <u>2017</u>  | <u>2018</u>  | <u>4Q16</u>  | <u>1Q17</u>  | <u>2Q17</u>  | <u>3Q17</u>  | <u>4Q17</u>  | <u>1Q18</u>  | <u>2Q18</u>  | <u>3Q18</u>  | <u>4Q18</u>  |
|--------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Closing stock levels, mb</b>                  |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>OECD onland commercial</b>                    | <b>3,002</b> | <b>2,853</b> | <b>2,851</b> | <b>3,002</b> | <b>3,031</b> | <b>3,019</b> | <b>2,969</b> | <b>2,853</b> | <b>2,816</b> | <b>2,817</b> | <b>2,869</b> | <b>2,851</b> |
| Americas                                         | 1,598        | 1,498        | 1,526        | 1,598        | 1,606        | 1,596        | 1,571        | 1,498        | 1,468        | 1,471        | 1,541        | 1,526        |
| Europe                                           | 989          | 943          | 922          | 989          | 1,022        | 999          | 965          | 943          | 970          | 958          | 938          | 922          |
| Asia Pacific                                     | 414          | 412          | 403          | 414          | 404          | 424          | 433          | 412          | 378          | 388          | 390          | 403          |
| <b>OECD SPR</b>                                  | <b>1,600</b> | <b>1,568</b> | <b>1,550</b> | <b>1,600</b> | <b>1,600</b> | <b>1,588</b> | <b>1,578</b> | <b>1,568</b> | <b>1,575</b> | <b>1,570</b> | <b>1,565</b> | <b>1,550</b> |
| Americas                                         | 697          | 665          | 651          | 697          | 694          | 681          | 676          | 665          | 667          | 662          | 662          | 651          |
| Europe                                           | 481          | 480          | 478          | 481          | 484          | 484          | 479          | 480          | 485          | 486          | 481          | 478          |
| Asia Pacific                                     | 421          | 423          | 421          | 421          | 422          | 423          | 423          | 423          | 422          | 422          | 422          | 421          |
| <b>OECD total</b>                                | <b>4,602</b> | <b>4,421</b> | <b>4,401</b> | <b>4,602</b> | <b>4,630</b> | <b>4,608</b> | <b>4,547</b> | <b>4,421</b> | <b>4,391</b> | <b>4,386</b> | <b>4,434</b> | <b>4,401</b> |
| <b>Oil-on-water</b>                              | <b>1,102</b> | <b>1,025</b> | <b>1,062</b> | <b>1,102</b> | <b>1,043</b> | <b>1,052</b> | <b>998</b>   | <b>1,025</b> | <b>1,036</b> | <b>1,014</b> | <b>1,041</b> | <b>1,062</b> |
| <b>Days of forward consumption in OECD, days</b> |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>OECD onland commercial</b>                    | <b>63</b>    | <b>60</b>    | <b>59</b>    | <b>64</b>    | <b>64</b>    | <b>63</b>    | <b>62</b>    | <b>60</b>    | <b>60</b>    | <b>59</b>    | <b>59</b>    | <b>59</b>    |
| Americas                                         | 64           | 59           | 59           | 65           | 64           | 63           | 62           | 59           | 58           | 57           | 60           | 60           |
| Europe                                           | 69           | 66           | 64           | 72           | 72           | 68           | 67           | 68           | 68           | 65           | 65           | 66           |
| Asia Pacific                                     | 51           | 51           | 50           | 49           | 53           | 54           | 52           | 48           | 49           | 50           | 47           | 47           |
| <b>OECD SPR</b>                                  | <b>34</b>    | <b>33</b>    | <b>33</b>    | <b>34</b>    | <b>34</b>    | <b>33</b>    | <b>33</b>    | <b>33</b>    | <b>33</b>    | <b>33</b>    | <b>32</b>    | <b>32</b>    |
| Americas                                         | 28           | 26           | 26           | 28           | 28           | 27           | 27           | 26           | 26           | 26           | 26           | 26           |
| Europe                                           | 34           | 34           | 34           | 35           | 34           | 33           | 33           | 34           | 34           | 33           | 33           | 34           |
| Asia Pacific                                     | 52           | 53           | 53           | 50           | 55           | 54           | 51           | 50           | 55           | 55           | 51           | 49           |
| <b>OECD total</b>                                | <b>97</b>    | <b>92</b>    | <b>93</b>    | <b>98</b>    | <b>98</b>    | <b>97</b>    | <b>95</b>    | <b>93</b>    | <b>93</b>    | <b>91</b>    | <b>92</b>    | <b>92</b>    |

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

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

|                                      | 2015        | 2016        | 2017        | 3Q18        | 4Q18        | 2018        | Change<br>18/17 | 1Q19        | 2Q19        | 3Q19        | 4Q19        | 2019        | Change<br>19/18 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| US                                   | 14.1        | 13.6        | 14.4        | 17.2        | 17.6        | 16.6        | 2.2             | 17.7        | 18.0        | 18.6        | 19.4        | 18.4        | 1.8             |
| Canada                               | 4.4         | 4.5         | 4.9         | 5.3         | 5.3         | 5.2         | 0.4             | 5.2         | 5.0         | 5.3         | 5.2         | 5.2         | 0.0             |
| 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            |
| <b>OECD Americas</b>                 | <b>21.1</b> | <b>20.6</b> | <b>21.5</b> | <b>24.5</b> | <b>24.9</b> | <b>23.9</b> | <b>2.4</b>      | <b>24.9</b> | <b>24.9</b> | <b>25.8</b> | <b>26.6</b> | <b>25.6</b> | <b>1.6</b>      |
| 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         | 1.1         | 1.1         | 0.0             | 1.1         | 1.1         | 1.0         | 1.2         | 1.1         | 0.1             |
| Denmark                              | 0.2         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             |
| Other OECD Europe                    | 0.7         | 0.7         | 0.7         | 0.7         | 0.8         | 0.7         | 0.1             | 0.7         | 0.7         | 0.7         | 0.7         | 0.7         | 0.0             |
| <b>OECD Europe</b>                   | <b>3.8</b>  | <b>3.9</b>  | <b>3.8</b>  | <b>3.6</b>  | <b>3.8</b>  | <b>3.8</b>  | <b>-0.1</b>     | <b>3.8</b>  | <b>3.6</b>  | <b>3.7</b>  | <b>3.9</b>  | <b>3.8</b>  | <b>0.0</b>      |
| 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             |
| <b>OECD Asia Pacific</b>             | <b>0.5</b>  | <b>0.4</b>  | <b>0.4</b>  | <b>0.4</b>  | <b>0.4</b>  | <b>0.4</b>  | <b>0.0</b>      | <b>0.4</b>  | <b>0.5</b>  | <b>0.5</b>  | <b>0.5</b>  | <b>0.5</b>  | <b>0.1</b>      |
| <b>Total OECD</b>                    | <b>25.4</b> | <b>24.9</b> | <b>25.7</b> | <b>28.6</b> | <b>29.1</b> | <b>28.1</b> | <b>2.4</b>      | <b>29.1</b> | <b>29.0</b> | <b>30.0</b> | <b>31.0</b> | <b>29.8</b> | <b>1.7</b>      |
| Brunei                               | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             |
| India                                | 0.9         | 0.9         | 0.9         | 0.8         | 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         | 0.9         | 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         | 0.8         | 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             |
| <b>Other Asia</b>                    | <b>3.7</b>  | <b>3.7</b>  | <b>3.6</b>  | <b>3.5</b>  | <b>3.5</b>  | <b>3.5</b>  | <b>-0.1</b>     | <b>3.5</b>  | <b>3.4</b>  | <b>3.5</b>  | <b>3.5</b>  | <b>3.5</b>  | <b>-0.1</b>     |
| 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             |
| <b>Latin America</b>                 | <b>5.2</b>  | <b>5.1</b>  | <b>5.2</b>  | <b>5.1</b>  | <b>5.2</b>  | <b>5.2</b>  | <b>0.0</b>      | <b>5.4</b>  | <b>5.4</b>  | <b>5.5</b>  | <b>5.7</b>  | <b>5.5</b>  | <b>0.3</b>      |
| Bahrain                              | 0.2         | 0.2         | 0.2         | 0.2         | 0.2         | 0.2         | 0.0             | 0.2         | 0.2         | 0.2         | 0.2         | 0.2         | 0.0             |
| Oman                                 | 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             |
| <b>Middle East</b>                   | <b>3.3</b>  | <b>3.3</b>  | <b>3.1</b>  | <b>3.2</b>  | <b>3.2</b>  | <b>3.2</b>  | <b>0.1</b>      | <b>3.2</b>  | <b>3.2</b>  | <b>3.2</b>  | <b>3.2</b>  | <b>3.2</b>  | <b>0.0</b>      |
| 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             |
| <b>Africa</b>                        | <b>1.6</b>  | <b>1.5</b>  | <b>1.5</b>  | <b>1.5</b>  | <b>1.5</b>  | <b>1.5</b>  | <b>0.0</b>      | <b>1.5</b>  | <b>1.5</b>  | <b>1.6</b>  | <b>1.6</b>  | <b>1.6</b>  | <b>0.0</b>      |
| <b>Total DCs</b>                     | <b>13.8</b> | <b>13.5</b> | <b>13.4</b> | <b>13.3</b> | <b>13.5</b> | <b>13.4</b> | <b>0.1</b>      | <b>13.6</b> | <b>13.6</b> | <b>13.8</b> | <b>14.0</b> | <b>13.8</b> | <b>0.3</b>      |
| <b>FSU</b>                           | <b>13.7</b> | <b>13.9</b> | <b>14.1</b> | <b>14.3</b> | <b>14.6</b> | <b>14.3</b> | <b>0.2</b>      | <b>14.5</b> | <b>14.4</b> | <b>14.4</b> | <b>14.5</b> | <b>14.4</b> | <b>0.2</b>      |
| 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             |
| <b>Other Europe</b>                  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.0</b>      | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>0.0</b>      |
| <b>China</b>                         | <b>4.4</b>  | <b>4.1</b>  | <b>4.0</b>  | <b>3.9</b>  | <b>4.0</b>  | <b>4.0</b>  | <b>0.0</b>      | <b>4.0</b>  | <b>3.9</b>  | <b>3.9</b>  | <b>4.0</b>  | <b>4.0</b>  | <b>0.0</b>      |
| <b>Non-OPEC production</b>           | <b>57.4</b> | <b>56.5</b> | <b>57.2</b> | <b>60.3</b> | <b>61.3</b> | <b>59.9</b> | <b>2.7</b>      | <b>61.3</b> | <b>61.0</b> | <b>62.3</b> | <b>63.6</b> | <b>62.1</b> | <b>2.1</b>      |
| 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             |
| <b>Non-OPEC supply</b>               | <b>59.5</b> | <b>58.7</b> | <b>59.5</b> | <b>62.5</b> | <b>63.6</b> | <b>62.2</b> | <b>2.7</b>      | <b>63.6</b> | <b>63.3</b> | <b>64.5</b> | <b>65.9</b> | <b>64.3</b> | <b>2.2</b>      |
| OPEC NGL                             | 4.6         | 4.7         | 4.8         | 4.8         | 4.9         | 4.8         | 0.0             | 4.9         | 4.9         | 4.9         | 5.0         | 4.9         | 0.1             |
| OPEC Non-conventional                | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0             |
| <b>OPEC (NGL+NCF)</b>                | <b>4.7</b>  | <b>4.8</b>  | <b>4.9</b>  | <b>5.0</b>  | <b>5.1</b>  | <b>5.0</b>  | <b>0.0</b>      | <b>5.0</b>  | <b>5.1</b>  | <b>5.1</b>  | <b>5.1</b>  | <b>5.1</b>  | <b>0.1</b>      |
| <b>Non-OPEC &amp; OPEC (NGL+NCF)</b> | <b>64.2</b> | <b>63.5</b> | <b>64.4</b> | <b>67.5</b> | <b>68.6</b> | <b>67.1</b> | <b>2.8</b>      | <b>68.6</b> | <b>68.4</b> | <b>69.6</b> | <b>71.0</b> | <b>69.4</b> | <b>2.3</b>      |

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

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

|                           | 2016         | 2017         | 2018         | Change<br>2018/17 | 1Q18         | 2Q18         | 3Q18         | 4Q18         | Dec 18       | Jan 19       | Change<br>Jan/Dec |
|---------------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|
| US                        | 509          | 875          | 1,031        | 157               | 964          | 1,037        | 1,051        | 1,073        | 1,078        | 1,065        | -13               |
| Canada                    | 131          | 207          | 191          | -15               | 273          | 106          | 208          | 177          | 141          | 175          | 34                |
| Mexico                    | 26           | 17           | 27           | 9                 | 19           | 25           | 30           | 32           | 31           | 24           | -7                |
| OECD Americas             | 665          | 1,099        | 1,249        | 150               | 1,257        | 1,168        | 1,289        | 1,282        | 1,250        | 1,264        | 14                |
| Norway                    | 17           | 15           | 15           | 0                 | 15           | 14           | 14           | 17           | 18           | 13           | -5                |
| UK                        | 9            | 9            | 7            | -2                | 6            | 6            | 8            | 8            | 11           | 11           | 0                 |
| OECD Europe               | 96           | 92           | 85           | -7                | 86           | 82           | 84           | 90           | 95           | 86           | -9                |
| OECD Asia Pacific         | 7            | 15           | 21           | 5                 | 16           | 21           | 22           | 23           | 24           | 24           | 0                 |
| <b>Total OECD</b>         | <b>768</b>   | <b>1,206</b> | <b>1,355</b> | <b>149</b>        | <b>1,359</b> | <b>1,271</b> | <b>1,395</b> | <b>1,396</b> | <b>1,369</b> | <b>1,374</b> | <b>5</b>          |
| Other Asia*               | 204          | 208          | 222          | 14                | 221          | 216          | 228          | 224          | 226          | 228          | 2                 |
| Latin America             | 111          | 112          | 123          | 11                | 123          | 120          | 126          | 123          | 127          | 132          | 5                 |
| Middle East               | 75           | 68           | 65           | -4                | 66           | 67           | 64           | 62           | 63           | 66           | 3                 |
| Africa                    | 43           | 38           | 45           | 7                 | 33           | 45           | 50           | 50           | 51           | 51           | 0                 |
| <b>Total DCs</b>          | <b>432</b>   | <b>426</b>   | <b>454</b>   | <b>28</b>         | <b>442</b>   | <b>447</b>   | <b>468</b>   | <b>460</b>   | <b>467</b>   | <b>477</b>   | <b>10</b>         |
| <b>Non-OPEC rig count</b> | <b>1,200</b> | <b>1,632</b> | <b>1,809</b> | <b>177</b>        | <b>1,801</b> | <b>1,718</b> | <b>1,863</b> | <b>1,855</b> | <b>1,836</b> | <b>1,851</b> | <b>15</b>         |
| Algeria                   | 54           | 54           | 50           | -4                | 53           | 52           | 48           | 47           | 50           | 44           | -6                |
| Angola                    | 6            | 3            | 4            | 1                 | 3            | 3            | 4            | 5            | 5            | 5            | 0                 |
| Congo                     | 2            | 2            | 3            | 1                 | 3            | 3            | 3            | 4            | 4            | 3            | -1                |
| Ecuador                   | 4            | 6            | 8            | 2                 | 6            | 6            | 9            | 11           | 12           | 11           | -1                |
| Equatorial Guinea**       | 1            | 1            | 1            | 0                 | 1            | 1            | 1            | 1            | 1            | 1            | 0                 |
| Gabon                     | 1            | 1            | 3            | 3                 | 3            | 4            | 3            | 4            | 4            | 7            | 3                 |
| Iran**                    | 143          | 156          | 157          | 2                 | 157          | 157          | 157          | 157          | 157          | 157          | 0                 |
| Iraq                      | 43           | 49           | 59           | 10                | 58           | 60           | 58           | 61           | 62           | 62           | 0                 |
| Kuwait                    | 44           | 54           | 51           | -3                | 54           | 54           | 50           | 45           | 41           | 46           | 5                 |
| Libya                     | 1            | 1            | 5            | 4                 | 1            | 1            | 7            | 9            | 9            | 9            | 0                 |
| Nigeria                   | 6            | 9            | 13           | 5                 | 13           | 13           | 15           | 12           | 11           | 15           | 4                 |
| Saudi Arabia              | 125          | 118          | 117          | -1                | 114          | 112          | 119          | 123          | 125          | 123          | -2                |
| UAE                       | 51           | 52           | 55           | 4                 | 53           | 54           | 56           | 57           | 57           | 59           | 2                 |
| Venezuela                 | 58           | 49           | 32           | -17               | 46           | 30           | 27           | 26           | 27           | 27           | 0                 |
| <b>OPEC rig count</b>     | <b>537</b>   | <b>553</b>   | <b>558</b>   | <b>5</b>          | <b>564</b>   | <b>550</b>   | <b>557</b>   | <b>563</b>   | <b>565</b>   | <b>569</b>   | <b>4</b>          |
| <b>World rig count***</b> | <b>1,737</b> | <b>2,185</b> | <b>2,368</b> | <b>183</b>        | <b>2,365</b> | <b>2,268</b> | <b>2,419</b> | <b>2,418</b> | <b>2,401</b> | <b>2,420</b> | <b>19</b>         |
| of which:                 |              |              |              |                   |              |              |              |              |              |              |                   |
| Oil                       | 1,313        | 1,678        | 1,886        | 209               | 1,864        | 1,803        | 1,945        | 1,934        | 1,911        | 1,928        | 17                |
| Gas                       | 370          | 466          | 448          | -17               | 468          | 432          | 440          | 453          | 460          | 466          | 6                 |
| Others                    | 54           | 42           | 33           | -9                | 33           | 34           | 34           | 31           | 30           | 26           | -4                |

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



**up 1.80 in January**

|                     |              |
|---------------------|--------------|
| January 2019        | 58.74        |
| December 2018       | 56.94        |
| <b>Year-to-date</b> | <b>58.74</b> |

## January OPEC crude production

mb/d, according to secondary sources



**down 0.80 in January**

|               |       |
|---------------|-------|
| January 2019  | 30.81 |
| December 2018 | 31.60 |

## Economic growth rate

per cent

|             | World | OECD | US  | Japan | Euro-zone | China | India |
|-------------|-------|------|-----|-------|-----------|-------|-------|
| <b>2018</b> | 3.6   | 2.3  | 2.9 | 0.8   | 1.8       | 6.6   | 7.5   |
| <b>2019</b> | 3.3   | 1.9  | 2.5 | 1.0   | 1.3       | 6.1   | 7.2   |

## Supply and demand

mb/d

| <b>2018</b>       |             | <b>18/17</b> | <b>2019</b>       |             | <b>19/18</b> |
|-------------------|-------------|--------------|-------------------|-------------|--------------|
| World demand      | 98.8        | 1.5          | World demand      | 100.0       | 1.2          |
| Non-OPEC supply   | 62.2        | 2.7          | Non-OPEC supply   | 64.3        | 2.2          |
| OPEC NGLs         | 5.0         | 0.0          | OPEC NGLs         | 5.1         | 0.1          |
| <b>Difference</b> | <b>31.6</b> | <b>-1.3</b>  | <b>Difference</b> | <b>30.6</b> | <b>-1.0</b>  |

## OECD commercial stocks

mb

|                       | <b>Oct 18</b> | <b>Nov 18</b> | <b>Dec 18</b> | <b>Dec 18/ Nov 18</b> | <b>Dec 17</b> |
|-----------------------|---------------|---------------|---------------|-----------------------|---------------|
| Crude oil             | 1,429         | 1,444         | 1,432         | -12.0                 | 1,411         |
| Products              | 1,430         | 1,417         | 1,418         | 1.2                   | 1,442         |
| <b>Total</b>          | <b>2,860</b>  | <b>2,861</b>  | <b>2,851</b>  | <b>-10.8</b>          | <b>2,853</b>  |
| Days of forward cover | 59.5          | 59.2          | 59.5          | 0.3                   | 59.8          |

**Next report to be issued on 14 March 2019.**