OPEC

Monthly Oil Market Report

10 April 2019

Feature article:
Summer oil market outlook

Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: prid(at)opec.org

Website: www.opec.org

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

In March 2019, the OPEC Reference Basket (ORB) rose by $2.54, or 4.0%, month-on-month (m-o-m), settling at $66.37/b, amid strengthening oil market fundamentals and improving market sentiment, which were supported by the commitment of OPEC and participating non-OPEC countries to restore global oil market stability. Crude oil futures prices extended gains in March, with both ICE Brent and NYMEX WTI reaching their highest since last October, amid uncertainties about the supply outlook from several regions. ICE Brent averaged a m-o-m rise of $2.60, or 4.0%, to $67.03/b, while NYMEX WTI rose $3.19, or 5.8%, m-o-m to $58.17/b. However, year-to-date (y-t-d), ICE Brent was $3.40, or 5.1% lower, at $63.83/b, and NYMEX WTI was $7.99, or 12.7%, lower at $54.90/b. The ICE Brent price structure flipped into backwardation, the NYMEX WTI price structure remained in steep contango, while DME Oman continued to see significant backwardation. Hedge funds and other money managers further raised their bullish positions in both ICE Brent and NYMEX WTI, reaching the highest level since October 2018.

World Economy

The global economic growth projection remains estimated at 3.6% for 2018, while for 2019 it is revised slightly downward to 3.2% from the 3.3% projected last month. The main downward revisions are made for the OECD economies. US 2018 growth remains unchanged at 2.9%, but 2019 growth was revised down from 2.5% to 2.4%. Euro-zone 2018 growth remains unchanged at 1.8%, while 2019 growth was revised down from 1.3% to 1.2%. Similarly, GDP growth in Japan was revised lower from 0.7% to 0.6% for 2019, compared with 0.8% in 2018. In the non-OECD economies, the main 2018 and 2019 forecasts remain unchanged. China's growth forecast remains at 6.1%, after reaching 6.6% in 2018. India's growth forecast remains at 7.1%, following 7.3% in 2018. Growth in Brazil remains unchanged at 1.8% in 2019, after seeing 1.1% in 2018, while Russia's 2019 GDP growth forecast is also unchanged at 1.6%, following an upward revision of 2.3% for 2018.

World Oil Demand

In 2018, global oil demand growth was revised down by 20 tb/d from last month's assessment amid weaker 4Q18 oil demand data from OECD Asia Pacific. Global oil demand in 2018 is now estimated to have increased by 1.41 mb/d y-o-y, reading 98.70 mb/d. Similarly, global oil demand in 2019 is revised downward by 30 tb/d from 1.24 mb/d to around 1.21 mb/d compared with last month's projection and this is due to slower-than-expected economic activity compared with the expectations of a month earlier. As a result, total world demand for the year is now expected to reach 99.91 mb/d and exceed the 100.00 mb/d threshold during 2H19. OECD oil demand growth is projected to reach 0.21 mb/d, with OECD Americas leading the increase, while oil demand in the non-OECD region is projected to rise by around 1.0 mb/d, with Other Asia and China being the primary contributors to growth.

World Oil Supply

Non-OPEC oil supply growth in 2018 was revised upward by 0.16 mb/d from the previous month's report and is now estimated at 2.90 mb/d to average 62.37 mb/d. The adjustment was mainly due to upward revisions in the UK, Brazil and China. The main drivers of growth for the year were the US with 2.26 mb/d, along with Canada, Russia, the UK, Kazakhstan, and Qatar. Meanwhile Mexico, Norway and Vietnam are estimated to have seen the largest declines. In contrast, non-OPEC oil supply growth in 2019 was revised downward by 0.06 mb/d to average 2.18 mb/d, mainly due to extended maintenance in Kazakhstan, Brazil and Canada, which was partially offset by upward revisions to the US and Russia. Total non-OPEC supply in 2019 is now forecast to average 64.54 mb/d, with the US, Brazil, the UK, Australia and Ghana being the major contributors to growth, while Mexico, Kazakhstan, 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, 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. In March 2019, OPEC crude oil production decreased by 534 tb/d to average 30.02 mb/d, according to secondary sources.

Product Markets and Refining Operations

Global product markets showed solid gains over the month of March 2019. Refining margins saw an extension of the upward trend recorded in the previous month, reaching the highest levels seen y-t-d, and boosted by a sharp recovery in gasoline cracks after steep multi-month declines. In the US, a combination of planned and unplanned refinery outages affected gasoline production, resulting in considerable declines in inventory levels and lending strong support to refining economics. In Europe, strength emerged from larger gasoline exports to the US and Africa, despite weaker middle distillate fundamentals due to narrower arbitrage opportunities. Meanwhile, in Asia, robust performance at the top of the barrel, supported by scheduled and unscheduled refinery maintenance, provided relief to the oversupply environment witnessed in recent months.

Tanker Market

Average dirty tanker spot freight rates declined further in March 2019, continuing the negative trend seen so far in the first quarter of 2019. Lower rates were seen in most reported dirty classes. This was mainly attributed to high vessel supply, while market activities remained thin in general. Clean tanker spot freight rates showed some improvement in the West, supported mainly by higher rates in Northwest Europe on the back of balanced tonnage availability and occasional shortages in prompt vessel supply. In the East, a lack of activity dominated different classes, resulting in a drop in rates across several routes.

Stock Movements

Preliminary data for February showed that total OECD commercial oil stocks fell by 18.3 mb m-o-m to stand at 2,863 mb. This was 7.0 mb higher than the same time one year ago, and 7.5 mb above the latest five-year average. Compared with the latest five-year average, crude indicated a surplus of 25 mb, while product stocks showed a deficit of 17.5 mb. In terms of days of forward cover, OECD commercial stocks rose by 0.4 days m-o-m in February to stand at 60.6 days. This was 0.2 days above the same period in 2018, but 1.1 days below the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2018 is estimated at 31.4 mb/d, 1.5 mb/d lower than the 2017 level. In 2019, demand for OPEC crude is forecast at 30.3 mb/d, around 1.1 mb/d lower than the estimated 2018 level.

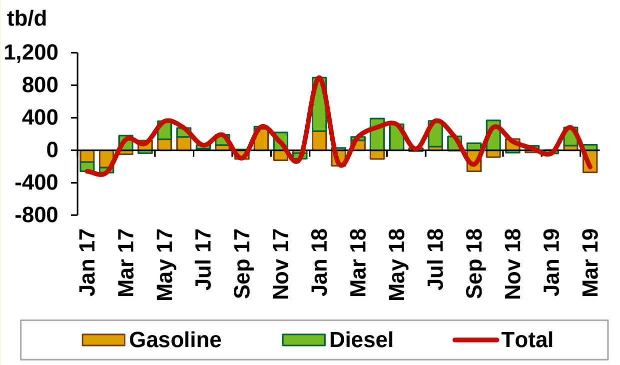
Feature Article

Summer oil market outlook

The performance of product markets typically follows seasonal patterns, with refining margins recovering during the driving season in the Northern Hemisphere. Last summer, refinery margins across the globe saw some support, but exhibited only a mixed performance year-on-year.

US refinery margins showed solid gains in the summer months of 2018 compared with the previous year, averaging $5.63 higher. This was mainly attributed to robust diesel demand, as well as strong gasoline exports and operational adjustments that contributed to higher margins. US diesel inventories reached record lows during the summer and remained below the 5-year average in 2018. Moreover, diesel exports were considerably lower, showing a declining trend since 2015. At the same time, the pace of growth in US gasoline consumption weakened y-o-y (***Graph 1***). This was attributed to fuel efficiency gains, reduced consumer spending and trend toward fuel substitution toward EV's and natural gas. In contrast to diesel stocks, gasoline inventories in 2018 remained well above the 5-year average for most of the year, reaching record highs during the last quarter. Gasoline exports are generally moderate over the summer to accommodate domestic consumption, but have grown considerably y-o-y since 2015. As a result of these diverging trends, the US product market has been increasingly sustained by robust diesel consumption, with some support from gasoline exports.

Graph 1: US gasoline and diesel consumption, y-o-y change

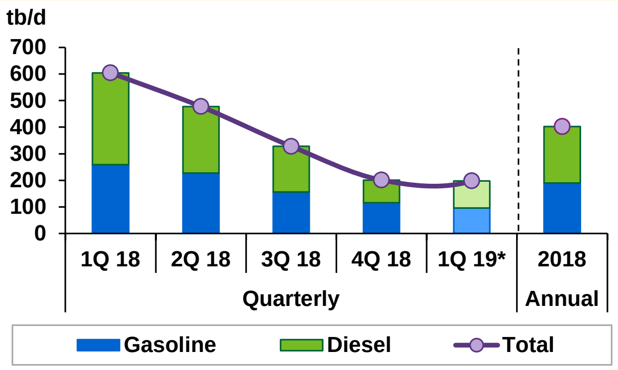


Note: January - March 2019 data based on weekly average.
Sources: US EIA and OPEC Secretariat.

In Europe, refinery margins showed a negative performance y-o-y over the summer, averaging minus $1.5, pressured mainly by weaker diesel cracks. Europe has been diesel's biggest market in past years but this has changed in recent years. Governments have enacted bans on older diesel cars in selected city streets in Germany, Spain, France and Italy. As a consequence, diesel consumption for passenger cars has declined, while gasoline cracks have seen a moderate upside as new car buyers switch from diesel- to gasoline-fuelled engines.

In Asia, refinery margins also showed a negative performance of minus $1.5 y-o-y over the summer. Although Asian gasoline and diesel consumption softened in 2018 (***Graph 2***), the diesel remained well supported, as demand more closely follows economic growth due to its use in industrial, mining, and farming, in addition to the transportation sector. In contrast, recent additions of refining capacity in the region have led to a downturn in the gasoline market, where cracks dropped from near parity to gasoil in August 2017 to a $14.08 discount in February 2019. This was attributed to a growing gasoline surplus as gasoline demand got slower regionally and globally.

Graph 2: Asian gasoline and diesel demand growth, y-o-y change



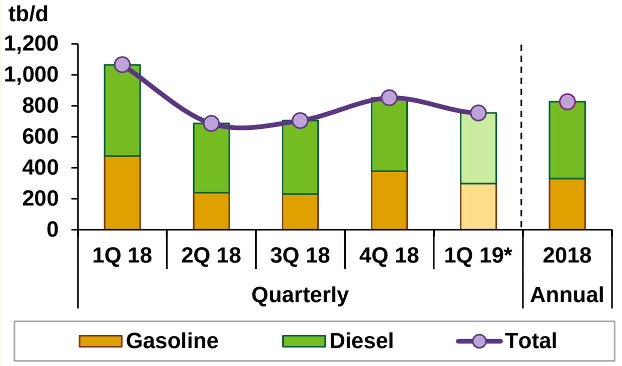
*Note: * 1Q19 = Estimate.*
Source: OPEC Secretariat.

Looking ahead, product markets are expected to come under pressure as refineries resume operations following peak spring maintenance due to higher product availability. However, with the start of the driving season, some support is expected from the mild pick-up in transport fuels, mainly driven by gasoline. While US gasoline demand growth is expected to continue to slow, refining economics should remain well sustained, amid healthy exports. Meanwhile, diesel demand for both transportation and the industrial sector will remain robust and jet fuel cracks are set to gain some upward momentum during the peak travel season across the globe. However, expectations for a slight slowdown in economic growth for the current year point to some weakening in demand growth for middle distillates.

In Europe, product markets are expected to be supported over the upcoming summer season by declining but still strong domestic diesel consumption, as well as firm jet fuel demand. Further support is likely to come from a possible pick up in domestic gasoline consumption, as well as exports, particularly to West Africa.

Given the high gasoline supplies in Asia, the downward trend in gasoline cracks could continue once refineries return from spring maintenance. Moreover, recent capacity additions are bound to trigger further bearishness. This development could lead to a re-occurring gasoline surplus, keeping refining margins partially depressed, despite positive prospects for sustained middle distillate demand during summer.

Graph 3: Global gasoline and diesel demand growth, y-o-y change



*Note: * 1Q19 = Estimate.*
Source: OPEC Secretariat.

Even if gasoline markets both in Europe and in Asia were to see any significant upside, the lower global gasoline and diesel consumption baseline in the first quarter of this year (***Graph 3***) point to a less optimistic outlook for product markets globally in the coming driving season.

Table of Contents

Crude Oil Price Movements

*In March 2019, the **OPEC Reference Basket (ORB)** continued to rise amid continuing strengthening oil market fundamentals and improving market sentiment, which were supported by the commitment of OPEC and participating non-OPEC countries to restore global oil market stability. The ORB value increased m-o-m by $2.54, or 4.0%, to settle at $66.37/b. All ORB component values settled higher in March, at five-month highs, in line with their respective benchmarks, higher crude differentials and official selling prices, particularly for medium- and heavy-sour crudes.*

***Crude oil futures prices** extended gains in March, with both ICE Brent and NYMEX WTI reaching their highest levels since last October, amid uncertainties about the supply outlook from several regions due to geopolitical tensions. In March, ICE Brent averaged $2.60, or 4.0%, higher at $67.03/b, while NYMEX WTI rose $3.19, or 5.8%, to average $58.17/b. Year-to-date, ICE Brent is $3.40, or 5.1%, lower at $63.83/b, while NYMEX WTI decreased by $8.00, or 12.7%, to $54.90/b compared to the same period a year earlier. DME Oman crude oil futures gained $2.33, or 3.6% in March to average $66.95/b. Year-to-date, DME Oman declined 63¢, or 1.0%, y-o-y to $63.71/b. The spread between the ICE Brent and NYMEX WTI benchmarks narrowed by 59¢ in March to $8.86/b, on a monthly basis, as NYMEX WTI performed better than ICE Brent benchmark.*

***Hedge funds and other money managers** further raised their bullish positions in both ICE Brent and NYMEX WTI to reach the highest level since October, amid a more balanced global oil market, increased investor confidence and worries about tightening oil supply in coming months due to technical and geopolitical factors.*

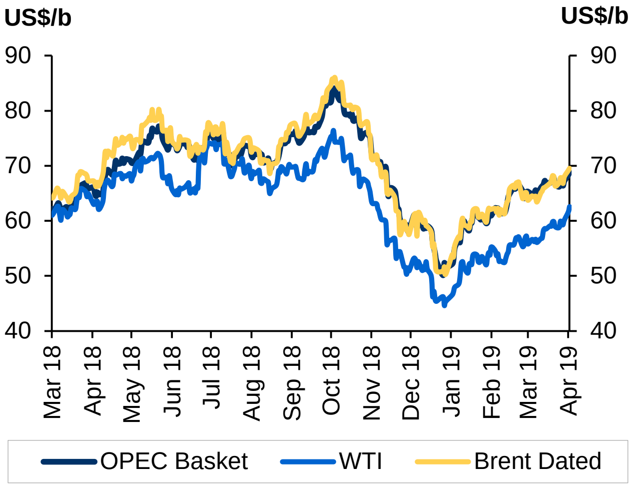
*The ICE Brent **price structure** flipped into backwardation in March and the front of the forward curve continued to steepen over the month, indicating tightening global oil supply and a more balanced global oil market. The NYMEX WTI price structure remained in steep contango, mirroring the US oil market oversupply. Meanwhile, DME Oman remained in significant backwardation.*

*The tightening supply of medium and heavy sour crudes and high supply of light crudes have created a crude quality imbalance and narrowed the **sweet/sour spread** further in Asia and in the USGC, while medium sour crudes in Europe continued to be priced at a premium to light sweet Brent.*

OPEC Reference Basket

The **ORB** continued to rally in March for the third consecutive month amid strengthening oil market fundamentals and improving market sentiment, which were supported by the commitment of OPEC and participating non-OPEC countries to restore global oil market stability. OPEC and participating non-OPEC countries have improved their conformity levels with their production adjustment in February 2019 to almost 90%, which is up from 83% in the month of January. M-o-m, the ORB closed March at $66.37/b, its highest since October 2018, after hovering around $67/b in daily basis. Throughout the month, prices have been bolstered by strong physical crude demand, especially from Asia Pacific, and lower crude availability due to persistent geopolitical tensions, as well as expectations for continued market balancing by OPEC and participating non-OPEC producing countries.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

Moreover, despite the fact that refinery maintenance is expected to peak in April and May in Asia, demand for crude remained healthy and crude oil differentials strengthened, particularly for medium and heavy sour grades.

Crude oil physical benchmarks ended higher in March, with Dated Brent, WTI and Dubai spot prices rose m-o-m by $2.08, $3.18 and $2.49, respectively, to settle at $66.08/b, $58.16/b and $66.91/b. For the year-to-date (y-t-d), ORB value was $1.85, or 2.9%, lower at $62.90/b compared to the same period in 2018.

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

			Change		*Year-to-date*	
	Feb 19	Mar 19	Mar/Feb	%	2018	2019
Basket	**63.83**	**66.37**	**2.54**	**4.0**	**64.75**	**62.90**
Arab Light	64.85	67.40	2.55	3.9	65.34	63.88
Basrah Light	63.25	66.05	2.80	4.4	63.62	62.42
Bonny Light	65.19	67.71	2.52	3.9	67.72	64.40
Djeno	61.40	63.48	2.08	3.4	64.89	60.48
Es Sider	63.15	65.38	2.23	3.5	65.89	62.19
Girassol	65.30	67.16	1.86	2.8	67.64	64.06
Iran Heavy	61.39	64.17	2.78	4.5	63.48	60.53
Kuwait Export	63.93	66.78	2.85	4.5	63.43	63.03
Merey	55.85	57.75	1.90	3.4	57.94	54.75
Murban	65.64	68.01	2.37	3.6	67.04	64.74
Oriente	60.42	63.66	3.24	5.4	61.71	59.64
Rabi Light	63.25	65.33	2.08	3.3	65.82	62.33
Sahara Blend	64.30	66.38	2.08	3.2	67.60	63.24
Zafiro	64.92	67.15	2.23	3.4	66.84	63.98
Other Crudes						
Dated Brent	64.00	66.08	2.08	3.3	66.79	63.08
Dubai	64.42	66.91	2.49	3.9	63.92	63.38
Isthmus	63.81	66.53	2.72	4.3	65.98	62.73
LLS	63.24	65.59	2.35	3.7	65.84	62.36
Mars	61.89	64.88	2.99	4.8	62.43	61.14
Minas	56.94	59.63	2.69	4.7	59.36	56.02
Urals	64.10	66.21	2.11	3.3	65.20	63.46
WTI	54.98	58.16	3.18	5.8	62.90	54.87
Differentials						
Brent/WTI	9.02	7.92	-1.10	-	3.89	8.21
Brent/LLS	0.76	0.49	-0.27	-	0.94	0.71
Brent/Dubai	-0.42	-0.83	-0.41	-	2.87	-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.

In March, all **ORB component values** settled higher to five-month highs, in line with their respective benchmarks and higher crude differentials and official selling prices, particularly for medium and heavy sour crudes that continued to be supported by lower supply availability. Crude oil differentials were supported by strong physical crude demand, lower loading programs and sustained backwardation in the Brent and Dubai price structure. On a monthly average, the ORB value increased m-o-m by $2.54, or 4.0%, to settle at $66.37/b in March.

Light sweet crude **ORB components from West and North Africa**, including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro, increased $2.15 on average, or 3.4%, m-o-m to $66.08/b in March. West African crudes differentials rose on strong demand in the Atlantic Basin and from Asia, amid lower supply from other regions. A relatively narrow Brent/Dubai spread and lower shipping costs, also gave additional support to crudes linked to Brent in the Atlantic basin.

Latin American ORB components continued to perform firmly in March, supported by lower medium and heavy sour crude supply, particularly from Venezuela, in addition to lower availability of similar crudes from other regions. Venezuela's Merey and Ecuador's Oriente settled higher m-o-m by $1.90, or 3.4%, to $57.75/b, and by $3.24, or 5.4%, at $63.66/b, respectively.

The value of **multi-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, rose by $2.74, or 4.3%, m-o-m to $66.10/b in March, underpinned by strong demand, especially from Asia Pacific, as well as lower crude oil supply in an already tight heavy sour crude market. A firmly backwardated Dubai market structure has resulted in higher official selling prices of heavier grades, which added support to prices. Furthermore, the widening of the Brent-Dubai Exchange of Futures for Swaps spread has risen the competitiveness of crude grades linked to the Dubai price benchmark.

Middle Eastern spot component Murban, a light sour grade, also evolved higher, supported by a widening Brent-Dubai spread, despite high competitiveness of similar grades in Asia Pacific. Murban crude saw their values higher m-o-m by $2.37, or 3.6%, to $68.01/b.

On 9 April, the ORB stood at $70.35/b, $3.98 above the March average.

The oil futures market

Crude oil futures prices extended their gains in March, with both ICE Brent and NYMEX WTI up $2.60 and $3.19 m-o-m, respectively, to their highest level since last October, supported by improving fundamentals as well as uncertainties about the supply outlook from several regions due to geopolitical factors. The NYMEX WTI front month strengthened further to reach more than $60/b in late March, after Baker Hughes data showed that the US drilling rig count continued to decline for six consecutive weeks to reach 816, for the week ending 29 March, their lowest level in nearly a year. Likewise, the US Energy Information Administration showed that US crude production decreased in January to 11.87 mb/d, or a decline of 90 tb/d m-o-m. Moreover, US crude stocks have continued to fall over the month, bringing the cumulative US crude stock draw in March to around 10 mb in the week ending 22 March. Oil prices were underpinned likewise by healthy global oil demand that would strengthen in 2Q19 and expectations of higher refiners' crude intakes in coming months to meet summer requirements. Support also came from higher investor confidence and optimism over the effectiveness of the production adjustments in restoring global oil market balance, as OPEC and non-OPEC participating countries continued to show high conformity with their voluntary production adjustments. However, disappointing macroeconomic data coming from major economies, and concerns about slowing global economic outlook that could hit oil demand amid continuing trade negotiations between China and the US, weighed on oil prices.

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

			Change		Year-to-date	
	Feb 19	Mar 19	Mar/Feb	%	2018	2019
NYMEX WTI	54.98	58.17	3.19	5.8	62.89	54.90
ICE Brent	64.43	67.03	2.60	4.0	67.23	63.83
DME Oman	64.62	66.95	2.33	3.6	64.34	63.71
Transatlantic spread (ICE Brent-NYMEX WTI)	*9.45*	*8.86*	*-0.59*	*-6.3*	*4.34*	*8.94*

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

In March, **ICE Brent** was on average $2.60, or 4.0%, m-o-m higher at $67.03/b, while **NYMEX WTI** rose m-o-m by $3.19, or 5.8%, to average $58.17/b. Year-to-date, ICE Brent is $3.40, or 5.1%, lower at $63.83/b, while NYMEX WTI decreased by $8.00, or 12.7%, to $54.90/b compared to the same period a year earlier.

DME Oman crude oil futures also increased m-o-m by $2.33 in March, or 3.6% over the previous month, to settle at $66.95/b. Year-to-date, DME Oman was down by $0.63, or 1.0%, y-o-y at $63.71/b.

Crude oil futures prices continued to rise in the first week of April. On 9 April, ICE Brent stood at $70.61/b and NYMEX WTI at $63.98/b.

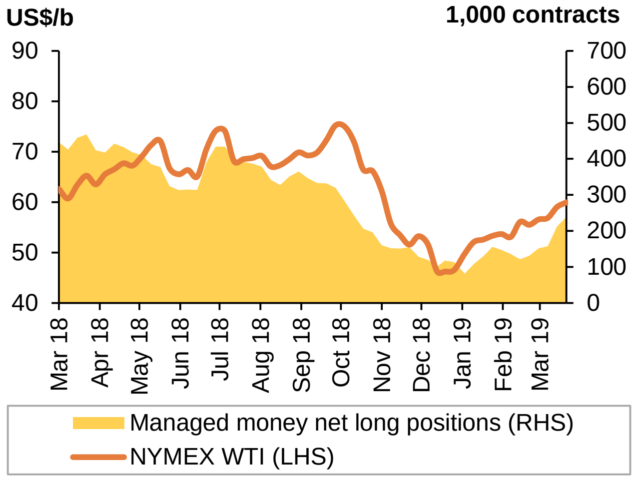
Amid a more balanced global oil market, higher investor confidence and worries about tightening oil supply in coming months due to technical and geopolitical factors, **hedge funds and other money managers** raised further their bullish positions in March on both global benchmarks, Brent and US crude WTI, to reach the highest level since last October. Signs of slowing US crude oil supply growth for this year and a reduction in US shale drilling activity have led speculators to be more bullish on US oil prices and consequently boosted their long positions in NYMEX WTI.

Hedge funds and money managers continued to raise their bullish wagers on US crude for five consecutive weeks in the week ending 26 March, to 280,748 contracts.

The speculator group boosted their combined net long positions for futures and options' positions in the **NYMEX WTI** by 106,883 contracts, or 81.4%, to 238,205 contracts for the week ending 26 March, according to the US Commodity Futures Trading Commission (CFTC).

During the same period, gross short positions fell significantly by 34,568 contracts to 42,543 contracts, the lowest since last October, while gross long positions rose by 72,315 contracts, data showed. During this period, NYMEX WTI prices rose by about 8%.

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



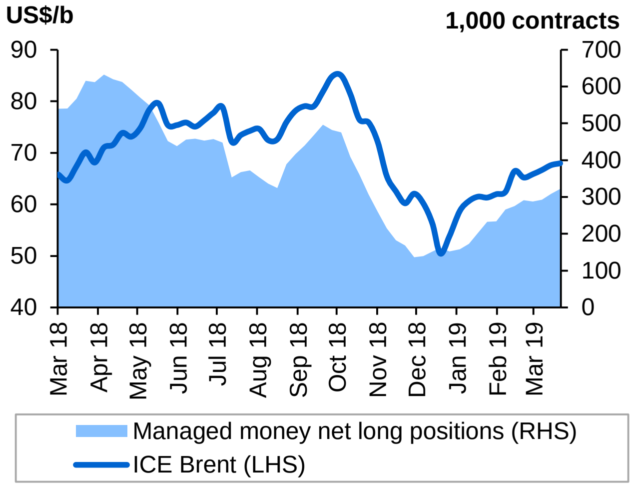
Sources: CFTC, CME Group and OPEC Secretariat.

Hedge funds and other money managers continued to increase firmly their combined futures and options net long positions linked to **ICE Brent,** by 30,699 contracts, or 10.5%, to 322,035 contracts for the week ending 26 March, according to the ICE Exchange.

The **long-to-short ratio** in ICE Brent speculative positions increased late March to 7.0:1, compared to 6.1:1 in late February, while that of NYMEX WTI increased to 6.6:1 for the week ending 26 March.

The **total futures and options open interest volume** in the two exchanges increased by 156,043 contracts to stand at 5.8 million contracts in the week ending 26 March.

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



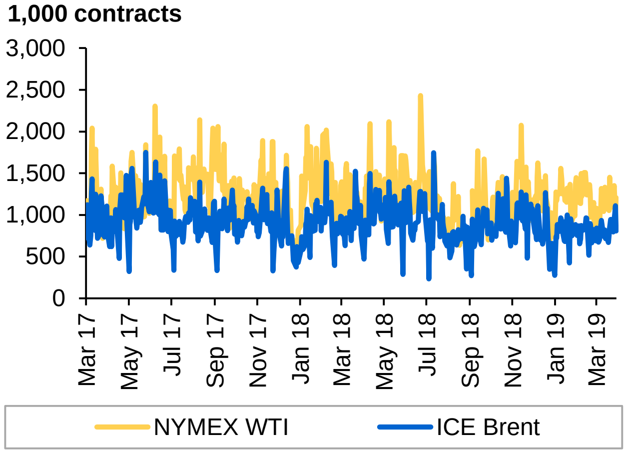
Sources: Intercontinental Exchange and OPEC Secretariat.

The **daily average traded volume** for NYMEX WTI contracts fell by 62,595 lots, or 5.2%, in March to 1,134,410 contracts. The daily average traded volume for ICE Brent rose by 43,437 contracts, or 5.5%, at 834,345 lots.

The **daily aggregate traded volume** for both crude oil futures markets decreased again in March by 19,157 contracts m-o-m to stand at 2.0 million futures contracts, or about 2.0 billion b/d of crude oil.

The March **total traded volume** in NYMEX WTI was slightly lower at 23.8 million contracts, or 0.5%, while that of ICE Brent was 10.8% higher at 17.5 million contracts.

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



Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

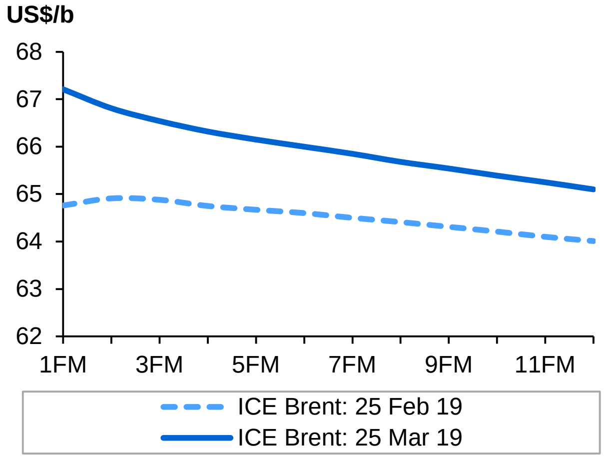
The futures market structure

The ICE Brent **price structure** flipped into backwardation in March and the front of the forward curve continued to steepen over the month, while the DME Oman price structure remained in significant backwardation, indicating tightening global oil supply and a more balanced global oil market. Nevertheless, the NYMEX WTI price structure remained in a steep contango mirroring the US oil market oversupply.

The futures **Brent** price structure flipped to **backwardation** in March and the whole curve steeped, with ICE Brent first to sixth-month spread settled at a $1.21 on 25 March, compared to 16¢ one month earlier. The Brent backwardation structure signals firm fundamentals in the physical crude market and expectations of tightening oil supply in coming months, while geopolitical risks in several oil producing countries added to worries about additional oil supply disruptions. Strong physical crude oil demand in the Atlantic Basin in March gave additional support to prompt oil prices.

DME Oman market structures remained in **backwardation** in March as the market for medium and heavy sour crudes continued to be tight amid lower sour crudes supply from the Middle East and Latin America while Asian demand remained robust.

Graph 1 - 5: ICE Brent forward curves

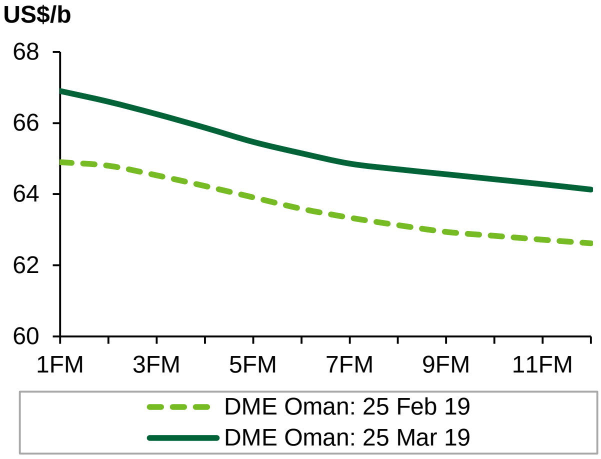


Note: FM = future month.
Sources: Intercontinental Exchange and OPEC Secretariat.

The rise of Brent/Dubai EFS in March also gave more competitiveness to Dubai-linked crudes and supported prices.

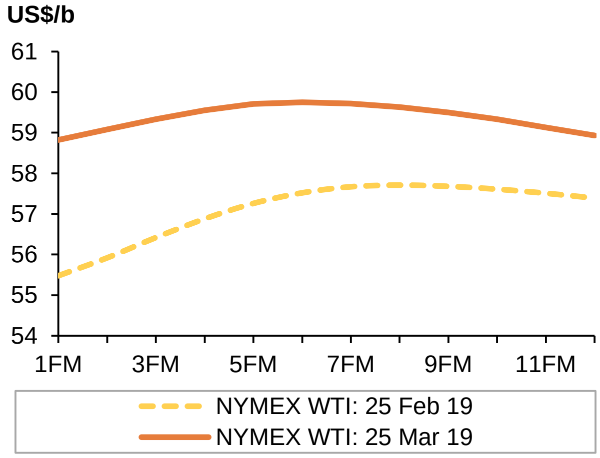
However, the **NYMEX WTI** price structure remained in deep **contango**, even if the front of the curve flattened slightly and the WTI time spread first to third-month narrowed. The US market overhang and growing crude stocks in Cushing continued to weigh on prompt oil prices. Indeed, US stocks at Cushing increased further in March to reach around 47 mb, its highest level since late 2017. Nonetheless, the WTI contango structure narrowed slightly on expectations of slower US oil supply growth and high demand for US crude oil exports, which gave some support to prompt prices. The contango structure of NYMEX WTI diminished over the forward five months and the spread first to sixth-month flipped to a backwardation of 3¢, on 25 March 2019.

Graph 1 - 6: DME Oman forward curves



Note: FM = future month.
Sources: Dubai Mercantile Exchange and OPEC Secretariat.

Graph 1 - 7: NYMEX WTI forward curves



Note: FM = future month.
Sources: CME Group and OPEC Secretariat.

Regarding the **M1/M3 structure**, the North Sea Brent M1/M3 slipped into backwardation of 27¢/b, on average, and widened from a contango of 10¢/b, a rise of 37¢/b. The Dubai M1 63¢/b premium to M3 decreased to a 58¢/b premium, down by 5¢. In the US, the WTI contango of 82¢/b narrowed to 59¢/b, where the spread M1-M3 decreased by 23¢.

The **spread between the ICE Brent and NYMEX WTI** benchmarks narrowed by 59¢ in March to $8.86/b, on a monthly basis, as NYMEX WTI performed better than ICE Brent benchmark. The NYMEX WTI price was supported by signs of slowing US oil supply growth, lower US crude oil stocks and high demand for US crude exports that competed with crudes linked to Brent in the Atlantic Basin and Asian markets.

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

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	25 Feb 19	55.48	55.92	56.42	57.52	57.39	1.91
	25 Mar 19	58.82	59.08	59.33	59.75	58.93	0.11
	Change	**3.34**	**3.16**	**2.91**	**2.23**	**1.54**	**-1.80**
ICE Brent	25 Feb 19	64.76	64.91	64.88	64.60	64.01	-0.75
	25 Mar 19	67.21	66.81	66.54	66.00	65.10	-2.11
	Change	**2.45**	**1.90**	**1.66**	**1.40**	**1.09**	**-1.36**
DME Oman	25 Feb 19	64.90	64.80	64.53	63.59	62.62	-2.28
	25 Mar 19	66.90	66.60	66.25	65.15	64.13	-2.77
	Change	**2.00**	**1.80**	**1.72**	**1.56**	**1.51**	**-0.49**

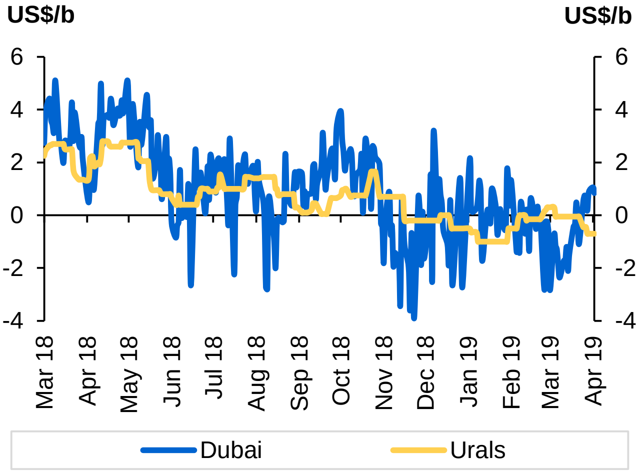
Note: FM = future month.
Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

The light sweet/medium sour crude spread

The tightening supply of medium and heavy sour crudes and high supply of light crudes have created an imbalance in crude quality and pushed the **sweet/sour spread** to narrow further in Asia and in the USGC, while medium sour crudes in Europe continued to be priced at a premium to light sweet Brent.

In **Europe**, the premium of medium sour crudes to light sweet widened again on average in March, amid strong demand for medium sour grades and lower inflow of the same grades quality from other regions. Urals crude was priced at premium to North Sea dated on strong European demand, despite ample Urals offers planned for April loading and scheduled European refinery maintenances. On the other hand, availability of light sweet crudes in Europe was significant, due to higher US crude oil exports and higher supply of Mediterranean and West Africa. The Brent/Urals discount widened by 3¢ to minus 13¢/b.

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



Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, the sweet/sour spread narrowed again on strong Asian demand for medium and heavy sour crudes amid lower supply from Middle East and Latin America, on the back of OPEC and non-OPEC voluntary production adjustments, which underpinned the Dubai market.

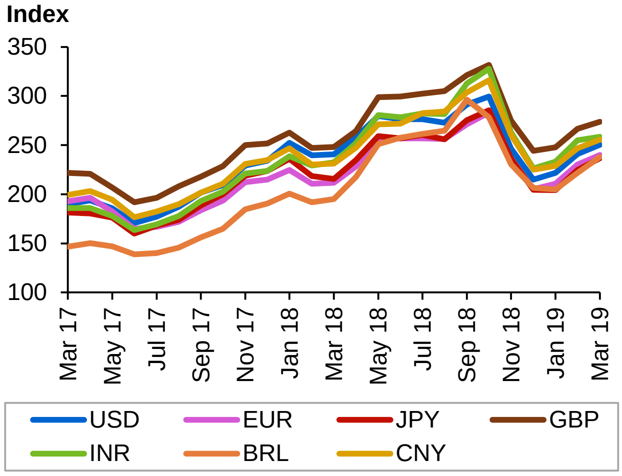
Additionally, worries regarding further supply disruptions in Latin America amid geopolitical tensions raised demand for heavy sour crudes. Furthermore, light sweet crude values were under pressure in Asia Pacific from ample availability and high US crude exports.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over Mars crude narrowed by 64¢ to 71¢, the narrowest level in years, as sour grades were supported by strong demand, a significant fall of imports from Latin America and lower availability of similar crude quality worldwide. At the same time, light sweet crude values in the USGC weakened in March as the spread between WTI and Brent narrowed, which has squeezed crude differentials in the USGC as the crudes linked to the WTI benchmark becomes more expensive compared with Brent-linked crudes.

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

The **USD** value was mixed **against major currency counterparts** in March. The dollar advanced by 0.1% on average against the euro, though the value saw significant swings, as both the European Central Bank and the US Federal Reserve signalled separately that they will refrain from interest rate increases this year. Furthermore, in the case of the Fed, a reduction was seen in the pace of balance sheet reduction. Against the Swiss franc the dollar was relatively unchanged, following a similar pattern to the euro during the month. The dollar advanced further by 1.3% against the Japanese yen, with declining safe haven demand continuing improvement in financial markets over the month. The dollar, however, fell by 1.3% against the pound sterling on the expectation that a no-deal Brexit scenario could be averted.

Graph 1 - 9: ORB crude oil price index compared with different currencies (base January 2016 = 100)



Sources: IMF and OPEC Secretariat.

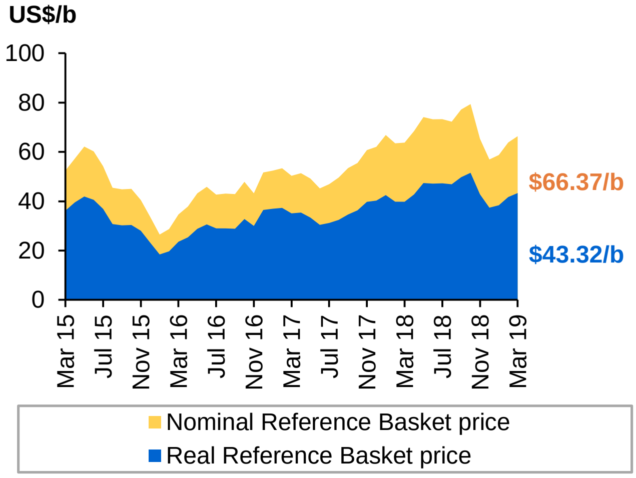
On average, the USD declined for the third consecutive month against the Chinese yuan in March, down by 0.4% m-o-m, as happened in previous months, supported by the expectation of an agreement between the US and China amid ongoing trade disputes, as well as by some signs of economic stabilization in March. The dollar decreased by 2.4% against the Indian rupee, supported by political developments surrounding the upcoming elections. Regarding the currencies of large commodity exporters, the USD advanced by 3.3% against the Brazilian real on concerns due to delays in pension reform discussions in the country's Congress. Meanwhile, it lost 1.1% against the Russian ruble, as oil prices continued to recover, and on receding fears of sanctions.

In **nominal terms**, the price of the OPEC Reference Basket (ORB) increased by $2.54, or 4.0%, from $63.83/b in February to $66.37/b in March.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to $43.32/b in March from a revised $41.70/b (base June 2001=100) the previous month.

Over the same period, the **USD** was relatively unchanged against the import-weighted modified Geneva I + USD basket, while inflation increased by 0.1% 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 in March showed similar trends as in the previous two months, with crude oil prices recovering in tandem with improving sentiment in global financial markets. However, coal and natural gas generally experienced a continued decline as a result of mild winter temperatures and some deceleration in economic activity which together with robust increases in supply resulted in oversupplied markets.

In the group of __non-energy commodities__, base metal prices advanced further as manufacturing activity appears to have found some stable footing as a result of stimulus measures by the Chinese government, and the expectation of a potential agreement in trade negotiations between China and the US. In the group of precious metals, gold declined amid a continued recovery in financial markets that dented demand for safe assets.

Trends in selected commodity markets

The **energy price index** increased by around 3.3% m-o-m in March, but was down by 6.2% y-t-d compared to the same period last year. The increase in the energy index mainly reflects the price increase of crude oil, however, natural gas and coal have dropped significantly in Europe and Asia. The non-energy index was down by 0.2% m-o-m, and by 6.4% y-t-d, compared to last year.

Table 2 - 1: Commodity prices

Commodity	Unit	Monthly averages			% Change	Year-to-date	
		Jan 19	Feb 19	Mar 19	Mar 19/Feb 19	2018	2019
Energy*		**73.8**	**77.4**	**80.0**	**3.3**	**82.2**	**77.1**
Coal, Australia	US$/mt	98.6	95.4	93.1	-2.4	103.0	95.7
Crude oil, average	US$/b	56.6	61.1	63.8	4.3	64.6	60.5
Natural gas, US	US$/mbtu	3.1	2.7	2.9	8.0	3.1	2.9
Natural gas, Europe	US$/mbtu	7.3	6.0	5.2	-13.8	6.7	6.1
Non-energy*		**81.2**	**82.7**	**82.5**	**-0.3**	**87.7**	**82.1**
Base metal*		**81.3**	**84.7**	**86.2**	**1.8**	**95.6**	**84.0**
Precious metals*		**98.4**	**100.4**	**98.7**	**-1.6**	**102.1**	**99.2**

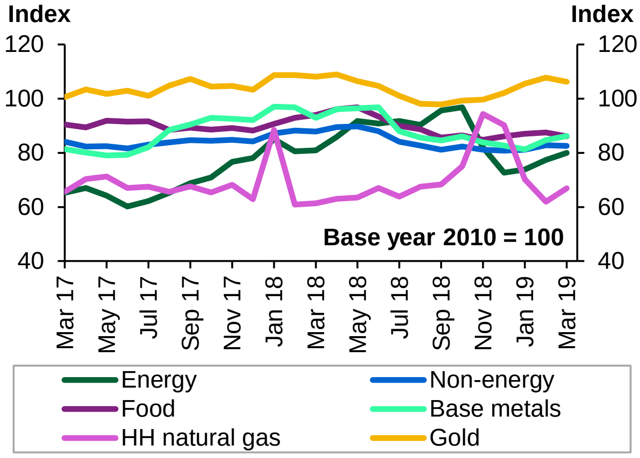
*Note: * World Bank commodity price indices (2010 = 100).*
Sources: World Bank, Commodity price data; OPEC Secretariat.

In March, the **Henry Hub natural gas index** increased on average by 8.0% to $2.9/mmbtu. Y-t-d, the index declined by 5.5% compared to the same period last year. Prices were higher at the end of February and the beginning of March due to a late outburst of colder-than-average weather; however, in the second half of the month almost all the gains since mid-February were erased. While inventories ended the month significantly below the five-year average – 30% down – the market continued to focus on rising production, which runs around 13% higher than a year ago. According to the US Energy Information Administration (EIA), utilities added 23 bcf to working gas underground storage during the week ending 29 March, around the five-year average withdrawal. The build left total working gas in underground storage at 1,130 bcf, which was 30.9% lower than the previous five-year average.

Natural gas prices in Europe declined with the **Title Transfer Facility** price falling by 13.7% to $5.18/mmbtu in March. They are down around 46% from the average registered in September 2018. Inventories were at comfortable levels in Europe mainly as a result of a mild winter that resulted in reduced demand. Furthermore, the plunge in LNG prices in Asia – mainly as a result of a mild winter too – resulted in additional LNG exports being diverted to Europe, which added further downward pressure to prices. Natural

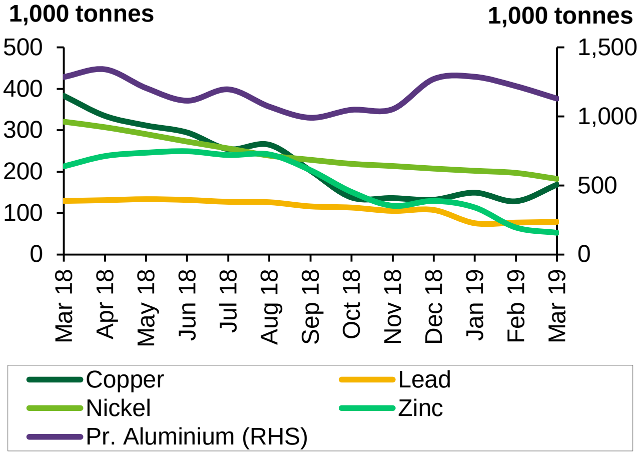
gas inventories for EU Member States were 42.2% full at the end of March, which is considerably higher than the 18.4% level at the end of March last year, according to Gas Infrastructure Europe.

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.

Australian thermal coal prices decreased to an average of $93.1/mt in March, or 2.4% m-o-m; however, towards the end of the month and at the beginning of April, prices plummeted to around $78/Mt on further delays to Australian exports at Chinese ports, as well as healthy inventory levels. The combination of a mild winter and China's higher hydroelectric output – up 6.6% y-o-y according to official data– have limited coal consumption, resulting in less import requirements Indeed, Chinese imports fell sharply by 47% in February from the previous month after having almost tripled m-o-m in January. More recently, it was reported that Japanese utilities reached an agreement for coal supplies from April 2019 up to March 2020 at a fixed price of $94.75/mt, some 14% lower than the previous contract that runs until September this year, adding further downward pressure to prices.

The **base metal price index** advanced on average by 1.8% m-o-m in March and was down by 12.1% in the January-March period compared to last year. Prices recovered as manufacturing activity improved in China as a result of stimulus measures by the Chinese government. Expectation of further advances in trade negotiations between the US and China also added optimism to the market. However, despite the improvement in China, the overall picture for global manufacturing was relative stable signalling slow growth. The JP Morgan global manufacturing PMI remained at a 32-month low of 50.6, with more deceleration in the new export sub-components which dropped further into the contraction zone at 48.9, compared to 49.0 in the previous month.

Copper prices were up on average by 2.2% m-o-m in March on the back of stimulus measures from China. The International Copper Study group estimated the global refined copper balance to be in deficit by 390,000 in 2018, almost unchanged from the previous month's estimation. However, in March inventories registered some increase, with stocks at the London Metal Exchange (LME) – designated warehouses – increasing to around 168,000 mt vs 128,475 mt previous month. This prevented a further strengthening in prices during the month. **Iron Ore** gave back some of previous month gains, declining on average by 2% in March after having risen by around 26% the previous two months, as a result of supply disruptions mainly arising from a Brazilian mine accident and subsequent security reviews that are reducing Brazilian Vale's output by more than 23%, according to companies latest report. In addition, severe weather has recently affected supplies from Australia also supporting prices.

In the group of **precious metals**, the index declined by 1.6% mainly as a result of receding demand for safe assets, amid a continued recovery in financial markets. Gold prices declined by 1.5%, silver by 3.3%, but platinum rose by 1.4%.

Investment flows into commodities

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

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

	Open interest		*Net length*			
	Feb 19	Mar 19	Feb 19	% OI	Mar 19	% OI
Crude oil	2,045	2,003	144	7	216	11
Natural gas	1,255	1,180	143	11	154	13
Precious metals	704	697	106	15	47	7
Copper	250	255	-3	-1	10	4

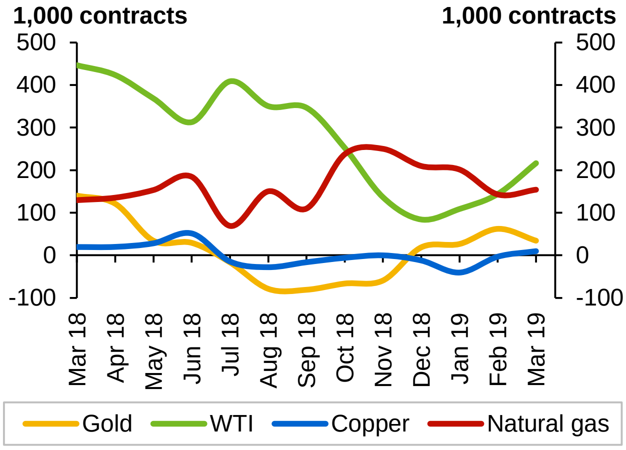
Note: Data on this table is based on monthly average.
Sources: CFTC and OPEC Secretariat.

Henry Hub's natural gas OI decreased in March by 2.0%, while money managers' average net long positions increased by 7.6% to 142,904 contracts. This is mainly because of increases at the end of the month, although net length fell toward the end of the month as temperatures moderated.

Copper's OI increased in February by 2.0%. Money managers switched to a net long position of around 10,000 contracts, from an average net short position of 3,000 contracts in the previous month, as prospects for world manufacturing improved, especially in China, the world's largest consumer.

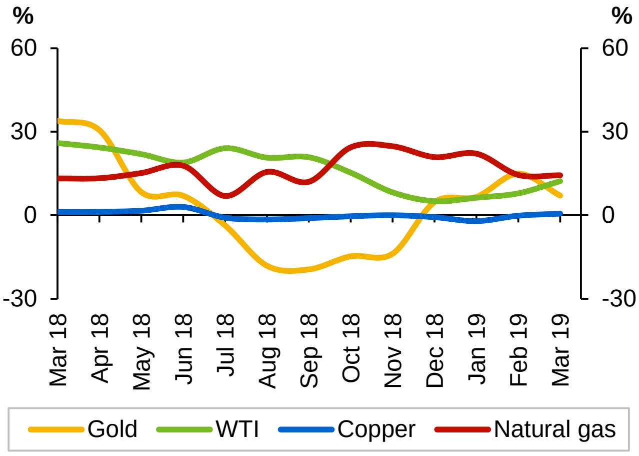
Precious metals' OI decreased slightly by 1.0%. Money managers decreased their net long positions significantly by around 55% to 47,000 contracts, with a focus on reducing demand for safe assets as financial markets recovered.

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



Note: Data on this graph is based on monthly average.
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.
Sources: CFTC and OPEC Secretariat.

World Economy

*Newly available data has confirmed the recently observed downward trend in global economic activities. This **weaker than anticipated growth trend has led to a further downward revision** of global economic growth for 2019, with growth now forecast at 3.2%, compared to 3.3% in the previous MOMR. This slowdown in 2019 follows growth of 3.6% in 2018. In particular, growth in OECD economies has slowed further, global trade has continued to decline and the outcome of the ongoing US-China trade negotiations and future developments related to further US trade-related initiatives remain unclear.*

*In the **OECD**, all major key economies were revised down for 2019. Momentum in economic growth in the US continues, albeit at a slowing pace. The 2019 US growth forecast was revised down slightly to 2.4%, after growth of 2.9% in 2018. The Euro-zone's 2019 growth was revised down to 1.2%, following growth of 1.8% in 2018. The 2019 growth forecast for Japan was revised down to 0.6%, compared to 0.8% in 2018. It is estimated that the OECD growth forecast will likely stabilise around the current forecast level of 1.7% for 2019, considerably lower than growth of 2.3% in 2018.*

*In the **emerging economies**, the growth forecasts remain unchanged. China's 2019 growth forecast remains at 6.1%, following growth of 6.6% in 2018. Some upside may still come from further fiscal and monetary stimulus in China, although as noted, trade related tensions continue. India's 2019 growth forecast is unchanged at 7.1%, compared to 7.3% in 2018. Brazil's growth forecast remains at 1.8% in 2019, after growth of 1.1% in 2018. Russia's growth forecast for 2019 remains unchanged at 1.6%, following growth of 2.3% in 2018.*

***While the recent global economic growth slowdown appears to have stabilised to some extent**, underlying risks remain and may further hinder 2019 global growth levels. Growth risks pertain to continued trade issues, ongoing challenges in several emerging and developing economies and high debt levels in several important economies. Moreover, Brexit, fiscal issues in some EU Member Country economies and Japan's slowdown, as well as fading US fiscal stimulus pose additional risks.*

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

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2018	**3.6**	**2.3**	**2.9**	**0.8**	**1.8**	**1.4**	**6.6**	**7.3**	**1.1**	**2.3**
Change from previous month	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7
2019	**3.2**	**1.7**	**2.4**	**0.6**	**1.2**	**1.3**	**6.1**	**7.1**	**1.8**	**1.6**
Change from previous month	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0

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

OECD

OECD Americas

US

The final release of 4Q18 **US GDP growth** numbers evidenced an even more severe slowdown in the last quarter of 2018. It was reported at 2.2% q-o-q at a seasonally-adjusted annualized rate (SAAR) by the Bureau of Economic Analysis, compared to 2.6% q-o-q in its previous estimate. This comes after a very high economic growth level of 3.4% q-o-q SAAR in 3Q18 and 4.2% q-o-q SAAR in 2Q18. This trend is forecast to continue in 1Q19, also accentuated by the negative impact of the government shutdown, the cold weather on the East Coast and the 1Q19 downward trend in consumer sentiment.

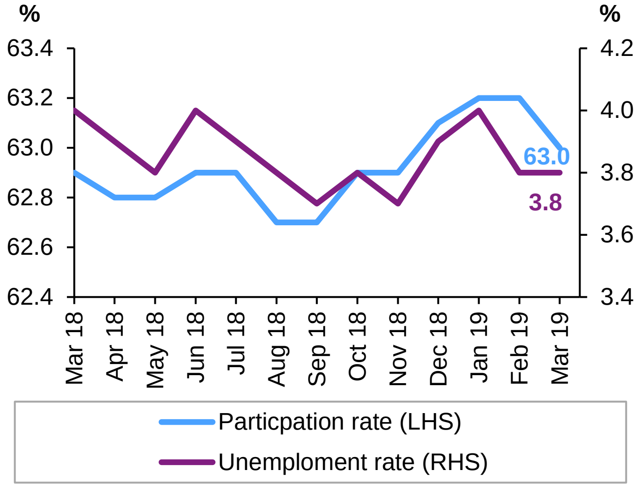
Despite the slower growth level in 4Q18, annual 2018 growth was maintained at 2.9%. While the 1Q19 growth number is currently forecast at around 2%, a further recovery is anticipated for the remainder of the year. In particular, domestic consumption is forecast to continue to support higher economic growth as the labour market continued developing positively in March, after a downward trend in February and consumer sentiment has witnessed a recovery from previous slowing levels. Nonetheless, numerous uncertainties remain.

Trade related issues seem to have impacted parts of the US economy, particularly sensitive areas related to agricultural exports, mainly a consequence of retaliatory trade measures from China. While negotiations are ongoing, any agreement between the US and China on trade-related issues remains unclear. Given that the US trade deficit hit a new record high in 2018, despite the US administration's stated strategy to reduce it, the ongoing trade negotiations warrant close monitoring. The recently upwardly revised 2018 trade deficit number of more than $622bn in 2018 was the largest since 2008, when it reached $709bn, based on data from the Census Bureau. So far, the latest available January number of a monthly $52.2bn deficit is almost precisely in line with the large average monthly deficits in 2018.

Moreover, the US officially hit the debt ceiling at the beginning of March, capping the national debt at just over $22 trillion. While the Treasury will be able to extend financing for about half a year, the debate in Congress about how to proceed, will probably again aggravate political tensions. These heightening external and domestic political strains also come at a time of growing verbal interventions by the US administration in the US Fed's monetary policy, which also may create rising uncertainty in capital markets, a situation that – given the high US sovereign debt burden – may feed into unintended economic consequences. Adding to these uncertainties, the waning effects of last year's initiated fiscal stimulus are leading to a lower growth level this year.

The **labour market report** saw a positive rebound in March, with job growth particularly witnessing a recovery. The unemployment rate remained at a low level of 3.8%. Non-farm payrolls increased by 196,000, after an upwardly revised level of 33,000 job additions in February. However, both numbers compare to much stronger job growth of 312,000 in January. Average hourly earnings' growth for the private sector also remained above 3% for the sixth consecutive month at a rate of 3.2% y-o-y, slightly below the 3.4% y-o-y in February, which was the strongest level since 2009. Long-term unemployment edged up slightly again, the second month in a row, to stand at 21.1% in March, after a level of 20.4% in February and 19.3% in January, which was the lowest level since 2008. The participation rate fell to stand at its lowest level in four months to reach 63.0% in March, compared to 63.2% in February, which was the highest level since 2013.

Graph 3 - 1: US monthly labour market

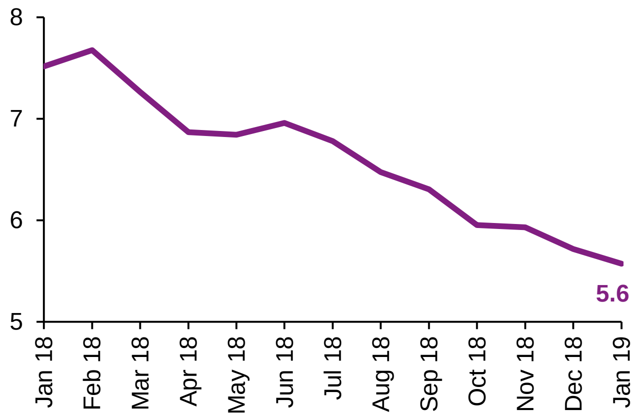


Sources: Bureau of Labor Statistics and Haver Analytics.

Overall **inflation** remained soft. Total yearly inflation stood at 1.5% y-o-y in February, the same low level as in January. This compared to considerably higher rates of 1.9% y-o-y in December and 2.2% in November. The important core inflation – excluding volatile items such as food and energy – stood at 2.1% y-o-y in February, the same level as January. This remains a healthy level and an indication of robust underlying economic development. However, the Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), retracted strongly to now stand at only 1.4% in January, clearly below the December growth of 1.8%. This low number also marks the lowest level of PCE inflation in more than two years. This provides the Fed with more flexibility as inflation does not currently seem to be a major challenge.

The very important **housing sector** continued to exhibit mixed development. While prices once again declined, home sales showed a healthy recovery. The S&P CoreLogic Case-Shiller Home Price Index Composite 20 for metropolitan areas showed a strongly slowing trend in terms of price increases. The January rise stood at 3.6% y-o-y, compared to 4.1% y-o-y in December. This is not only the lowest level since 2012, but also the 11th consecutive month of decline. Similarly, the yearly change in the house pricing index of the Federal Housing Finance Agency (FHFA) has also continued to see a slowing dynamic with a monthly price rise of 5.6% in January. This compares to a yearly average of 6.7% in 2018.

Graph 3 - 2: US house prices

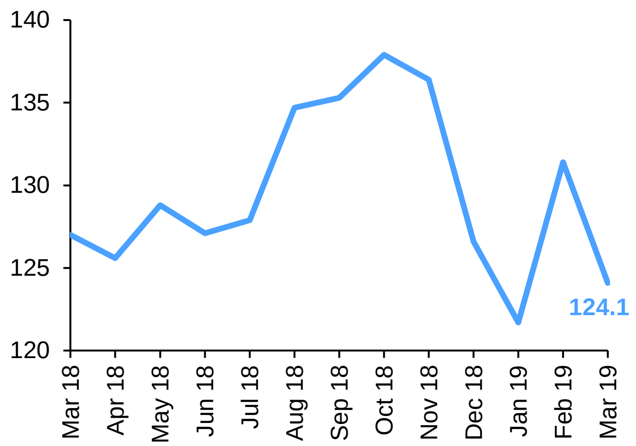


Sources: Federal Housing Finance Agency and Haver Analytics.

In what could be deemed a response to these lowering prices, and also due to improvements in the labour market, home sales data improved. While it is too early to call this a sustainable trend, it points to some positive development. Existing home sales in February recovered considerably, with an annualised level of 5.51 million, compared to 4.93 million entities in January. This even represents a pick-up when compared to the average monthly 5.34 million sold entities in 2018. New home sales recovered as well, rising by 667,000 in February, compared to 636,000 in January.

Despite the improving labour market situation, **consumer sentiment has again retracted**. The lead-indicator, published by the Conference Board, declined in March, to now stand at 124.1, after 131.4 in February, but above the 121.7 in January.

Graph 3 - 3: US consumer confidence index

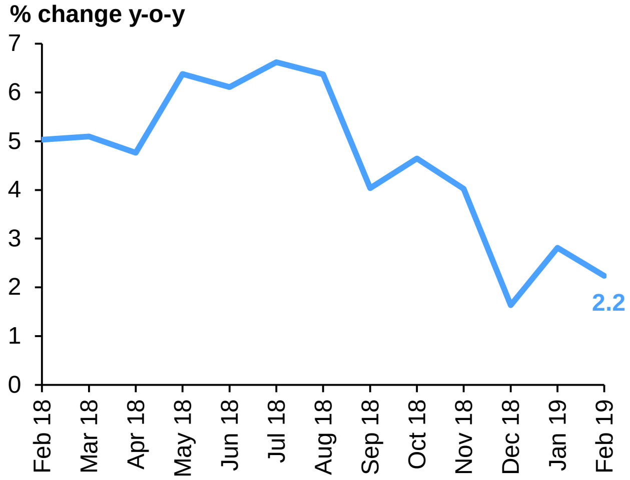


Sources: The Conference Board and Haver Analytics.

Retail sales grew by 2.8% y-o-y in January and 2.2% y-o-y in February, after having decelerated considerably in December, growing by only 1.6% y-o-y. However, the 2019 levels compare to annual growth of 4.9% in 2018.

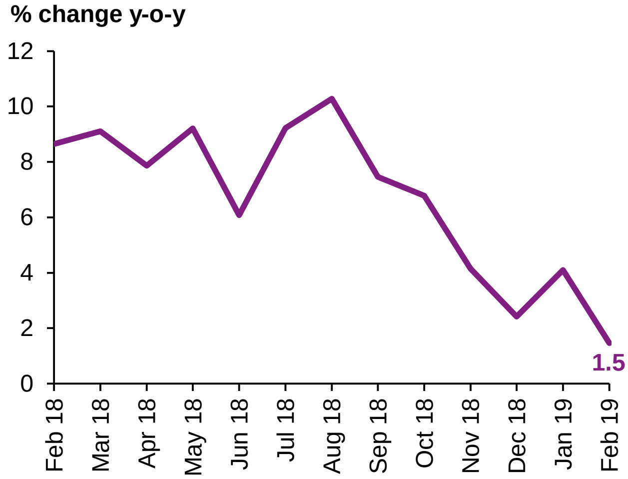
Industrial production growth held up well and stood at 3.6% y-o-y in February, after 3.9% y-o-y in January and 3.7% y-o-y in December. Some stabilisation of the slowing, albeit still healthy output numbers was also confirmed by **manufacturing orders**, a good lead-indictor for future manufacturing activity. Manufacturing order improved to 4.1% y-o-y in January, compared to 2.4% y-o-y in December, the lowest growth level since 2016. However, manufacturing orders grew in February by only 1.5% y-o-y.

Graph 3 - 4: US retail sales



Sources: Census Bureau and Haver Analytics.

Graph 3 - 5: US manufacturing orders

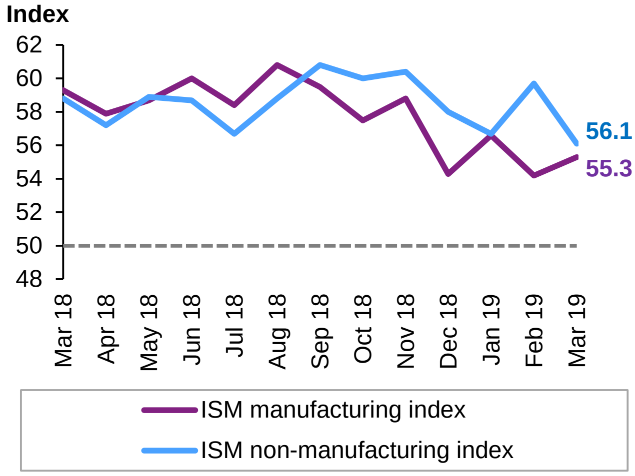


Sources: Census Bureau and Haver Analytics.

March's **Purchasing Managers' Index (PMI)**, as provided by the Institute of Supply Management (ISM) indicated a recovery and continuation of the positive manufacturing sector trend. However, the important services sector declined.

The manufacturing PMI rose to stand at 55.3 in March, compared to 54.2 in February, but still below the January level of 56.6. The index for the services sector fell to 56.1. While this is still a very high level, it compares to 59.7 in February, and index levels of up to and more than 60 in previous months.

Graph 3 - 6: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

There is still some uncertainty about the real underlying momentum in 1Q19 **GDP growth**, given distortions caused by the government shutdown. However, even a currently anticipated level of 2%, and assuming some rebound in the remainder of the year, leads to a downward revision to 2019 US GDP growth. This is now forecast at 2.4%, compared to the previous monthly forecast of 2.5%. This underscores an important slowdown from 2018 growth of 2.9% and there is evidently some downside risk to the current forecast.

Canada

Current indicators to the **Canadian economy** are mixed. While some indicators point at a soft recovery from the slowdown of recent months it is too early to say whether this momentum is sustainable, given ongoing domestic and external challenges.

After a period of slowdown, the most recent January monthly GDP growth indicated some recovery, showing a growth level of 0.3% m-o-m. This is an early positive sign and may indicate that the economic slowdown the country was facing towards the end of 2018 may not continue, or at least it may stabilise. The main support came from manufacturing and construction, growing by 1.5% and 1.9% m-o-m, respectively.

While the crude oil production adjustments in the province of Alberta may have some negative impact on the economy, on the other hand, rising oil prices may help to counterbalance this impact. However, January GDP numbers showed that mining and oil declined considerably by 3.1% m-o-m. While construction activity supported Canada's output in January, house prices continued to decline, falling by 0.4% y-o-y in January. That is now the largest monthly decline since 2009, a fact that points to the continued housing sector challenges. With relatively high debt levels in the housing sector, it remains an area that should be closely monitored. External trade may also remain a challenge as Canada's most important trading partners are facing decelerating economies.

This slightly recovering trend is also reflected in the January **industrial production** number, which grew by 1.9% y-o-y, a rise from the 1.3% y-o-y in December. However, this compares to 2.7% y-o-y in November and 5.0% y-o-y in October. The latest **PMI** index for manufacturing also points to a deceleration, reaching a level of only 50.6 in March, after 52.6 in February and 53.0 in January.

Given the downward trend towards the end of the year, the ongoing domestic and trade related challenges, the 2019 **GDP growth** forecast for Canada has been revised down to 1.4%, compared to 1.6% the previous month. This compares to GDP growth of 1.8% in 2018.

OECD Asia Pacific

Japan

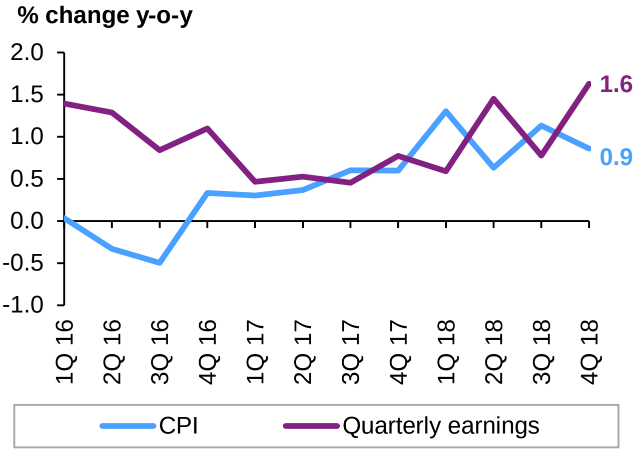
Japan's economy has witnessed a further slowdown and a negative growth rate in 1Q19 seems possible, when taking into account export declines and the ongoing lacklustre domestic demand. Hence, it is very likely that Japan will again face relatively anaemic growth in the current year, despite last year's growth being revised up to stand at 0.8%. Moreover, the latest survey from the Bank of Japan (BoJ), the Tankan, and other indicators point to a continuation of the low growth momentum in 2019. The quarterly Tankan saw large manufacturer business sentiment fall for the quarter to March, while all firms' sentiment stayed well above the average of the current expansion period, the level of optimism retracted somewhat from previous months.

In general, challenges remain as consumption has not appeared to pick up materially, despite labour market tightness. Additionally, the country's export-oriented economy is forecast to see a continued impact from the slowdown in global trade, partially due to slowing Chinese growth, but also in other parts of the world. Importantly, exports have continued to decline, as has industrial production, and retail trade has remained muted. The core-inflation dynamic continues a relatively stagnant trend, despite the tight labour market.

Inflation remained unchanged at a very low rate of 0.2% y-o-y in February, the third month in a row. This compared to the yearly 2018 average of 1.0%. While wages continue to rise and earnings' growth remains strong, support is still muted and lifting inflation has only been achieved to a limited extent.

The downward trend in the economy has also been accentuated by a decline in earnings in February, when **monthly earnings** fell by 0.1% y-o-y, a third consecutive monthly deceleration. This decline comes after some months of strong growth, with an average 1.6% y-o-y in 4Q18 and 0.8% y-o-y in 3Q18. Given this previous monthly support, the more wage level-driven core inflation, which excludes food and energy, stood at 0.4% y-o-y in February, the same as last month. Given the labour market tightness, the unemployment rate stood at an extremely low level of 2.3% in February, the lowest in nine months.

Graph 3 - 7: Japan's CPI vs earnings

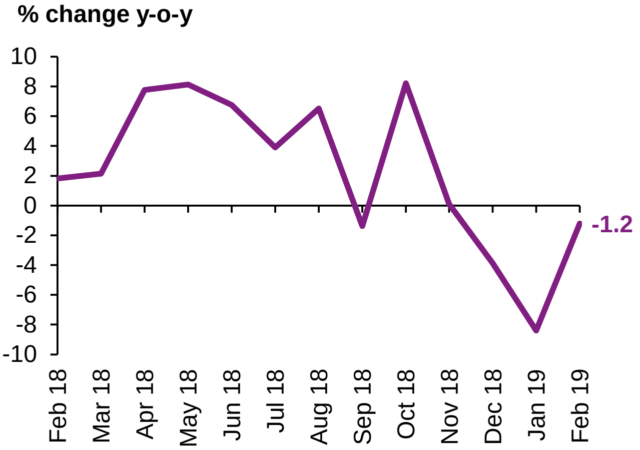


Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Haver Analytics.

Along with other economic indicators, **export** growth slowed significantly in February. After a solid increase in exports for most of 2018, international trade fell again in February, declining by 1.2% y-o-y, non-seasonally adjusted. Nonetheless, this is a lower decline than witnessed in January and December, when exports fell more severely, by 8.4% and 3.9% y-o-y, respectively.

A continuation of the weak trend was also seen for **industrial production**, which fell again by 1.3% y-o-y in February, compared to growth of 0.1% y-o-y in January. The lead-indicator of manufacturing orders points to a further challenging near-term development, with a decline of 11.5% y-o-y in January. This strong decline comes after a rise of 0.5% y-o-y in December and 2.3% y-o-y in November.

Graph 3 - 8: Japan's exports

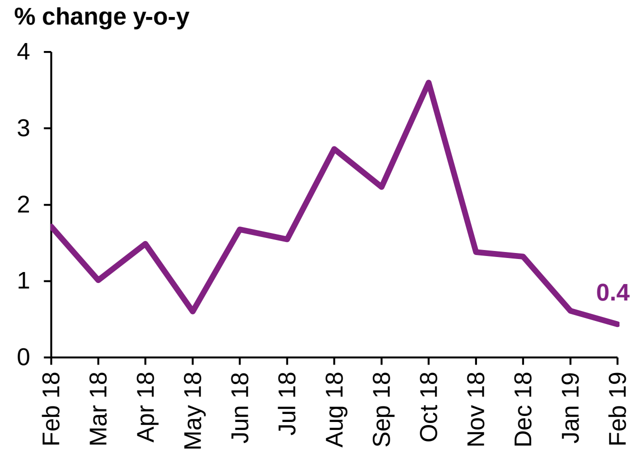


Sources: Ministry of Finance, Japan Tariff Association and Haver Analytics.

Domestic retail demand mirrored the slowing trend in the Japanese economy too, expanding by only 0.4% y-o-y in February, after already low growth of 0.6% y-o-y in January. This compares to a relatively low annual rise of 1.7% y-o-y in 2018.

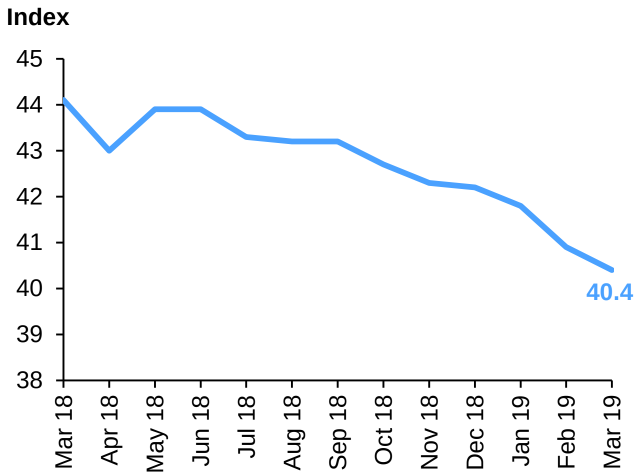
Moreover, **consumer confidence** fell again and now stands at 40.4 in March, following a level of 40.9 in February, based on the Cabinet Office's index level. This is the lowest level since 2016.

Graph 3 - 9: Japan's retail trade



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

Graph 3 - 10: Japan's consumer confidence index

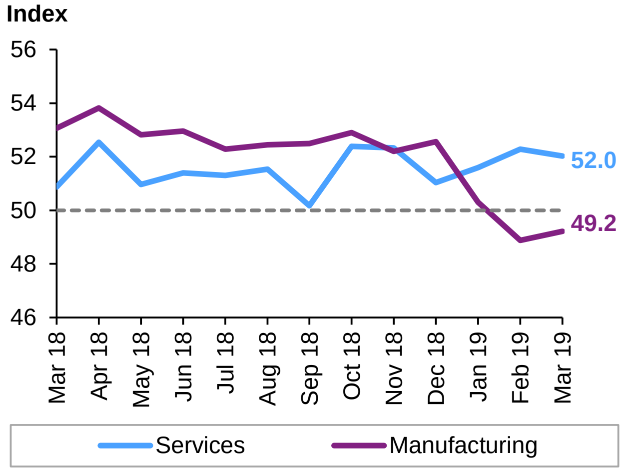


Sources: Cabinet Office of Japan and Haver Analytics.

The latest **March PMI number** for manufacturing confirms the slowing trend, with the level remaining below the growth indicating level of 50. While it improved from the February level of 48.9 to stand in March at 49.2, it continues to indicate a decline in the sector. The services sector PMI – the sector that constitutes around two-thirds of the Japanese economy – remained almost unchanged at 52.0 in March, only slightly below the 52.3 recorded in February.

Given the clear downward trajectory, Japan's 2019 **GDP growth forecast** has been revised down. The weakness in 1Q19 is forecast to continue and given the envisaged sales tax increase later this year, the 4Q19 growth level is forecast to be negative. Hence, the 2019 GDP growth forecast was revised to 0.6%, compared to 0.7% in March. This compares to growth of 0.8% in 2018.

Graph 3 - 11: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

South Korea

The **South Korean economy** continues to see a slowdown. The important indicator of **exports** underscores this development falling by 2.7% y-o-y in March, a third consecutive monthly decline. Exports fell by 1.6% y-o-y in January and 7.7% y-o-y in February. Consequently, industrial production is exhibiting a loss of momentum, dropping by 1.3% y-o-y in February, following growth of 0.7% y-o-y in January. Moreover, the latest **PMI number** for the manufacturing sector points to another declining trend. While the March number of 48.8 improved on the February level of 47.2, it continues to indicate a drop-off in the sector.

While the risk remains skewed to the downside, it should be noted that most of the slowing trend in **GDP growth** has already been anticipated. Therefore, the 2019 growth forecast remains unchanged at 2.4%, following growth of 2.7% in 2018.

OECD Europe

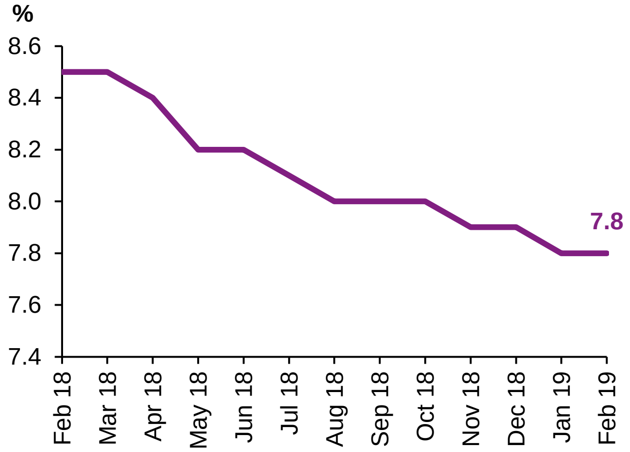
Euro-zone

The **downward trend in the Euro-zone that began in the 2H18 has continued in recent months**, with further challenges in Germany, the ongoing uncertainties surrounding Brexit, Italy's enduring economic issues, among others. The most recently available data has confirmed the slowdown, but there are some signs that the negative momentum is abating growth may now stabilise at this lower level. Ongoing monetary stimulus, as indicated in the latest ECB meeting, will also support growth at this lower level for some time. Growth is now forecast to remain at around current levels of slightly more than 1% growth on average for the whole Euro-zone.

Importantly, the slowing situation in Germany will need to be monitored carefully, given that it constitutes the largest Euro-zone economy. An important indicator in this respect are German exports, which improved in February, rising by 2.8% y-o-y, a solid recovery from the lower January level of 1.8%. The February level is the highest rate of expansion in four months. Italy's situation remains challenging, but positively for the economy the risk premium for debt instruments has fallen and the ECB has indicated an ongoing accommodative monetary policy. The ECB has halted its monetary policy normalisation and indicated that it will not raise interest rates until at least the end of 2019. However, Italy is the weakest of the three largest Euro-zone economies and there is still the risk that the economy may face a mild recession in 2019. The ongoing decline in world trade in recent months has also impacted the Euro-zone and it remains to be seen how global trade will develop in the near-term. Moreover, there is still the possibility that the US introduces tariffs on car and car parts, which would ultimately impact major car-exporters in the Euro-zone, first of all Germany.

In the **labour market**, the unemployment rate in February remained at 7.8% for the second month in a row. While it constitutes the lowest level in more than a decade, it is still a high-level and there remains room to lower this level further. In terms of countries, Germany reached another new all-time low of 3.1% in February, while France's unemployment rate stood at 8.8%. Spain's labour market improved further as its unemployment rate declined to 13.9%. This is the first time since 2008 that the Spanish unemployment rate has been below 14%. Only Italy's unemployment level did not improve in February, rising to 10.7%, and there has been little change in this since the beginning of 2018.

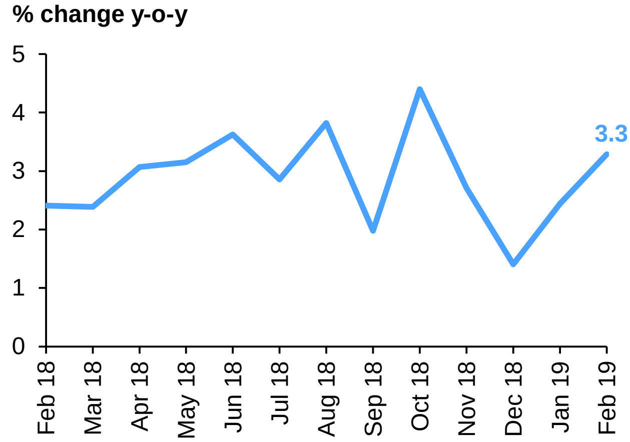
Graph 3 - 12: Euro-zone unemployment rate



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

In line with labour market improvements, developments in the area of **retail trade** picked up too. Retail trade growth in value terms stood at 3.3% in February, compared to 2.4% y-o-y in January and 1.4% y-o-y in December.

Graph 3 - 13: Euro-zone retail sales



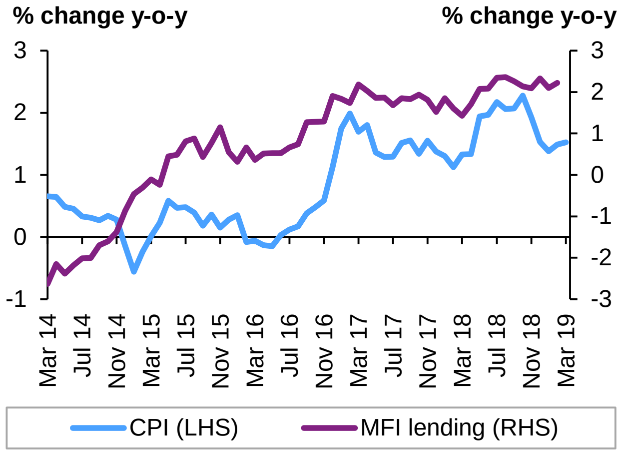
Sources: Statistical Office of the European Communities and Haver Analytics.

However, **Industrial production** (IP) in the Euro-zone fell again. After a considerable decline in both December and November 2018, declining by 3.9% y-o-y and 3.0% y-o-y, respectively, IP fell again by 1.4% y-o-y in January. The January trend was very much influenced by a 2.0% y-o-y decline in Germany and a decline in Italy of 0.9% y-o-y. Positively, IP in France picked up by 1.7% y-o-y.

Manufacturing activity fell again in January, declining by 2.0% y-o-y. A sharp decline in manufacturing orders, a good lead indicator for future manufacturing activity, indicates that the slowing growth trend is likely to continue. Manufacturing order growth fell by 3.1% y-o-y in January, after an already strong decline of 4.4% y-o-y in December.

Inflation also continued a lacklustre trend, growing by 1.5% y-o-y in March, unchanged from the previous month. With rising consumption levels and improvements in the labour market, however, prices may rise again in the coming months. In the meantime, the important core inflation – the CPI, excluding energy and food – stood at only 0.8% in March, following an already low level of 1.0% y-o-y in February and 1.1% y-o-y in January.

Graph 3 - 14: Euro-zone CPI and lending activity



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

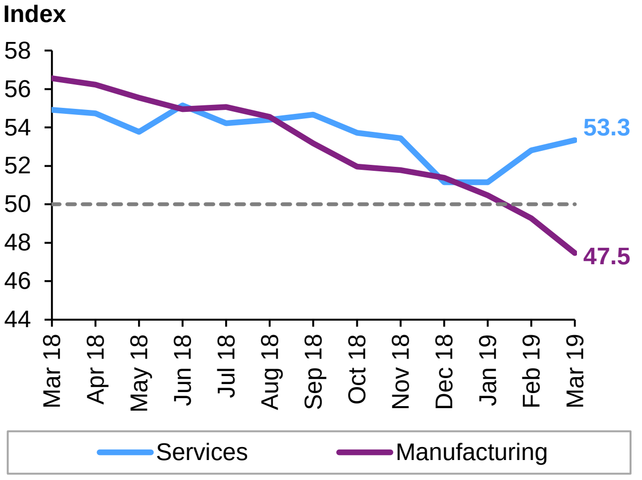
Developments in **lending activity** – as a motor for investments – remain an important element to monitor in the Euro-zone. The latest growth number from February improved slightly to stand at 2.2%, a pick up from the 2.1% y-o-y growth in January. It seems that although some areas of the Euro-zone's banking sector remain weak, the growth dynamic of the liquidity lines, a vital financing source for the Euro-zone, has remained relatively stable in past

months.

The Euro-zone's latest March **PMI indicators** generally point to mixed developments. The manufacturing PMI fell again to stand below the growth indicating level of 50, retracting further to 47.5, comparing to 49.3 in February. The important PMI for the service sector, which constitutes the largest sector in the Euro-zone, however, improved to stand at 53.3 in March, compared to 52.8 in both February.

As the Euro-zone has continued to slow in 1Q19, the 2019 **GDP growth** forecast has been revised down to 1.2%, compared to 1.3% in the previous month. This comes after growth of 1.8% in 2018. However, developments will need to be closely observed as numerous uncertainties remain. In general, political uncertainties, including the Brexit process, weaknesses in the banking sector, as well as monetary policies and the management of still-high sovereign debt levels in some economies remain important factors to monitor.

Graph 3 - 15: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

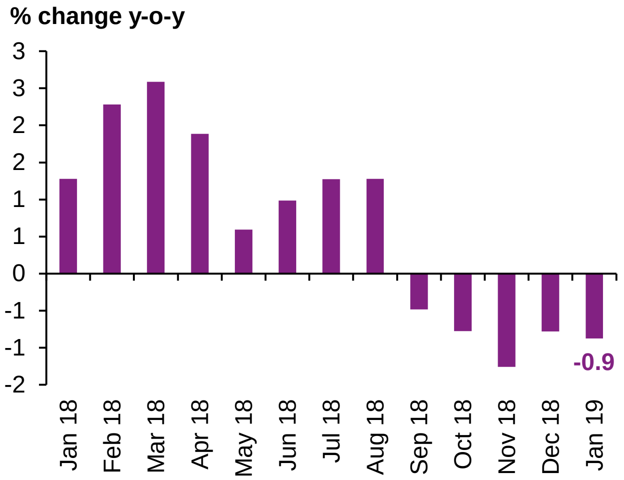
UK

At the time of writing this monthly report, the outcome of **Brexit**-related developments remain uncertain. The current official Brexit date for the UK leaving the EU is 12 April. However, there are moves to extend this date further into the future. The UK's Prime Minister is continuing her consultation with EU leaders, and with the UK Labour party. On Wednesday, there will be another EU Summit to deal with the request to delay the UK's exit date. The Prime Minister is believed to want to postpone the current exit date of 12 April to 30 June. A further delay may have the likely and complicated implication of the UK participating in elections for the EU parliament on 23 May. Moreover, the possibility of a 'confirmatory referendum' has garnered more discussion in recent weeks.

Given all this ambiguity, the negative impact of these uncertainties continues to be felt in the UK's economy, with generally anaemic growth, mainly supported by domestic demand.

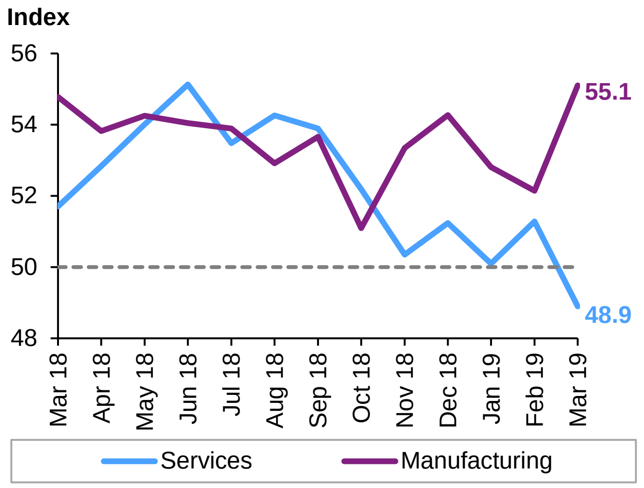
Industrial production declined for the fifth consecutive month in January, falling by 0.9% y-o-y. **Retail trade** in value terms held up well, rising by 4.4% y-o-y in February, the same level as in January. Exports continued growing, however, albeit at a decelerating rate as they rose by 2.1% y-o-y in January, while the last quarter of 2018 witnessed much higher growth of around 4.1% y-o-y.

Graph 3 - 16: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Graph 3 - 17: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

The March **PMI** lead indicators showed varying signals. The PMI for manufacturing rose considerably to stand at 55.1, compared to 52.1 in February and 52.8 in January. The very important PMI of the services sector, which constitutes the majority of the UK's economy, fell strongly to 48.9, compared to 51.3 in February.

Given the ongoing Brexit uncertainties and the slowing trend in key parts of the UK economy, the 2019 **GDP growth** estimate was revised down to 1.3%, compared to 1.4% in the previous monthly report. GDP growth for 2018 stood at 1.4%.

Non-OECD

BRICs

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

	GDP growth rate, %		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Brazil	1.1	1.8	3.7	3.8	-14.5	-20.6	-7.0	-5.7	76.4	80.9
Russia	2.3	1.6	2.9	4.9	109.1	106.0	2.7	2.4	10.3	9.3
India	7.3	7.1	3.9	3.3	-72.5	-53.3	-3.6	-3.4	50.2	49.6
China	6.6	6.1	1.9	2.6	45.1	27.0	-4.0	-4.4	19.2	22.2

*Note: * 2019 = Forecast.*

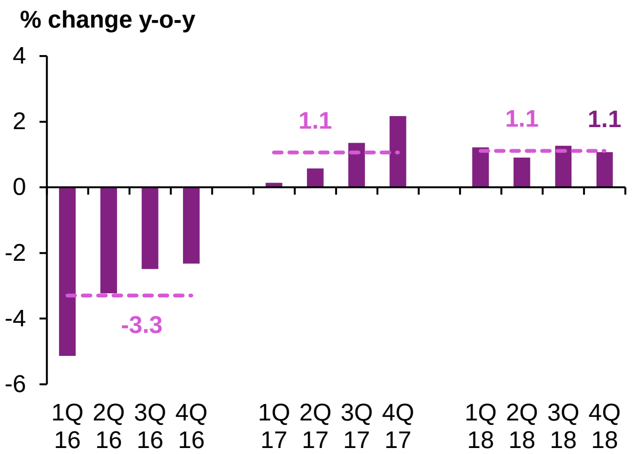
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, Oxford Economics and OPEC Secretariat.

Brazil

Exports from Brazil posted a 10.2% y-o-y drop in March, falling to $18.2 billion. Exports of manufactured products declined by 15.4% y-o-y in March, semi-manufactured decreased by 10.0% y-o-y, and primary products by 1.9% y-o-y. Imports fell by 4.9% y-o-y in March, posting a level of $13.1 billion. **Imports** of manufactured products dropped by 7.8% y-o-y in March, while those of primary products and semi manufactured products increased by 6.1% and 24.2% y-o-y, respectively. As a result, the trade surplus narrowed by 21.5% y-o-y. The **trade surplus** was at around $6.4 billion in March 2018, compared to $5.0 billion in March 2019. GDP posted growth of 1.1% y-o-y in 4Q18, down from 1.3% in the previous quarter. Thus, full year growth stood at 1.1% in 2018, similar to the economic growth registered in 2017.

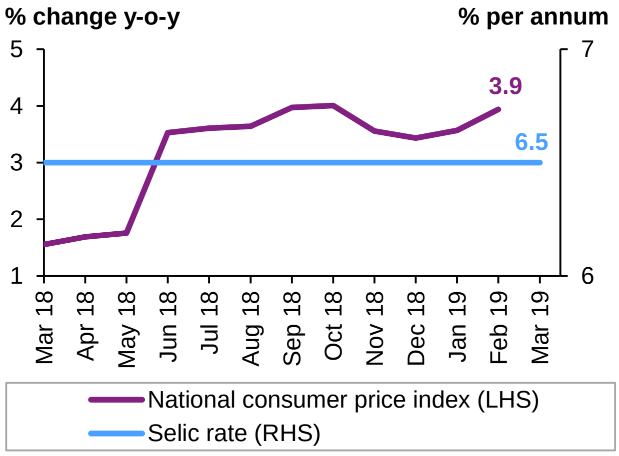
In March, the real depreciated by 3.3% m-o-m, after appreciating by 0.5% and 3.7% m-o-m in February and January, respectively. On a y-o-y comparison, the real was lower by 17.2% vs the dollar in March 2019. The real depreciated by 18% in 2018. **Inflation** slightly increased from 3.6% y-o-y in January 2019 to 3.9% in February. In 2018, average inflation stood at 2.9%. The central bank held its benchmark **interest rate** unchanged at 6.50% in March 2019, the thirteenth month in a row. The **unemployment rate** rose for the second consecutive month in February. It posted a level of 12.4% in February, from 12.0% and 11.6% in January 2019 and December 2018, respectively.

Graph 3 - 18: Brazil's GDP growth



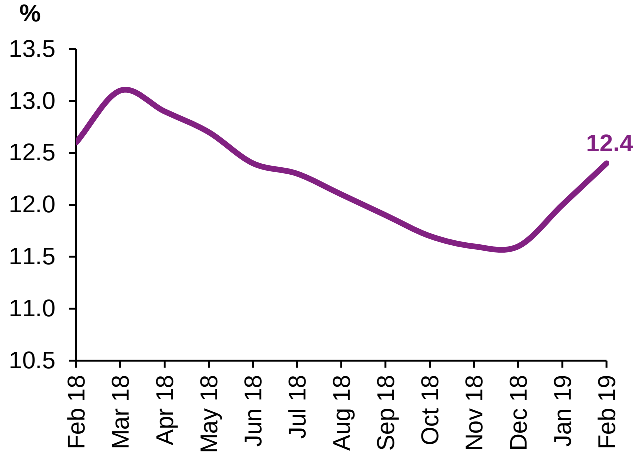
Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

Graph 3 - 19: Brazil's inflation vs. interest rate



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

Graph 3 - 20: Brazil's unemployment rate



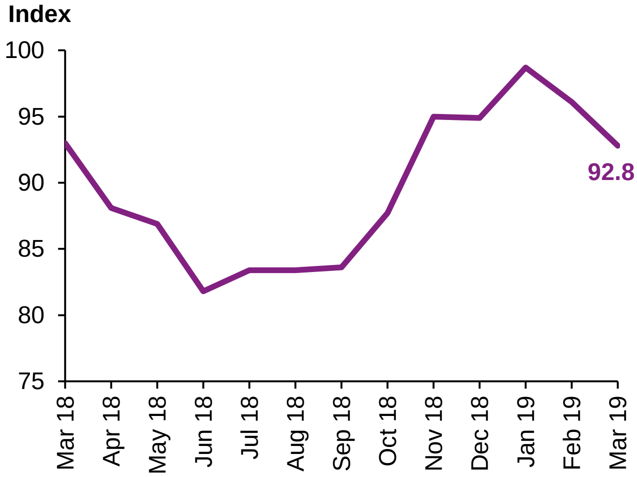
Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

The **consumer confidence index** fell for the second month in a row in March, registering 92.8, from 96.1 in February, and 98.7 in January.

The **manufacturing sector** survey in March showed that a softer upturn in order books underpinned a weaker and only slight expansion in employment, while the ongoing drop in new export work stretched to four months. Nonetheless, stronger increases in output and input buying were registered. The IHS Markit Brazil Manufacturing PMI fell from February's 11-month high of 53.4 to 52.8 in March. New orders and employment acted as a drag on the headline figure, both increasing at slower rates in March. Despite easing, the rise in new orders was solid and stronger than the average witnessed in 2018.The upturn in employment was the weakest in the current three-month sequence of expansion. In contrast, export sales declined for the fourth month in a row. Manufacturing production rose for the ninth successive month during March and at the quickest pace in one year. The upturn reflected greater inflows of new work, efforts to boost inventories and upbeat growth projections. Part of the goods produced in March were placed into inventory, as highlighted by consecutive increases in the holdings of finished goods.

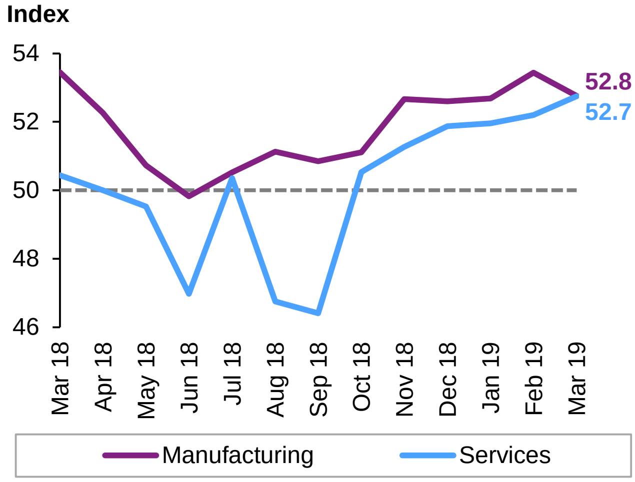
March data painted a mixed picture in terms of the health of the Brazilian **service sector**. On the positive side, stronger expansions in new work and business activity were recorded. However, job shedding resumed amid efforts to tighten costs. The IHS Markit Brazil Services Business Activity Index pointed to a solid upturn in output. The increase was the joint-strongest since January 2013. The index rose to 52.7 in March 2019, from 52.2 in February.

Graph 3 - 21: Brazil's consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 22: Brazil's PMIs



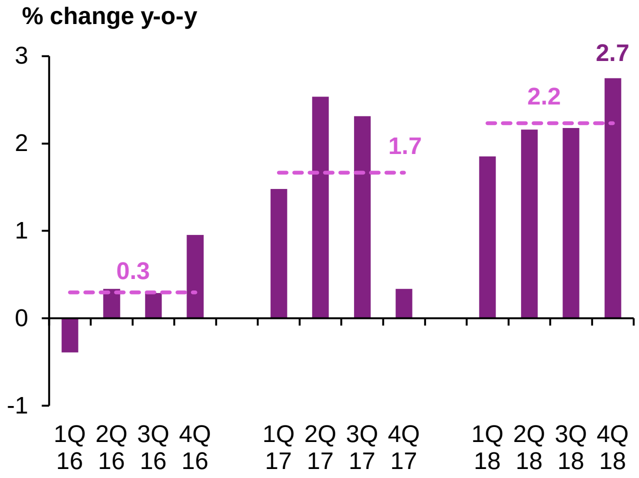
Sources: IHS Markit and Haver Analytics.

Indications from the Brazilian economy during the past two months continued to point to mild growth. Private sector growth was sustained in both manufacturing and services. However, the unemployment rate increased in February. Moreover, exports to Argentina continue to weaken, falling by more than 41% y-o-y in February 2019. Argentina is Brazil's third largest trading partner. Furthermore, significant uncertainty regarding the government's plan to revamp the country's pension system prevents pencilling in a more optimistic scenario for **GDP growth** in 2019. There is no change this month to Brazil's GDP forecast, with growth expected at 1.8% in 2019, from the 1.1% growth achieved in 2018.

Russia

The Federal State Statistics Service has published 4Q18 **GDP growth** alongside revised figures for the first three quarters of 2018 and the full years of 2017 and 2016. GDP growth in 4Q18 stood at an unexpectedly high level of 2.7% y-o-y. The GDP estimation was revised up for 1Q18 from 1.3% to 1.9% y-o-y, for 2Q18 from 1.9% to 2.2% y-o-y, and for 3Q18 from 1.5% to 2.2% y-o-y. This brings the GDP growth figure for 2018 to 2.3% y-o-y, which is the highest rate of growth since 2012. This is also higher than the 1.8% y-o-y growth estimated by the economy ministry and the 1.5% y-o-y growth estimated by the central bank. The Statistics Service has revised construction growth in the first eleven months of 2018 from 0.5% to 5.7% y-o-y, which also accounts for the third phase of the Yamal LNG fields in the Far East of Russia. Estimations of economic growth for 2016 and 2017 were also revised up.

Graph 3 - 23: Russia's GDP growth

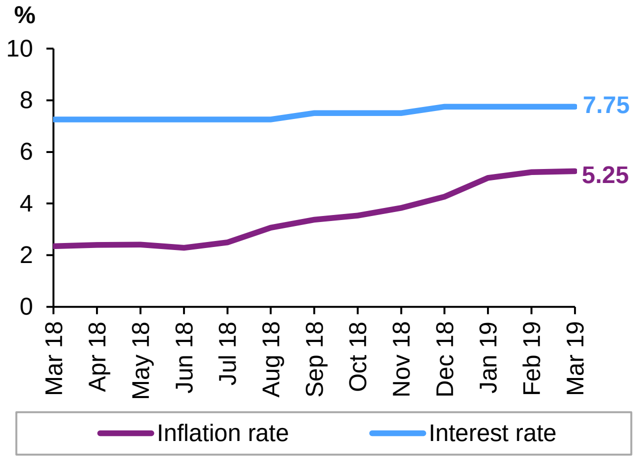


Sources: Federal State Statistics Service and Haver Analytics.

The data showed **household consumption** increased by 2.6% y-o-y in 4Q18, from 2.0% in the previous quarter, while **government consumption** was stable at 0.3% y-o-y growth in 4Q18. **Gross capital formation** posted a 3.0% y-o-y rise in 4Q18, up from 1.1% in 3Q18. **Exports** went up by 2.6% y-o-y in 4Q18, from 4.8% growth in 3Q18, whereas **imports** declined by 0.3% in 4Q18, after increasing by 0.1% in the previous quarter.

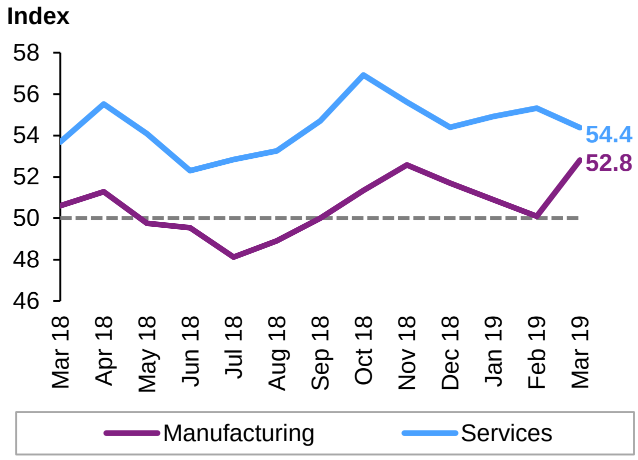
The **ruble** appreciated by 1.1% m-o-m in March, following a 2.2% appreciation in February. On a y-o-y comparison, the ruble was 14.2% lower in March 2019. Consumer price **Inflation** increased for the eighth month in a row in February, posting 5.2% y-o-y. It was the highest inflation rate since December 2016. In January, inflation accelerated to 5.0% y-o-y, up from 4.3% in December and 3.8% in November, as a result of the VAT increase. In August 2018, inflation had surpassed 3% y-o-y for the first time in 12 months. The central bank left its benchmark **one-week repo rate** unchanged in March at 7.75.

Graph 3 - 24: Russia's inflation vs. interest rate



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

Graph 3 - 25: Russia's PMIs

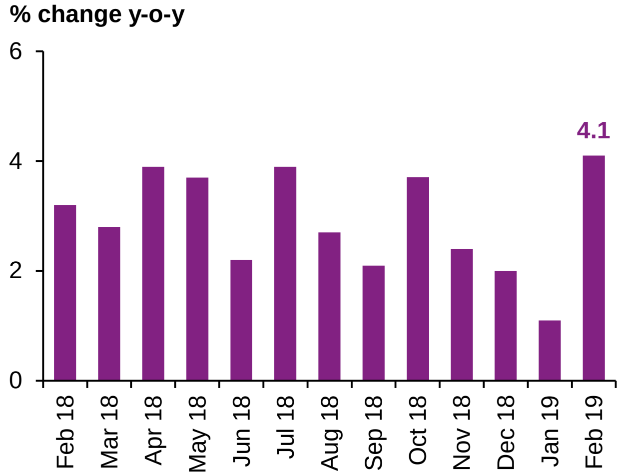


Sources: IHS Markit and Haver Analytics.

Russian **manufacturers** signalled a significant uptick in domestic demand and production in March, indicating a solid end to the 1Q19 following relatively lacklustre February growth. Rates of new orders and output growth accelerated, supporting an improvement in business confidence that reached a series high. The IHS Markit Russia manufacturing PMI in March posted a level of 52.8, up from February's 50.1. The survey showed that cost burdens increased at a faster pace in March as the recent VAT hike reportedly had a continued effect on supplier prices. The solid overall expansion was supported by significant accelerations in rates of output and new business growth. Although foreign client demand fell for the third consecutive month, new orders rose at the fastest pace since January 2017 amid stronger domestic demand. Subsequently, business confidence improved in March and optimism reached a fresh series high. Industrial production grew by 4.1% y-o-y in February, from 1.1% y-o-y in January 2019. This highlights the fastest pace of industrial production growth since August 2017.

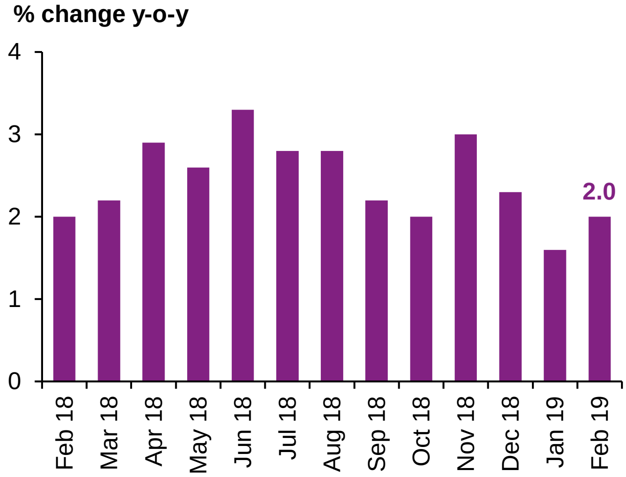
The IHS Markit Russia **Services** Business Activity Index posted a level of 54.4 in March, down from 55.3 in February, as it dipped below the long-run series trend. Although still solid, the rate of growth signalled was the slowest for three months. New business received by service providers grew strongly in March, despite an easing from the sharp rates seen in the previous five months. Russian service sector firms reported a softer rate of input price inflation in March. The increase remained marked, but eased from the high seen at the start of the year following the recent VAT hike. For the fifteenth month in a row, retail sales continued its improving growth streak in February 2019. The rate of increase was 2.0% y-o-y, from 1.6% a month earlier.

Graph 3 - 26: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 27: Russia's retail sales



Sources: Federal State Statistics Service and Haver Analytics.

The better than expected **GDP growth rate in 2018** was due to one-time factors and thus not indicative of a sustained or broad-based pick-up in growth.

The GDP growth forecast for 2019 still points to 1.6% y-o-y. Among challenges to seeing a notably faster growth in 2019 are the baseline effects of a strong harvest, the impact of higher inflation and interest rates on domestic demand, and commodity price uncertainties.

India

India's general election is due to take place in April and May 2019. A number of platform promises designed to appeal to India's large rural community, including farm loan waivers, subsidies, a reduction in the Goods and Services Tax (GST) and unemployment allowances, are already in place. A number of these measures could have significant fiscal implications for India's economy.

The last few years have been challenging for **earnings growth**, due to the effects of demonetisation, the implementation of the GST and the impact of negative headlines from non-performing loans. However, a gradual improvement in earnings growth now appears to be occurring, which would be supportive for equities.

India continues to benefit from various **growth drivers,** such as favourable demographics, infrastructure investment, urban consumption growth and increasing income levels that will support the economy in the mid-term. In the short-term GDP growth debate, lower consumer spending, sluggish investments, and slower growth in agriculture and manufacturing, are stunting growth. These issues are likely to become flash points as election campaigning peaks.

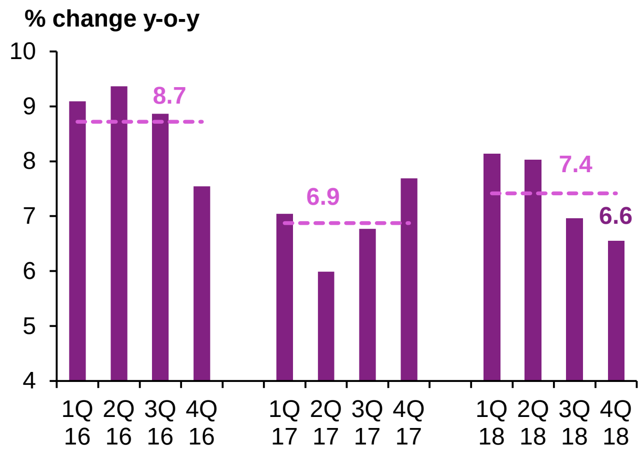
India's **GDP growth rate** is expected to be moderate at about 6.9% in 1Q19, Looking forward, the Secretariat estimates an annual growth GDP rate of 7.1% in 2019.

In 1H18, foreign portfolio outflows from India amounted to nearly INR500 billion ($7.2 billion).The situation has not changed since then. Capital flows to developing economies have been slowing due to a strong dollar and increasing yields in the US and it is a global phenomenon. However, there are weaknesses in the Indian economy too, which has made things worse.

Foreign Direct Investment (FDI) in India increased by $3.7 billion in January 2019, but investments into new projects in 4Q18 stood at their lowest level since 2014.

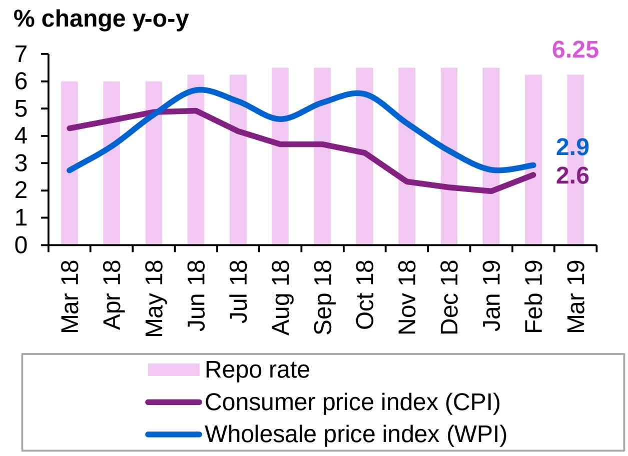
Slowing rural growth, softening international commodity prices, and irregular monsoons have taken a toll on Indian farmers in certain geographies. **Farm income** has slumped to a 14-year low and even the non-farm wage growth has slowed, which paints an even bleaker picture of the state of the rural economy.

Graph 3 - 28: India's GDP growth



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

Graph 3 - 29: Repo rate and inflation in India



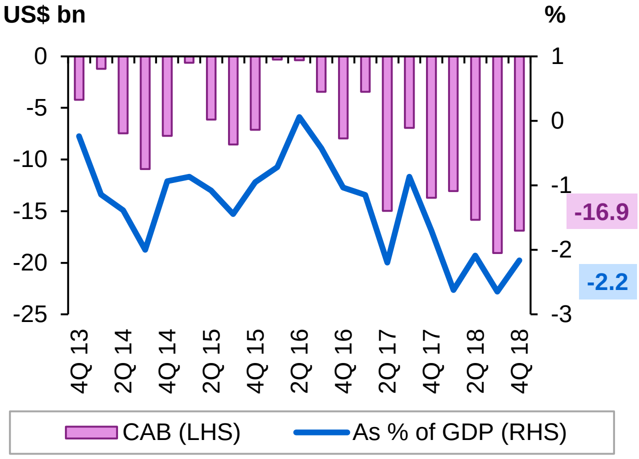
Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

India's **CPI inflation** rose 2.6% y-o-y in February 2019, following a downwardly revised 2.0% rise in January. It is the highest inflation rate in four months as food prices fell less than in January. In its February meeting, the RBI lowered its inflation forecasts to 2.8% for January-March 2019, mentioning a deflation in food items and a sharp fall in fuel inflation. India's **WPI** rose by 2.9% y-o-y in February 2019, accelerating from a 2.8% rise the prior month, mainly driven by a faster rise in the cost of food and fuel. The **cost of food** in India decreased 0.66% in February 2019 compared to the same month in 2018.

India's **trade balance** narrowed y-o-y to $9.6 billion in February 2019 from $12.3 billion. It is the lowest trade deficit since September 2017. **Exports** increased 2.4% y-o-y to $26.7 billion, mainly due to engineering goods (1.7%) and drugs and pharmaceuticals (16.1%). In contrast, **imports** declined 5.4% to $36.3 billion, mainly due to oil (-8.1%), electronic goods (-6.5%) and gold (-10.8%). From April 2018 to February 2019, the country's trade gap increased to $165.52 billion from $148.55 billion. While export growth has decelerated noticeably since mid-2018, imports have lost even more momentum, with non-oil and non-gold imports lower than a year earlier in three of the last four months. This does not suggest particularly buoyant domestic demand.

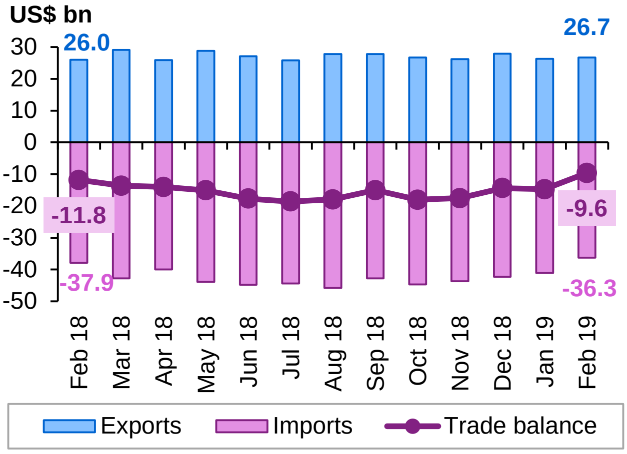
India's **fiscal deficit** remained at around 110% of the budgeted target in January 2019, with capital spending facing continued pressure. In January 2019, capital expenditure stood at 68% of the target, as opposed to 100% at the equivalent period in 2017.

Graph 3 - 30: India's current account balance (CAB)



Sources: Reserve Bank of India and Haver Analytics.

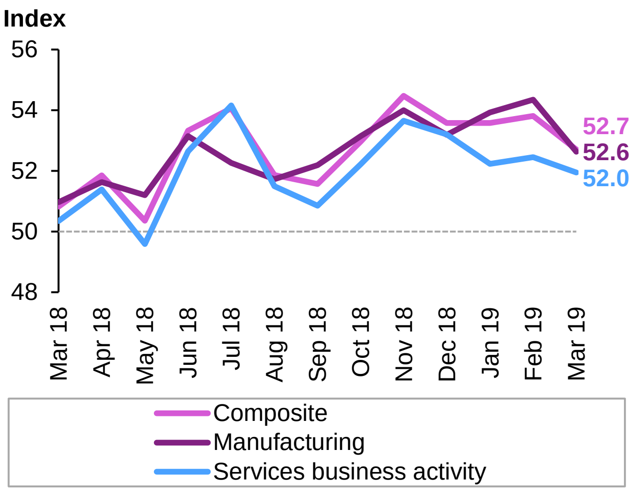
Graph 3 - 31: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

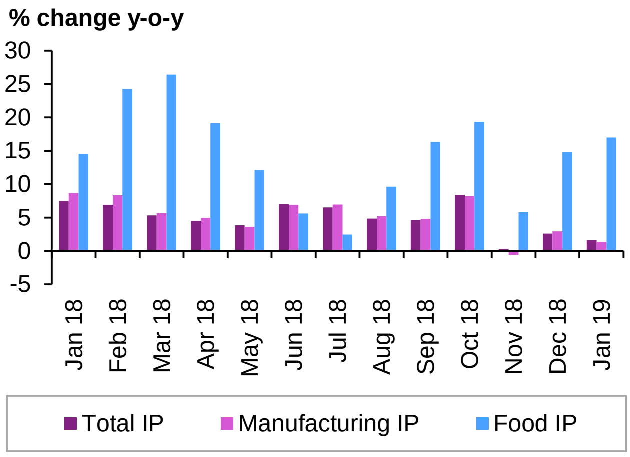
India's **Nikkei Manufacturing PMI** dropped to a six-month low of 52.6 in March 2019 from 54.3 in February. Both output and new orders expanded the least in six months and new export order growth also eased. Buying levels increased the least in the current ten-month sequence of increases and employment advanced at the weakest rate in eight months. On the price front, softer increases in input costs and output charges were registered. In both cases, inflation rates were below their respective long-run averages. Looking ahead, sentiment has strengthened to a seven-month high, amid hopes of favourable public policies after the national election, as well as plans for marketing initiatives and capacity expansion.

Graph 3 - 32: India's PMI



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 33: India's industrial production (IP) breakdown



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

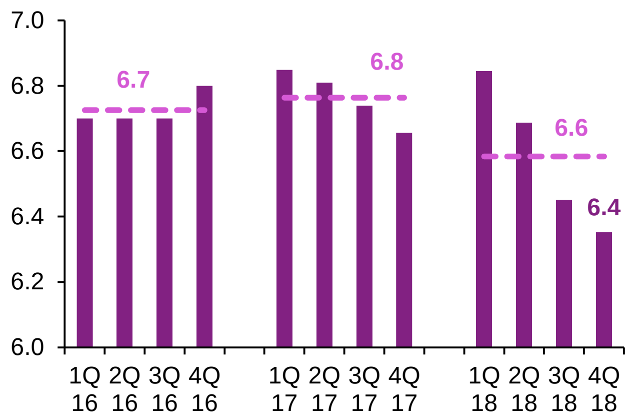
The **Nikkei India Services PMI** dropped to 52.0 in March 2019 from 52.5 the previous month. The latest reading points to the weakest expansion in the services sector since September last year, as output growth eased to a six-month low mainly driven by a slowdown in new business. In addition, the job creation rate expanded at the softest pace in six months, amid sufficient employee numbers to handle current workloads.

The **Business Expectations Index (BEI)** in India rose to 116.2 in 4Q18 from 115 in 3Q18, pointing to an optimistic outlook for demand conditions. **Consumer confidence** in India also increased 97 index points in the 1Q19 from 96.70 index points in the 4Q18. Expansionary public policies such as fiscal stimulus and interest rate reduction should also assist the manufacturing sector in gaining some short-term traction.

China

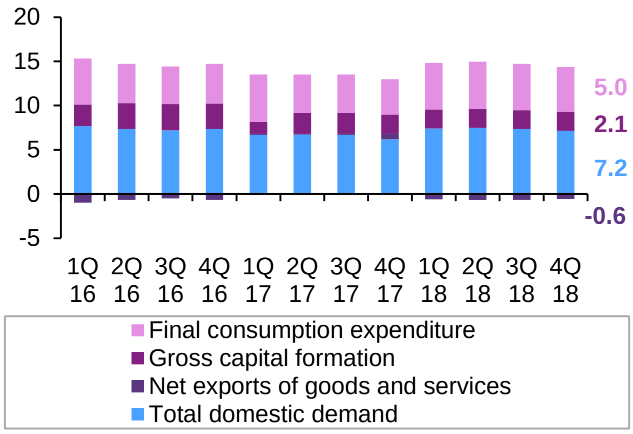
After a weak 4Q18, **China's economic indicators** were mixed in the first two months of 2019. Weakness in exports, infrastructure and mining coincided with some improvement in consumption and investment indicators, while growth in manufacturing stabilized. Economic growth is expected to remain under pressure in the coming months from slowing exports and still subdued sentiment. Yet, growth will likely find support in 2Q19 in response to macro policy easing and some improvement in confidence following the easing of trade barrier with the US.

Graph 3 - 34: China's GDP growth



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

Graph 3 - 35: China's GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

In January and February 2019, overall **fixed asset investment (FAI)** growth edged up 6.1% y-o-y from 5.9% in December (7.2% in 4Q18). However, infrastructure investment disappointed in the first two months, suggesting that government efforts to boost spending have not yet had a material impact. On the other hand, real estate FAI growth surprised on the upside, with growth rising 11.6% y-o-y across January and February, even though other property market indicators weakened. **Housing sales** fell 3.2% y-o-y in the first two months of the year following a 0.9% decline in 4Q18, while housing starts growth slowed from 20.1% y-o-y in 4Q18 to 4.3% over January and February.

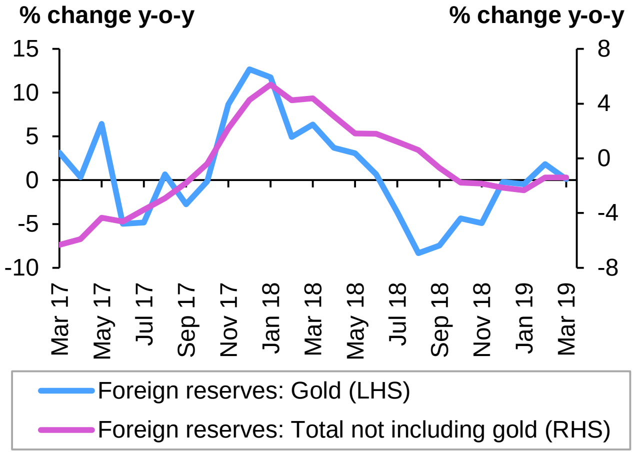
Household consumption in the first two months of the 2019 were supported by recent income tax cuts. Real retail sales growth rose 7.2% y-o-y, up from 6.9% in December 2018 and 6.1% in 4Q18, despite passenger car sales in February declining for the eighth month in a row. Data released in early March showed that goods export growth fell 4.8% y-o-y in the first two months of 2019 in real terms. In terms of production, industrial value added (VA) growth slowed to 5.3% y-o-y in the first two months of the year. This was due to a weakness in mining and utilities activity, whereas manufacturing VA growth nudged up to 5.6% y-o-y.

The 13th National People's Congress of the People's Republic of China held in Beijing in March 2019 and the annual Government Work Report (GWR) raised some strategic goals such as keeping GDP growth in an appropriate range of 6.4% - 6.6%, continuing to increase the role consumption plays in driving economic growth and ongoing improvements in living standards. The GWR shows that, despite a desire to not overdo it, the government is committed to expansionary macro policies, notably on the fiscal side, to support 2019 growth. It seems the budget deficit – adjusted for carryover and surplus funds and local government special bond issuance – will rise from 4.7% of GDP in 2018 to 6.2% in 2019. However, with a large part of the fiscal stimulus stemming from tax cuts, the fiscal multiplier – the impact on growth – is expected to be relatively low this time. Moreover, the GWR potentially provides a mandate for monetary policy to remain easier than in 2018. The risk of credit growth not rising in response to the policy easing has diminished, after better credit data in January and February. In a first step, China will cut retail gasoline and diesel prices from 1 April 2019 following a VAT rate cut to 13% for refined oil products from 16%.

China's CPI inflation fell to 1.5 % y-o-y in February 2019 from 1.7 % in the previous month, which matched market consensus. This was the lowest inflation rate since January last year, mainly due to a marked slowdown in food prices. **China's PPI** increased by 0.1 % y-o-y in February 2019, unchanged from January's 28-month low and below market estimates of 0.2 %.

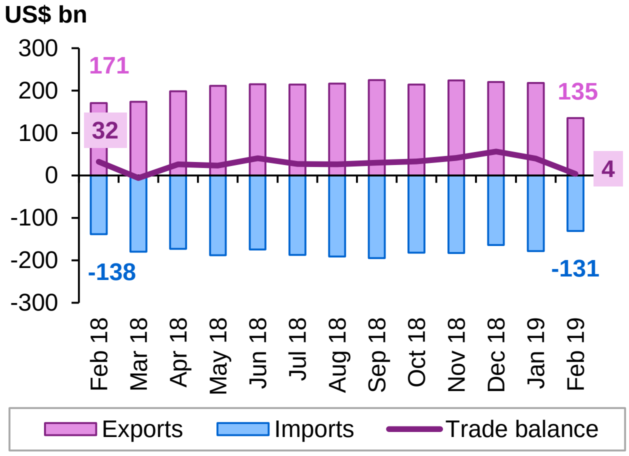
Gold reserves in China increased to 1,864.30 tonnes in 1Q19 from 1,852.50 tonnes in 4Q18. Gold reserves are the country's gold assets held or controlled by the People's Bank of China (PBoC). China, the top gold producer and consumer, is beefing up holdings amid signs of slowing growth and uncertainty about how its trade dispute with the US be resolved.

Graph 3 - 36: China's foreign reserves



Sources: People's Bank of China, International Monetary Fund and Haver Analytics.

Graph 3 - 37: China's trade balance



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

China's trade surplus was revised lower to $4.08 billion in February and compared to a surplus of $32.3 billion y-o-y. It was the smallest trade surplus since a rare deficit in March 2018. **Exports** from China fell 20.7% y-o-y to $135.2 billion in February 2019, the most since February 2016, amid weakening global demand, ongoing trade tensions with the US and a series of Lunar New Year holidays that started in early February. Among China's biggest trade partners, exports plunged to the US (-28.6%), the EU (-13.2%), ASEAN countries (-13.2%), Japan (-9.5%), South Korea (-6.9%), Taiwan (-7.3%) and Australia (-15.9%). **Imports** to China dropped 5.2 % y-o-y to $131.1 billion in February 2019, the third straight month of decline. Purchases of soybeans dropped 17.8% y-o-y to a four-year low of 4.46 million tonnes, amid higher tariffs imposed on shipments from the US. Imports fell from the US (-26.2%), ASEAN countries (-9.9%), South Korea (-15.9%), and Taiwan (-5.6%), but rose from the EU (2.5%), Japan (0.2%) and Australia (3.9%).

US and Chinese officials have resumed high-level trade talks as they close in on a deal. The burst of diplomacy suggests both sides remain determined to reach an agreement that would avoid any escalation of the eight-month trade dispute that has seen them impose duties on $360 billion of each other's imports. Some market strategists have already been counting on an extended truce, rather than a wholesale reversal of the tariffs. Failure to achieve a deal would likely see the US more than double the 10% tariffs on $200 billion of Chinese goods and impose fresh tariffs. The US administration has in the past threatened to tax all Chinese goods entering the US. The US has already imposed tariffs on $250 billion worth of Chinese goods, and China has retaliated with duties on $110 billion of US products. The US President has also threatened further tariffs on an additional $267 billion worth of Chinese products that would see virtually all of Chinese imports into the US become subject to tariffs. The damaging trade dispute has cast a shadow over global trade and is contributing to a slowdown in the world economy. Meanwhile it seems China's State Council continue to suspend additional tariffs on US vehicles and auto parts in April 2019, in a goodwill gesture following a US decision to delay tariff hikes on Chinese imports.

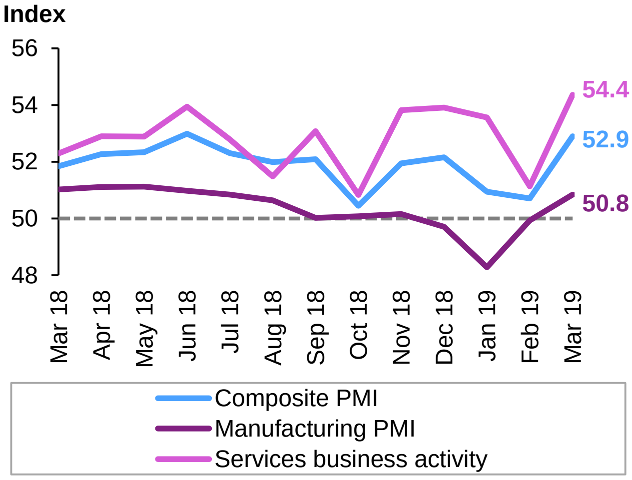
The **Official NBS Manufacturing PMI** (business confidence) rose to 50.5 in March from February's 3-year low of 49.2, marking the first expansion in four months. Factory activity in China unexpectedly grew for the first time in four months in March 2019.

The **Caixin China General Manufacturing PMI** rose to 50.8 in March 2019 from 49.9 the previous month. It marked the first increase in the manufacturing sector since November 2018, as new export orders returned to expansion after a drop in February, output rose slightly faster, and new order growth accelerated to a four-month high. In addition, employment increased for the first time in over five years, with some firms hiring additional workers to support greater production and new business developments. Meanwhile, purchasing activity continued to fall, though the rate of the reduction was only slight. Moreover, inventories of finished goods fell less. On the price front, average input costs rose slightly, though companies generally passed this

on to clients in the form of higher selling prices. Looking ahead, sentiment improved to a ten-month high, amid hopes of further improvements in market conditions.

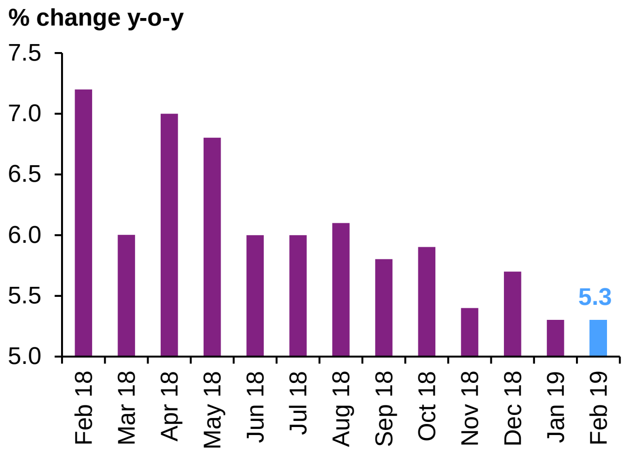
The **official non-manufacturing PMI** increased unexpectedly to 54.8 in March 2019 from 54.3 the previous month. It was the highest PMI reading since September 2018.

Graph 3 - 38: China's PMIs



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3 - 39: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

The Caixin China General **Services PMI** jumped to 54.4 in March 2019 from 51.1 the previous month. It was the strongest growth in the service sector since January 2018, as new orders rose the most in 14 months, export sales advanced at the second-strongest rate since December 2017 and employment grew at a rate similar to that seen in February.

China's **manufacturing sector** finished the 1Q19 on a positive note, with operating conditions improving for the first time since last November. Firms signalled slightly quicker rises in output and overall new work, while employment increased for the first time in over five years. Firmer demand conditions led to a softer fall in purchasing activity, while inventories of inputs rose slightly, the first increase since last November. Average input costs rose slightly, though companies generally passed this on to clients in the form of higher selling prices. Sentiment regarding the 12-month business outlook improved to a ten-month high, amid hopes of further improvements in market conditions.

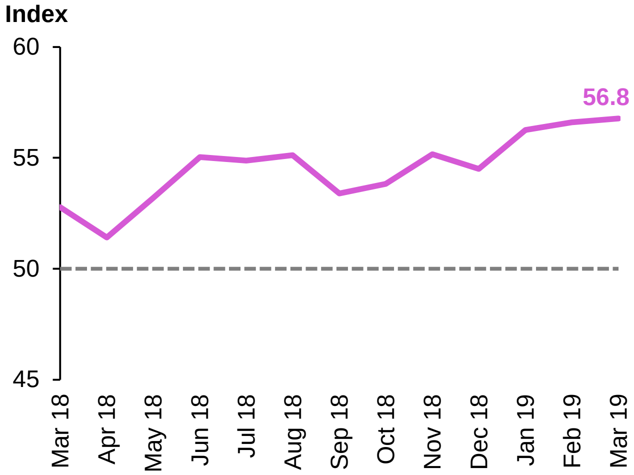
China's **GDP growth** considered at 6.1% in 2019 without any changes compared to the last months.

OPEC Member Countries

Saudi Arabia

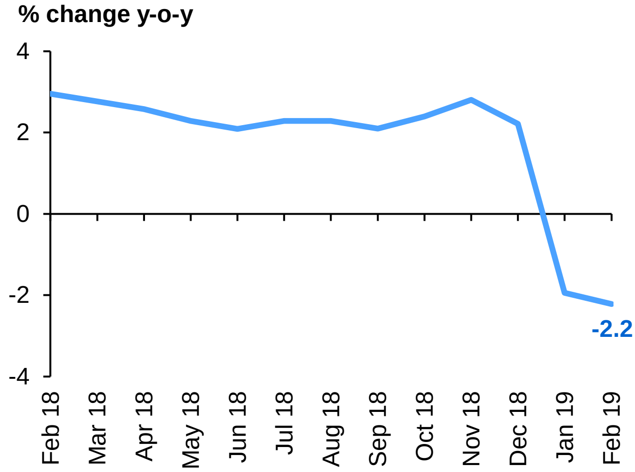
GDP growth in **Saudi Arabia** for 4Q18 was revised from 4.0% y-o-y to 3.6% and the full year growth from 2.3% y-o-y to 2.1%, its highest level since 2015. Data from the General Authority for Statistics showed that government final consumption expenditure declined by 15.6% y-o-y in 4Q18, from a 7.6% growth in the previous quarter. Private consumption went up by 0.1% y-o-y in 4Q18, from 1.6% in 3Q18. Gross capital formation rose by 13.6% y-o-y in 4Q18, after declining in the first three quarters of 2018. Exports increased by 12.4% y-o-y in 4Q18, up from 8.0% in 3Q18, while imports barely rose by 0.1% in the last quarter of 2018, after increasing by 7.2% in 3Q18. Inflation decreased for the second month in a row in February, dropping by 2.2% y-o-y, following a 1.9% y-o-y decline in January 2019. The inflation average was 2.5% y-o-y in 2018.The Emirates NBD Saudi Arabia PMI climbed to 56.8 in March, from February's 56.6, supported by stronger increases in new orders and output across the non-oil private sector. The latest reading was the highest since December 2017 and indicated one of the strongest growth performances over the past three-and-a-half years. The average PMI reading for Q1 2019 was 56.5, indicating the strongest quarterly expansion in the non-oil private sector since Q4 2017.

Graph 3 - 40: Saudi Arabia's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 41: Saudi Arabia's inflation

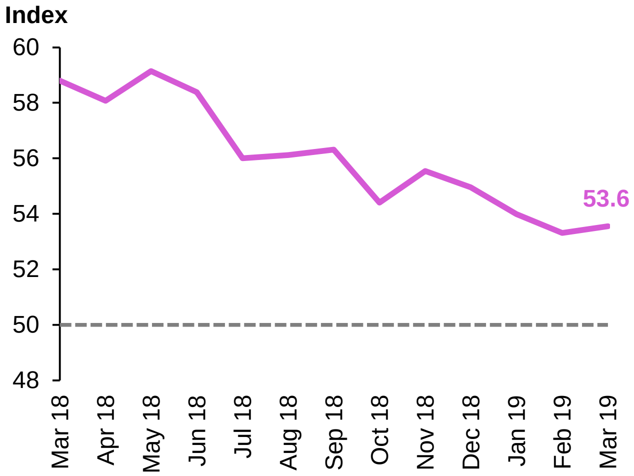


Sources: General Authority for Statistics and Haver Analytics.

Nigeria

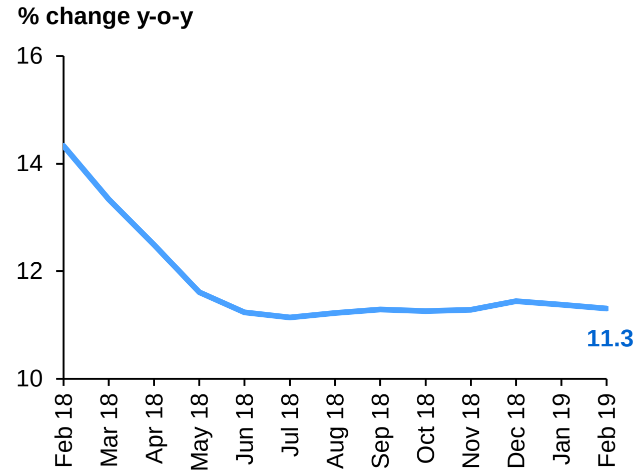
In **Nigeria**, the private sector saw growth continue in March, according to the Stanbic IBTC Bank Nigeria PMI survey. The survey showed that the rate of business activity expansion ticked up, but new order growth slowed and employment rose only slightly. Inflationary pressures were also relatively muted, with output prices increasing at the slowest pace in eight months. The index posted 53.6 in March, up slightly from 53.3 in February, but it was still the second-lowest reading in 21 months. The main positive from the latest survey was an accelerated expansion in business activity, with growth quickening to a three-month high on the back of improved customer demand. In contrast, new business rose at a weaker pace during the month. GDP registered growth of 2.4% y-o-y in 4Q18, its highest since 3Q15. This brings GDP growth in 2018 to 1.9% y-o-y, up from a contraction of 1.6% y-o-y in 2016 and a 0.8% y-o-y growth in 2017. It is the highest rate of GDP growth since 2015.

Graph 3 - 42: Nigeria's composite PMI



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

Graph 3 - 43: Nigeria's inflation



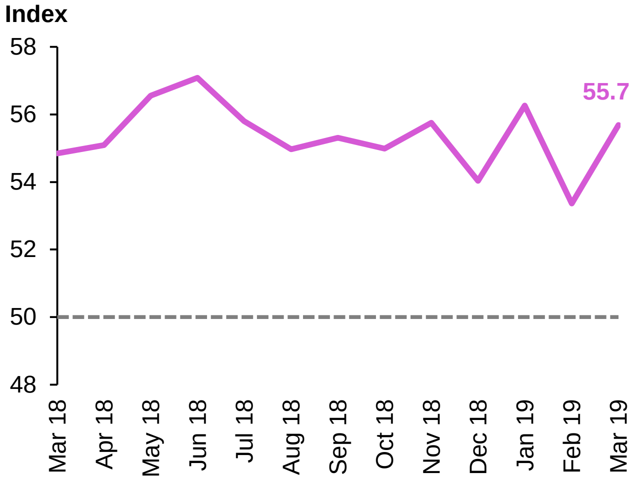
Sources: National Bureau of Statistics and Haver Analytics.

The United Arab Emirates (UAE)

In the **United Arab Emirates**, Abu Dhabi's GDP accelerated in 4Q18 to 3.7% y-o-y, up from 1.8% in the previous quarter. This faster pace of expansion brought the full year 2018 growth up to 1.9% y-o-y against a 0.9% y-o-y decline in 2017. Growth reported by non-financial corporations increased to 4.2% y-o-y in 4Q18, from 3.1% in 3Q18. Financial and insurance activities growth went from a 12.4% decline in 3Q18 to a 1.2% y-o-y growth in 4Q18. Public administration consumption decreased by 2.2% y-o-y in 4Q18, while that of households rose by 3.1% y-o-y in 4Q18. The Emirates NBD PMI recovered to 55.7 in March from the 28-month low of 53.4 in February. The latest reading signalled a solid monthly improvement in the health of

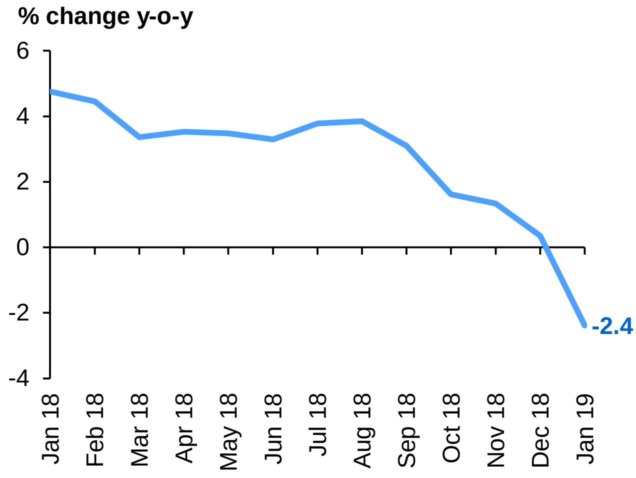
the non-oil private sector. The improvement in business conditions reflected sharper increases in output, new orders and stocks of purchases, as well as a return to job creation. Consumer price inflation notably dropped in January 2019, posting a 2.4% y-o-y decrease. The easing trend has been noticeable since December 2018 when inflation fell to 0.4% y-o-y, from 1.3% in November. The inflation average was 3.1% y-o-y in 2018.

Graph 3 - 44: UAE's composite PMIs



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 45: UAE's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Other Asia

Malaysia

In **Malaysia**, GDP grew by 4.7% y-o-y in 4Q18, following a 4.4% expansion in 3Q18. This was the strongest growth rate since 1Q18, as net external demand contributed positively to GDP growth, while private consumption, government spending, and investment slowed. For 2018 as a whole, the economy grew 4.7% y-o-y, compared to a 5.9% expansion in 2017. Exports increased by 1.3 % y-o-y in 4Q18, rebounding from a 0.8% fall in the previous quarter. Imports edged up 0.2% y-o-y in 4Q18, accelerating from a 0.1% rise in 3Q18. Private expenditure went up by 8.5% y-o-y in 4Q18, easing from a 9.0% increase in 3Q18, driven by consumption of food and beverages, communication, transport and restaurants and hotels. Gross fixed capital formation rose 0.3% y-o-y in 4Q18, slower than a 3.2% gain in the preceding quarter, mainly due to a decline in machinery and equipment investment. In 4Q18, government spending rose 4.0% y-o-y, softer than a 5.2% increase in 3Q18.

The Nikkei Malaysia **Manufacturing PMI** registered 47.2 in March, down slightly from February's reading of 47.6, and below the long-run survey average. This indicates that manufacturers continued to face a challenging business environment at the end of 1Q19, with key survey indicators such as output and new orders falling. Input cost and output price levels were meanwhile broadly stable in March, while manufacturers held employment steady. Although purchasing activity continued to rise in March, the rate of expansion was only slightly faster than February's 18-month low. The rate of inventory building was also relatively weak, and the slowest since June 2017. The survey also showed that predictions of new financial investment and business expansion plans supported optimism among companies that output will increase over the coming year. Confidence remained strong and above the series average.

Africa

In **Egypt**, GDP registered growth of 5.5% y-o-y in 4Q18, from 5.4% in the preceding quarter, signalling the highest rate of growth since 3Q14. For 2018 as a whole, GDP grew by 5.3% y-o-y, the highest since 2008. While the private sector, the public sector, and exports witnessed a slower pace of growth in 2018, that of gross capital formation was higher. Imports showed much slower growth in 2018, hence lending support to GDP growth. The private sector expanded by 24.0% y-o-y in 2018, after growing by 35.8% in 2017. Growth in the public sector went from 13.1% y-o-y in 2017 to 5.8% in 2018. Gross capital formation, on the other hand, posted higher growth of 39.5% in 2018 y-o-y vs 30.1% in 2017. Exports expanded by 52.9% y-o-y in

2018, from 95.8% in 2017. The increase in imports slowed in 2018 to 28.1% y-o-y, after rising by 88.6% in 2017. Inflation registered 13.9% y-o-y in February 2019, slightly higher than January's 12.2%, and slightly higher the central bank's upper limit inflation target of 12%. The unemployment rate fell to 8.9% in 4Q18, its lowest rate in eight years. Total receipts of Suez Canal amounted to $433.9 million in February 2019. The Emirates NBD PMI rose to a seven-month high of 49.9 in March. This represents a significant improvement from the 17-month low of 48.2 recorded in February. Key to the uptick in the headline index was a slight rise in new orders in March. Demand for Egyptian goods and services grew for the first time in seven months, as businesses noted stronger market movement and increased tourism. New export orders continued to decline, which surveyed firms related to a lack of foreign contracts.

Latin America

Argentina

The economy of **Argentina** shrank by 2.5% y-o-y in 2018. GDP decelerated at a faster pace in 4Q18, dropping 6.2% y-o-y. This marks the quickest decline in GDP since 2Q09 during the global financial crisis. The contraction in private consumption accelerated from 5.4% y-o-y in 3Q18 to 9.5% in 4Q18. Government consumption dropped by 5.1% y-o-y in 4Q18, from 4.2% in 3Q18. Furthermore, the decline in GFCF was bigger in 4Q18 at 25.0% y-o-y, following an 11.7% drop in the previous quarter. The trade part was more in favour of growth as exports surged by 10.4% y-o-y in 4Q18, supported by its increasing competitiveness due to the sharp currency depreciation. This depreciation was a big disadvantage for imports, causing them to fall by 26.1% y-o-y in 4Q18 vs a 10.2% decline in 3Q18. The Argentinian peso depreciated by a further 7.7% m-o-m in March 2019. On a y-o-y comparison, the dollar had appreciated by more than 104% vs the peso by March 2019. Inflation, as a result, spiked above 50% y-o-y in February, registering 51.3% y-o-y vs an inflation target of 17.0% set by the central bank.

Transition region

Poland

The economy of **Poland** posted growth of 4.5% y-o-y in 4Q18, lower than 3Q18's rate of 5.7%. While public consumption was flat and household consumption increased, it was gross capital formation that witnessed a notable drop in the pace of growth during the 4Q18. Public consumption growth was stable at 4.1% y-o-y in 4Q18, household consumption growth went up to 5.3% y-o-y in 4Q18, from 4.5% in the preceding quarter. Growth in gross capital formation went from 14.7% y-o-y in 3Q18 to 5.1% in the subsequent quarter. Exports rose by 8.0% y-o-y in 4Q18, from 5.5% in 3Q18. Imports showed a similar trend, expanding by 8.8% y-o-y in 4Q18, from 6.6% in 3Q18. The manufacturing sector remained in contraction in March, according to the latest IHS Markit Poland manufacturing PMI survey data. Output, new orders and employment all continued to decline, with new export work dropping at the strongest rate since June 2009. The index remained in contraction territory in March, extending the current downturn in manufacturing business conditions to five months. The three highest-weighted of the five components of the headline figures were in negative territory during March, namely new orders, output and employment. Thus, the index rose to 48.7, from 47.6 in February, signalling the weakest overall downturn in four months.

World Oil Demand

World oil demand growth for 2018 *was revised down slightly, by 0.02 mb/d, as compared with last month's assessment, mainly due to revisions in the OECD Asia Pacific. Oil demand growth was pegged at 1.41 mb/d and total oil consumption at 98.70 mb/d.*

Oil demand growth in the OECD region was revised lower by 0.02 mb/d in 2018 on lower-than-expected data from OECD Asia Pacific. Weaker-than-expected oil demand from Japan was further exacerbated by decreased oil requirements in South Korea at the end of the year. As a result, the region's oil demand in 4Q18 was adjusted lower by 0.06 mb/d.

For ***2019, world oil demand growth*** *is estimated to increase by 1.21 mb/d, revised lower by around 0.03 mb/d from last month's estimate. This was largely driven by revisions in economic growth expectations for the OECD region in 2019. As such, oil demand growth for the region was adjusted lower by 0.03 mb/d, while non-OECD oil demand growth held relatively unchanged from last month's projections.*

OECD oil demand is anticipated to grow by 0.21 mb/d in 2019, with OECD Americas increasing the most amid steady NGL and middle distillate requirements. In the non-OECD region, oil demand is foreseen rising by 1.00 mb/d, with lower Chinese oil demand growth partially offset by gains in the Middle East. Total world oil demand is now forecast at 99.91 mb/d in 2019.

World oil demand in 2018 and 2019

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

							Change 2018/17	
	2017	1Q18	2Q18	3Q18	4Q18	2018	Growth	%
Americas	25.06	25.20	25.40	25.78	25.74	25.53	0.48	1.90
of which US	*20.27*	*20.57*	*20.64*	*20.93*	*20.78*	*20.73*	*0.46*	*2.26*
Europe	14.30	13.95	14.19	14.68	14.32	14.29	-0.01	-0.09
Asia Pacific	8.06	8.54	7.65	7.70	8.08	7.99	-0.07	-0.86
Total OECD	**47.42**	**47.69**	**47.24**	**48.16**	**48.14**	**47.81**	**0.39**	**0.83**
Other Asia	13.24	13.55	13.84	13.38	13.87	13.66	0.42	3.14
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	7.82	8.09	-0.08	-0.98
Africa	4.20	4.35	4.32	4.27	4.40	4.33	0.13	3.13
Total DCs	**32.13**	**32.44**	**32.60**	**32.86**	**32.56**	**32.61**	**0.49**	**1.52**
FSU	4.70	4.66	4.65	4.94	5.01	4.82	0.12	2.45
Other Europe	0.72	0.73	0.69	0.73	0.82	0.74	0.03	3.48
China	12.32	12.28	12.84	12.65	13.07	12.71	0.39	3.18
Total "Other regions"	**17.74**	**17.68**	**18.18**	**18.32**	**18.90**	**18.27**	**0.53**	**2.99**
Total world	**97.29**	**97.80**	**98.02**	**99.35**	**99.60**	**98.70**	**1.41**	**1.45**
Previous estimate	97.29	97.80	98.02	99.35	99.68	98.72	1.43	1.47
Revision	0.00	0.00	0.00	0.00	-0.08	-0.02	-0.02	-0.02

Note: 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	25.53	25.43	25.63	26.06	26.00	25.78	0.25	0.98
of which US	*20.73*	*20.79*	*20.85*	*21.19*	*21.02*	*20.96*	*0.23*	*1.11*
Europe	14.29	13.97	14.16	14.67	14.30	14.28	-0.01	-0.05
Asia Pacific	7.99	8.53	7.61	7.67	8.05	7.96	-0.03	-0.41
Total OECD	**47.81**	**47.94**	**47.40**	**48.40**	**48.34**	**48.02**	**0.21**	**0.44**
Other Asia	13.66	13.91	14.21	13.75	14.25	14.03	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	8.09	8.23	7.99	8.45	7.86	8.13	0.04	0.49
Africa	4.33	4.45	4.42	4.36	4.50	4.43	0.10	2.31
Total DCs	**32.61**	**32.98**	**33.15**	**33.42**	**33.12**	**33.17**	**0.55**	**1.69**
FSU	4.82	4.75	4.74	5.03	5.11	4.91	0.09	1.87
Other Europe	0.74	0.75	0.71	0.75	0.84	0.76	0.02	2.69
China	12.71	12.61	13.18	12.99	13.42	13.05	0.34	2.67
Total "Other regions"	**18.27**	**18.11**	**18.63**	**18.77**	**19.37**	**18.72**	**0.45**	**2.46**
Total world	**98.70**	**99.02**	**99.18**	**100.59**	**100.83**	**99.91**	**1.21**	**1.23**
Previous estimate	98.72	99.02	99.21	100.62	100.95	99.96	1.24	1.25
Revision	-0.02	0.00	-0.03	-0.03	-0.12	-0.05	-0.03	-0.03

*Note: * 2019 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

OECD

OECD Americas

US

The most recent monthly **US oil demand** data for January marked the first implied monthly decline in the last 14 months, though on top of a very high baseline during the same month last year.

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

	Jan 19	Jan 18	Change 2018/17 tb/d	%
LPG	3,448	3,356	92	2.7
Naphtha	203	212	-9	-4.2
Gasoline	8,743	8,742	1	0.0
Jet/kerosene	1,655	1,626	29	1.8
Diesel oil	4,355	4,394	-39	-0.9
Fuel oil	304	340	-36	-10.6
Other products	2,035	2,082	-48	-2.3
Total	**20,743**	**20,752**	**-10**	**0.0**

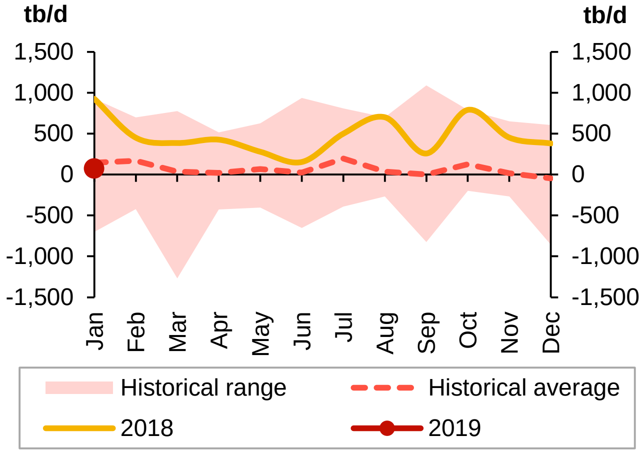
Sources: US EIA and OPEC Secretariat.

US oil demand inched down by around 0.01 mb/d y-o-y, with total consumption reaching 20.7 mb/d. January gasoline demand remained flat y-o-y on top of a high historical baseline, coming roughly in line to the decline in vehicle sales of around 2.6%, y-o-y.

Diesel oil requirements remained weak y-o-y, declining by 0.04 mb/d as a result of high baseline effects in the same month of 2018 and normal weather patterns in large parts of the country; the latter is expected to provide some support for fuel oil requirements during the month of February.

In line with the holiday season during the first half of January 2019 and the healthy growing economy, jet/kerosene demand rose by 0.03 mb/d, or 2%, y-o-y accounting for the second-largest percentage share in overall growth.

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



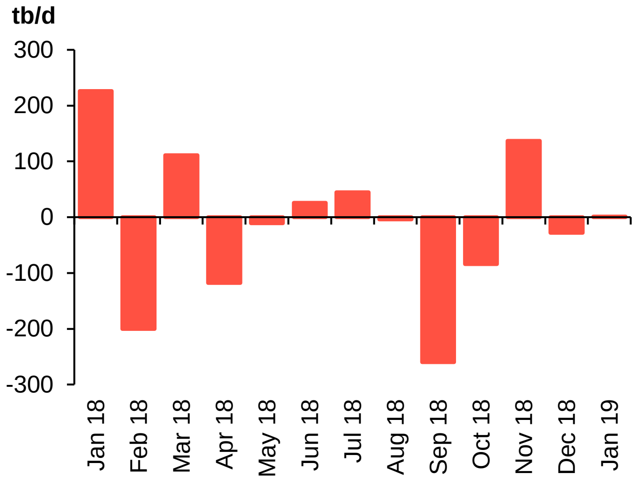
Sources: Joint Organisations Data Initiative and OPEC Secretariat.

Finally, positive developments in petrochemical industrial activities implied growth of roughly 3% y-o-y for petrochemical feedstock.

Overall, oil demand developments in January are very much in line with overall economic developments in the country and should consider the high baseline during the same month in 2018. Preliminary February 2019 and March 2019 data, which are based on averaged weekly figures, suggest solid oil demand growth, y-o-y, with road transportation and industrial fuels, notably diesel, gasoline and petroleum gas plant liquids, accounting for the bulk of these increases.

US oil demand in 2019 remains strongly dependent on developments in the US economy, and risks are estimated to be balanced towards the upside and the downside, compared with last month's publication. Naturally, the oil price environment is also expected to be an influential variable, particularly for the transportation sector.

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



Sources: US EIA and OPEC Secretariat.

Mexico

In **Mexico**, February was another disappointing month for oil demand. It was characterized by sharply falling requirements for the majority of main petroleum product categories. Decreases in demand for gasoline, diesel and residual fuel oil were especially substantial, and were barely offset by marginal gains in naphtha demand. Ongoing risks for Mexican oil demand are skewed to the downside, depending on overall development of the economy and the degree of substitution with other primary energy commodities, especially natural gas.

Canada

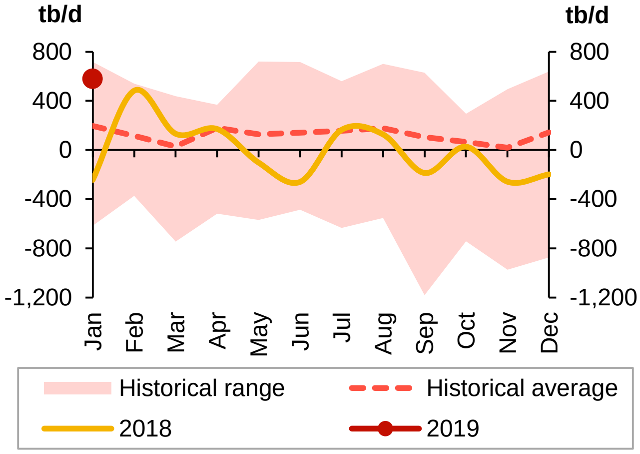
The latest **Canadian** data for January shows overall y-o-y gains in oil demand, particularly for LPG, gasoline, jet kerosene and naphtha. Losses in requirements for diesel and residual fuel oil moderated overall gains. Projection risks in 2019 for Canadian oil demand remained unchanged from those reported last month and are balanced towards the upside and downside.

In 2018, **OECD Americas oil demand** grew by 0.48 mb/d y-o-y. Growth in 2019 is projected at 0.25 mb/d.

OECD Europe

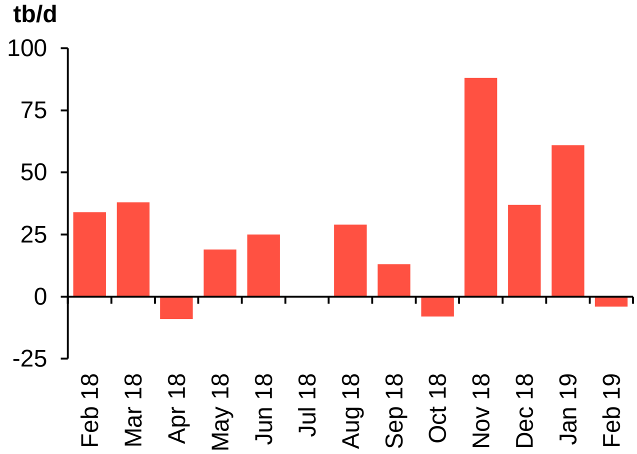
The latest available January data for **OECD Europe** implies sharply increasing oil demand requirements, following monthly declines in December and November 2018, y-o-y. Substantially colder weather, in combination with some low historical baseline effects, implied requirement gains for the majority of petroleum product categories, notably diesel fuel, jet/kerosene, LPG and naphtha. Gains were partly offset by declines in gasoline and fuel oil demand for the first time since the end of 2017. One of the main indicators for oil demand in the region, passenger car registrations, marked a decline during the first two months of 2019, though following a high historical baseline for the past four years.

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 fuel demand, y-o-y change



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

Preliminary February data for the **European Big 4 oil consuming countries** implies a decline y-o-y. The bulk of losses relates to diesel fuel requirements and can be attributed to substantially warmer weather compared with the historical norm and the same month in 2018. Regional oil demand for 2019 faces a number of risks, which may influence it to the upside or the downside. Forecast economic growth and the current oil price environment would principally support oil demand, while unsolved economic and geopolitical issues in some countries, as well as efficiencies and fuel substitution, may pose substantial downside risks. Consequently, expectations for 2019 oil demand in the region are unchanged since last month, with risks skewed to the downside.

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

			Change 2019/18	
	Feb 19	Feb 18	tb/d	%
LPG	585	528	57	10.8
Naphtha	627	669	-42	-6.3
Gasoline	1,158	1,187	-29	-2.5
Jet/kerosene	812	797	15	1.9
Diesel oil	3,302	3,492	-190	-5.4
Fuel oil	270	260	10	3.9
Other products	530	585	-55	-9.3
Total	**7,285**	**7,518**	**-233**	**-3.1**

*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 in 2018 fell by 0.01 mb/d y-o-y, while oil demand in 2019 will be 0.01 mb/d lower than in 2018.

OECD Asia Pacific

Japan

Preliminary February 2019 **Japanese oil demand** figures imply a sharp decline of 6.5%, or 0.3 mb/d, y-o-y for the second-consecutive month and feature negative performance for the majority of main petroleum product categories.

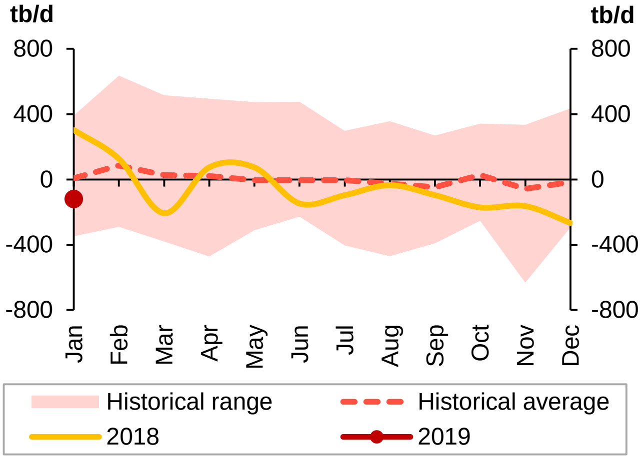
Table 4 - 5: Japan's domestic sales, tb/d

			Change 2019/18	
	Feb 19	Feb 18	tb/d	%
LPG	492	475	17	3.6
Naphtha	846	828	18	2.2
Gasoline	851	869	-18	-2.1
Jet/kerosene	788	890	-102	-11.4
Diesel oil	880	900	-20	-2.2
Fuel oil	292	370	-78	-21.1
Other products	244	367	-123	-33.5
Total	**4,394**	**4,699**	**-305**	**-6.5**

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

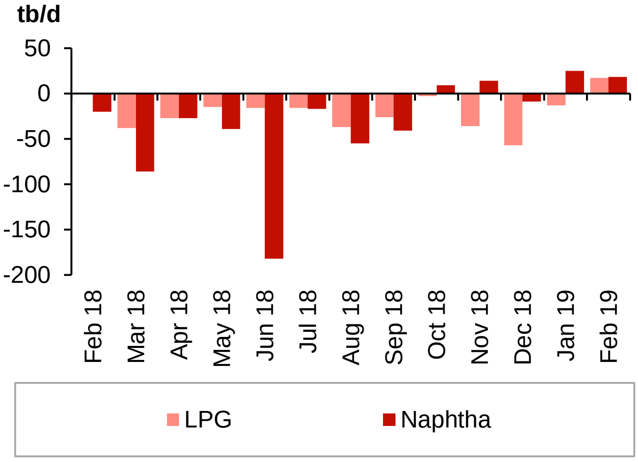
February 2019 demand for crude direct use and residual fuel oil for electricity generation declined as a result of fuel substitution and warmer weather conditions. During the same month, gasoline, jet kerosene and diesel fuel requirements also fell y-o-y, while growing demand for LPG and naphtha partially offset overall losses.

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.

Due to less optimistic economic forecasts, **outlook** risks for 2019 continue to be skewed to the downside. Fuel substitution and continuing efficiency improvements add to this trend.

South Korea

In **South Korea**, oil demand grew once more y-o-y in January 2019, after oil requirements declined for all months since July 2018. Healthy petrochemical activities – which called for strongly increasing LPG requirements and higher demand for gasoline, jet/kerosene and diesel fuel – were slightly offset by lower demand for residual fuel oil and naphtha, the latter also resulted from a high historical baseline in 2018. Projected risks for 2019 South Korean oil demand outlook are slightly skewed to the upside as a result of the forecast for healthy economic growth, implying additional oil use in the transportation and industrial sectors.

Australia

In **Australia**, oil demand grew slightly y-o-y in January 2019, accounting for the largest share in overall gains, along with industrial diesel fuel.

OECD Asia Pacific oil demand in 2018 fell by 0.07 mb/d for the second year in a row. In 2019, OECD Asia Pacific oil demand is projected to fall once more by 0.03 mb/d.

Non-OECD

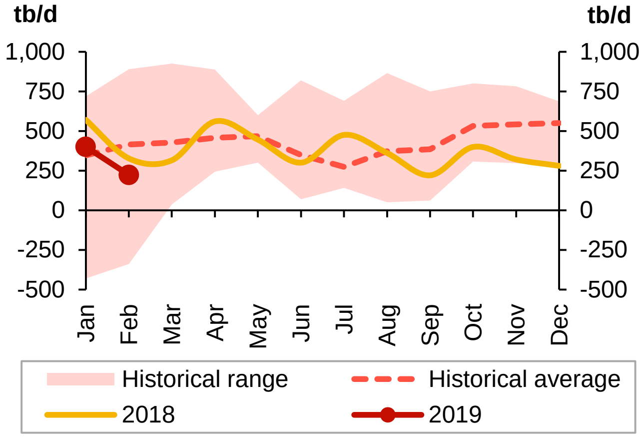
China

In February, **oil demand growth in China** increased by 0.22 mb/d compared with the same month in 2018. Oil demand remains focused on LPG for the petrochemical sector and gasoline for the road transportation sector.

Diesel fuel demand declined due to slower mining and construction activities. LPG demand increased in February, by 0.13 mb/d or around 8% y-o-y, in line with steady requirements from propane dehydrogenation (PDH) plants.

Gasoline consumption followed a similar trend, adding around 0.10 mb/d or 3% y-o-y. However, passenger car sales continued to decline in February for the eighth consecutive month. According to the China Association for Automobile Manufacturers (CAAM), sales of vehicles reached around 3.5 million units for the first two months of 2019, some 15% below levels recorded during the same period in 2018. Passenger car sales declined by around 13% y-o-y in February, according to the same agency.

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



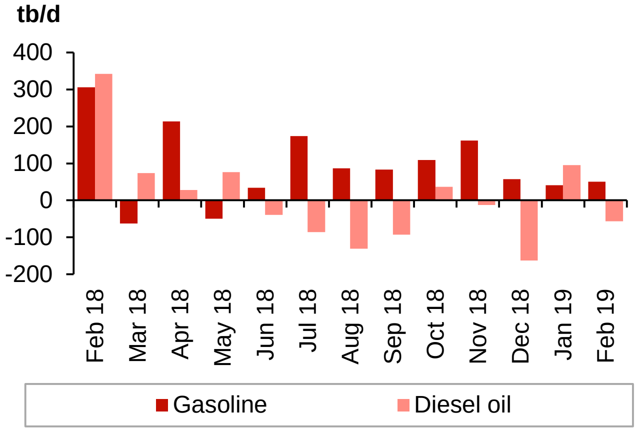
Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics of China and OPEC Secretariat.

In contrast, diesel fuel demand was lower compared with February 2018 by around 0.06 mb/d, or 2%, y-o-y, mostly due to slower overall industrial activities, particularly in mining plants and the construction sector, intensified by the lunar New Year holidays.

Consumption of jet/kerosene inched up in February 2019 y-o-y as data suggests an increase of about 0.01 mb/d, or around 2% y-o-y, amid a healthy aviation sector during the Lunar New Year holidays.

The 2019 outlook for China remains balanced, with possible downside risks linked to a slowing of the economy, as well as policies supporting a reduction in transportation fuel consumption. On the other hand, developments in the petrochemical and transportation sectors form upside potential.

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



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

In 2018, China's oil demand increased by 0.39 mb/d y-o-y, while oil demand during 2019 is estimated to hover at around 0.34 mb/d compared with 2018.

Other Asia

India

Indian oil demand continued to grow for the second month in 2019, increasing by 0.18 mb/d, or around 4%, y-o-y in February, mainly supported by an increase in government infrastructure spending. Total consumption was just shy of the 5.0 mb/d mark during the month. On the product side, demand was largely driven by light distillates – LPG and naphtha – which recorded a combined growth of 0.18 mb/d compared with the same period last year. Growth was largely attributed to LPG restocking ahead of a general election in May, while growth in naphtha consumption was in response to lower prices encouraging additional usage in various sectors.

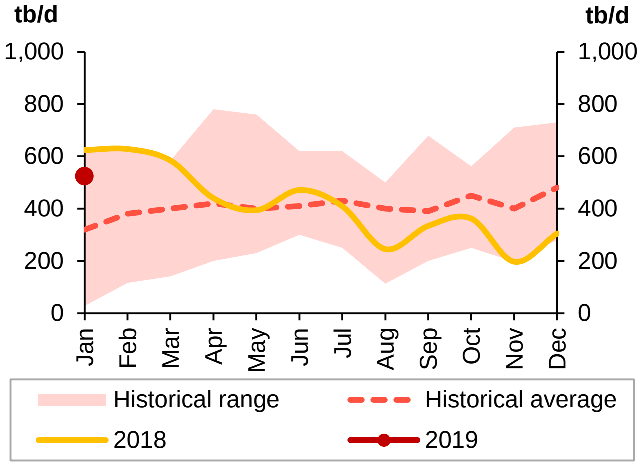
Table 4 - 6: India's oil demand, tb/d

			Change 2019/18	
	Feb 19	Feb 18	tb/d	%
LPG	835	731	104	14.2
Naphtha	362	289	73	25.3
Gasoline	694	643	51	8.0
Jet/kerosene	291	283	9	3.0
Diesel oil	1,915	1,861	53	2.9
Fuel oil	318	304	14	4.7
Other products	572	693	-121	-17.4
Total	**4,987**	**4,803**	**184**	**3.8**

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

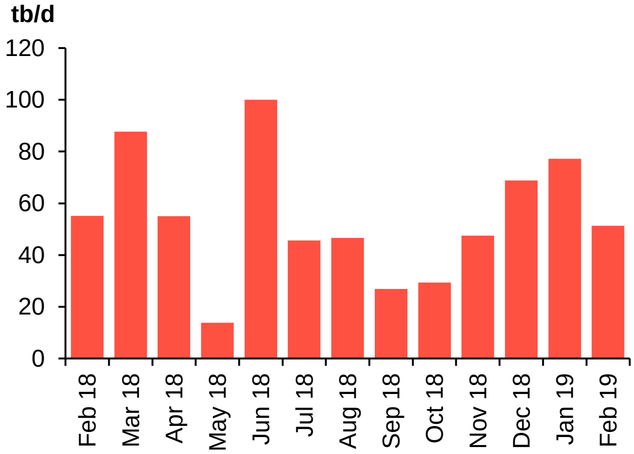
Gasoline demand was also higher by 0.05 mb/d y-o-y, which equates to around 8% y-o-y, despite weakness in new passenger vehicle sales, which shed around 1% compared with February 2018. Two-wheeler sales fell by more than 4% y-o-y in response to higher prices for end customers. In the middle of the barrel, demand for diesel fuel added 3% y-o-y, which is around 0.05 mb/d, amid a rise in construction activity and government infrastructure spending. Jet/kerosene added around 3% y-o-y, as jet fuel requirements outpaced declines in kerosene demand in February, due to healthier domestic air traffic activities. Fuel oil demand growth was higher by 0.01 mb/d, supported by steady requirements from the power generation sector.

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.

Indonesia

In **Indonesia**, the latest available January data indicate higher oil demand growth from one year earlier; a rise of around 0.04 mb/d, or around 3%, y-o-y. All product categories were in positive territory. Diesel fuel, jet/kerosene, gasoline and LPG led oil demand growth.

Thailand

In **Thailand**, oil demand had a positive start to the year, registering an increase of around 0.01 mb/d y-o-y during the month of January. Gains originated in diesel fuel, jet/kerosene and gasoline. Total oil demand in Thailand reached 1.45 mb/d in January.

For the remainder of 2019, continuing positive oil demand momentum in India, along with a number of other countries in the region, indicates an optimistic projection for the region's consumption going forward. The risks for **oil demand in Other Asia** are currently balanced as a result of steady overall economic momentum in the biggest oil consumer in the region, India, and stable economic performance in some other countries. Demand is anticipated to be supported by a positive push in Indian consumption levels, as the overall economic situation in the country is expected to remain positive.

In 2018, Other Asia oil demand grew by 0.42 mb/d y-o-y and is expected to increase by 0.37 mb/d in 2019.

Latin America

Brazil

In February 2019, **oil demand in Brazil** increased by a strong 0.13 mb/d or around 5% y-o-y. Total consumption was pegged at 2.84 mb/d.

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

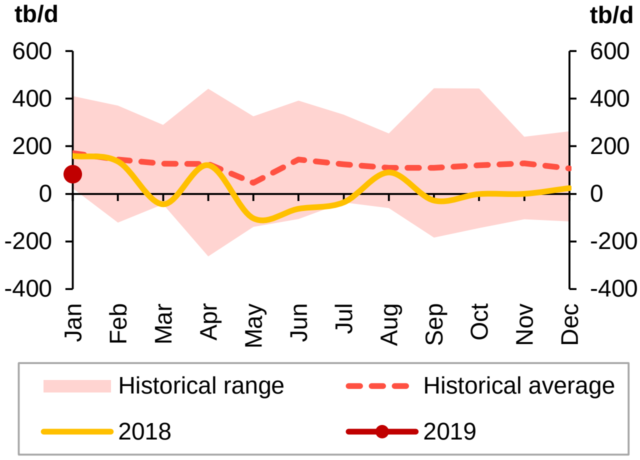
			Change 2019/18	
	Feb 19	Feb 18	tb/d	%
LPG	224	223	1	0.3
Naphtha	147	145	2	1.4
Gasoline	665	704	-39	-5.6
Jet/kerosene	127	120	6	5.3
Diesel oil	983	926	58	6.2
Fuel oil	95	98	-4	-3.6
Other products	603	493	109	22.2
Total	**2,844**	**2,710**	**133**	**4.9**

*Note: * = Inland deliveries.*

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

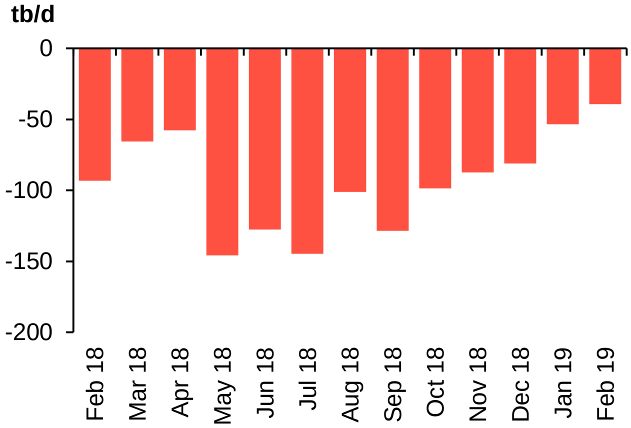
Similar to previous months, the increase was largely led by higher ethanol demand in lieu of gasoline, followed by diesel fuel and jet/kerosene. The increase in ethanol consumption was a result of lower prices for ethanol, which maximized its competitiveness to gasoline, as retail prices for ethanol hovered at around 2.78 Brazilian reals per liter, while retail prices for gasoline recorded around 4.19 reals per liter during the month of February. As such, ethanol demand accelerated over the month to grow by 0.11 mb/d y-o-y.

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 contrast, gasoline consumption declined by 0.04 mb/d or around 6% y-o-y. Demand for diesel fuel increased, adding 0.06 mb/d to February 2018 figures; total consumption was at 0.98 mb/d. This increase occurred in line with healthier PMI manufacturing data in February, seen to be well in expansion territory at 53.4. Jet/kerosene continued its growth momentum, adding 0.01 mb/d compared with the same month last year.

Argentina

Oil consumption in Argentina decreased in January 2019, despite slightly growing jet/kerosene requirements. Diesel fuel declined the most, having decreased by around 6% y-o-y. Gasoline and fuel oil both declined, recording drops of around 5% and 10% y-o-y. Total consumption hovered at around 0.74 mb/d in January.

Looking ahead, uncertainties for 2019 **oil demand growth in Latin America** are slightly tilted to the downside, much like in the previous month, as economic conditions in Brazil are projected to remain rather sluggish. In general, transportation fuels are expected to lead product growth in 2019, followed by petrochemical feedstock and industrial fuels.

In 2018, Latin America oil demand inched up by 0.02 mb/d y-o-y, while demand for 2019 is projected to increase by 0.04 mb/d.

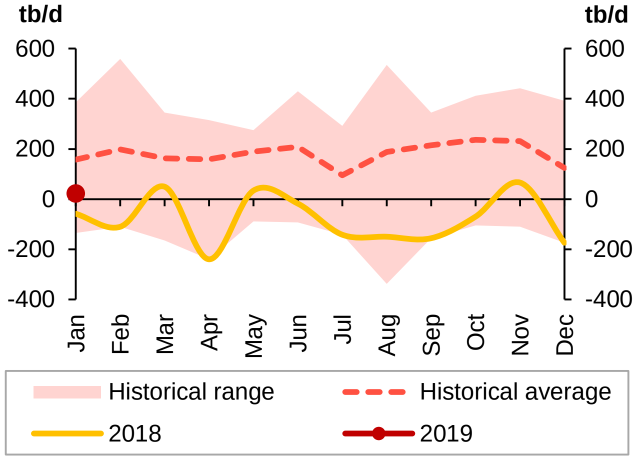
Middle East

Saudi Arabia

In **Saudi Arabia**, oil demand continued to increase for the second consecutive month, rising by 0.22 mb/d or more than 12% for the month of February, compared with February 2018. Total oil consumption for the same period stood at 2.16 mb/d. Most growth originated in power generation and transportation fuels, with fuel oil increasing by around 0.24 mb/d and gasoline and jet/kerosene adding around 0.06 mb/d and 0.01 mb/d, respectively. Demand for fuel oil in the power generation sector received support from the replacement of crude oil for the purpose of burning, which declined by 0.08 mb/d y-o-y, as well as a low baseline of comparison. For the other products, transportation fuels witnessed healthy gains, while diesel fuel performance was subdued in light of slower construction activities.

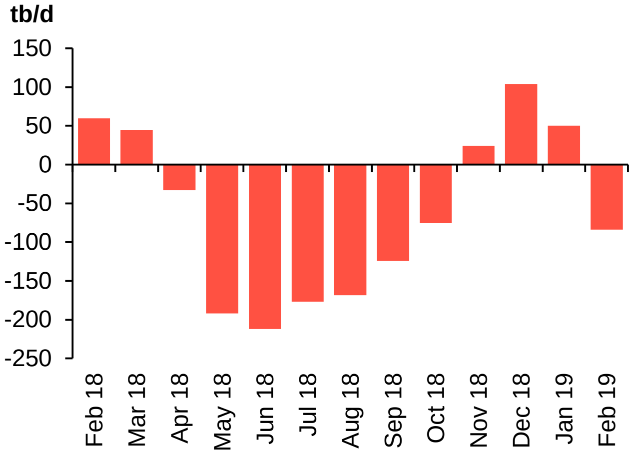
Gasoline and jet/kerosene increased y-o-y by 10% and 13%, respectively, due to a low baseline of comparison and a slight pickup in the aviation sector. Expectations for oil consumption in the Kingdom will slightly rise for most of the year, with a minor uptick during the summer air conditioning season.

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.

Iraq

Oil demand in **Iraq** increased in February 2019, with most products recording steady gains, apart from fuel oil, which declined by more than 0.05 mb/d y-o-y.

Other countries in the Middle East

Among other countries in the region, **UAE** registered healthy gains during January of around 0.05 mb/d, while oil demand in **IR Iran** declined by around 0.01 mb/d y-o-y in January.

The outlook for 2019 **Middle East oil demand** depends very much on overall economic levels and government spending plans, with risks currently balanced. As highlighted in the previous MOMR, projections for oil demand in 2019 remain highly dependent on economic performance and overall reform plans of major oil producing countries in the region, in addition to the impact of substitution programmes in a number of countries.

In 2018, Middle East oil demand weakened by 0.08 mb/d compared with 2017. In 2019, it is projected to grow by 0.04 mb/d.

World Oil Supply

Non-OPEC oil supply growth in 2018 *was revised up by 0.16 mb/d from the previous month's report and is now estimated to have grown by 2.90 mb/d to average 62.37 mb/d. The adjustment was mainly due to upward revisions to all quarters of the UK (+73 tb/d), as well as upward revisions to biofuels output in Brazil (+37 tb/d) and China (+27 tb/d). The expected y-o-y growth of 2.26 mb/d in the US, along with Canada, Russia, UK, Kazakhstan, Qatar, Other OECD Europe, Brazil, Ghana and China supported non-OPEC supply growth in 2018, while Mexico, Norway and Vietnam is estimated to have shown the largest declines.*

In contrast, ***non-OPEC oil supply growth in 2019*** *was revised down by 0.06 mb/d to average 2.18 mb/d, mainly due to extended maintenance in Kazakhstan (-111 tb/d), Brazil (-57 tb/d) and Canada (-23 tb/d) which was partially offset by upward revisions in the US and Russia's oil supply forecasts. Total supply for the year is now projected to average 64.54 mb/d. The US (+1.87 mb/d), Brazil, Russia, UK, Australia, Ghana and the Sudans are the main drivers for this year's growth, while Mexico, Kazakhstan, Norway, Indonesia and Vietnam are projected to see the largest declines. In addition to the existing infrastructure constraints in North America – both in Texas and Alberta, the 2019 non-OPEC supply forecast faces a range of uncertainties with regard to capital investment in US shale and expansion of field activities.*

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. In March 2019,* ***OPEC crude oil production*** *decreased by 534 tb/d to average 30.02 mb/d, according to secondary sources.*

According to preliminary March data, non-OPEC supply, including OPEC NGLs, increased by 0.39 mb/d m-o-m to average 69.24 mb/d, up by 2.67 mb/d y-o-y. As a result, global oil supply is estimated to have decreased in March 2019 by 0.14 mb/d m-o-m to average 99.26 mb/d.

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

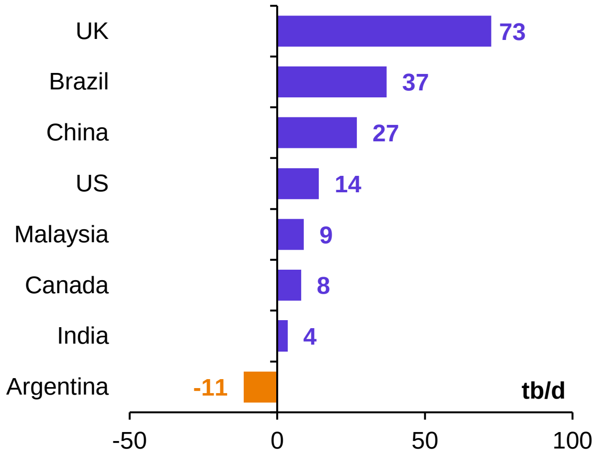
Region	2018	Change 2018/17	2019	Change 2019/18
OECD Americas	23.99	2.50	25.70	1.70
OECD Europe	3.83	0.01	3.83	0.00
OECD Asia Pacific	0.41	0.02	0.47	0.06
Total OECD	**28.24**	**2.53**	**30.00**	**1.76**
Other Asia	3.55	-0.07	3.47	-0.09
Latin America	5.19	0.04	5.49	0.30
Middle East	3.21	0.07	3.23	0.02
Africa	1.51	0.03	1.58	0.07
Total DCs	**13.47**	**0.07**	**13.77**	**0.30**
FSU	14.29	0.24	14.39	0.10
Other Europe	0.12	-0.01	0.12	0.00
China	4.01	0.03	3.99	-0.02
Non-OPEC production	60.12	2.86	62.27	2.15
Processing gains	2.25	0.04	2.28	0.03
Non-OPEC supply	**62.37**	**2.90**	**64.54**	**2.18**

*Note: * 2019 = Forecast.*
Non-OPEC supply includes Qatar.
Source: OPEC Secretariat.

Monthly revisions to non-OPEC supply growth forecast

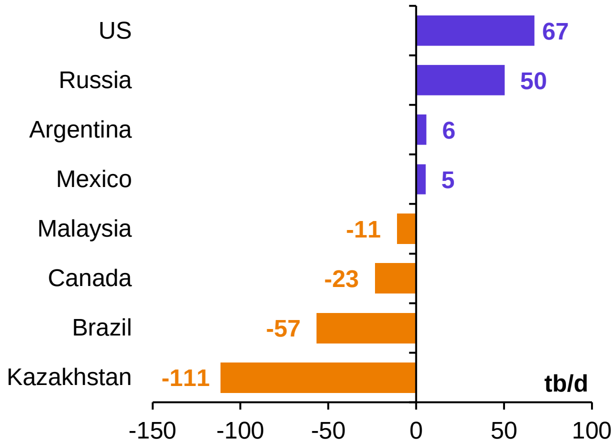
The non-OPEC oil supply growth estimate for 2018 was revised up by 0.16 mb/d to average 2.90 mb/d. On a country-by-country basis, cumulative expected growth in the UK, Brazil, China, US, Malaysia, Canada, and India were revised up by 172 tb/d in 2018, mostly in 4Q18, while the oil supply growth forecast for Argentina was revised down by 11 tb/d (***Graph 5 - 1***).

Graph 5 - 1: Monthly oil market report Apr 19/Mar 19 revisions in 2018 annual supply changes



Source: OPEC Secretariat.

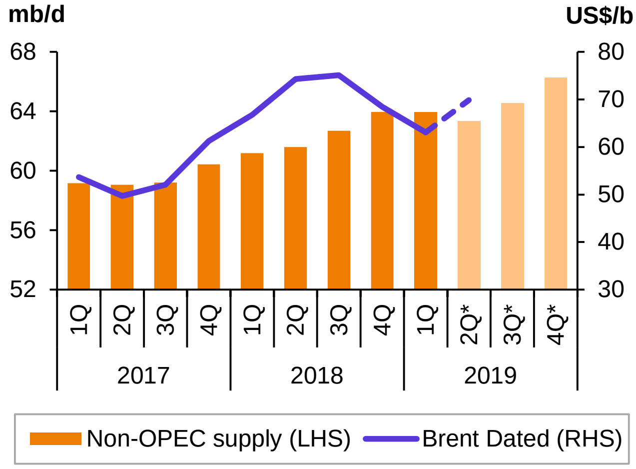
Graph 5 - 2: Monthly oil market report Apr 19/Mar 19 revisions in 2019* annual supply changes



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

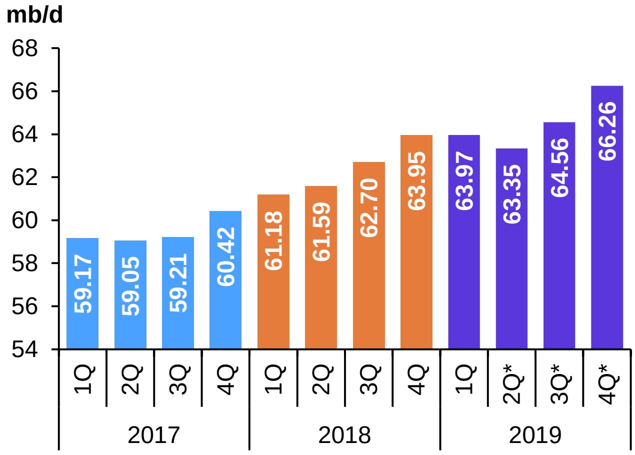
Revisions to non-OPEC oil supply growth for **2019**, as seen in ***Graph 5 - 2***, indicate downward adjustments to Kazakhstan, Brazil, Canada, and Malaysia totalling 216 tb/d, while oil supply forecasts for the US, Russia, Argentina and Mexico were revised up cumulatively by 139 tb/d. As a result, y-o-y growth for non-OPEC supply in 2019 was revised down by 0.06 mb/d to average 2.18 mb/d.

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



*Note: * 2Q19-4Q19 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 4: Non-OPEC quarterly oil supply



*Note: * 2Q19-4Q19 = Forecast.*
Source: OPEC Secretariat.

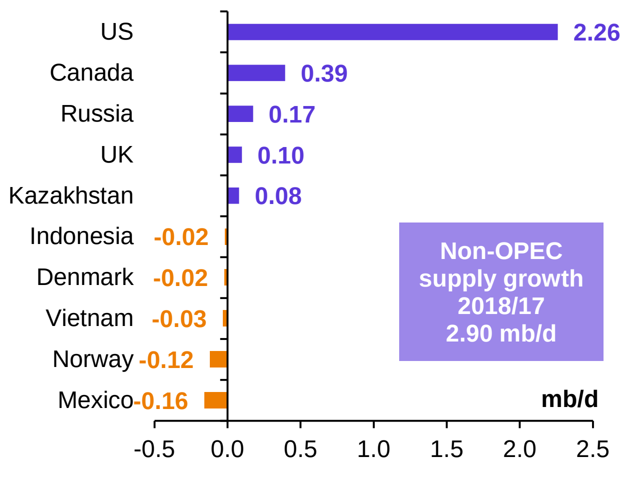
Non-OPEC oil supply in 2018 and 2019

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

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17 Growth	%
Americas	21.49	22.93	23.37	24.52	25.13	23.99	2.50	11.63
of which US	*14.40*	*15.53*	*16.22*	*17.17*	*17.70*	*16.66*	*2.26*	*15.69*
Europe	3.82	3.94	3.79	3.70	3.89	3.83	0.01	0.27
Asia Pacific	0.39	0.41	0.38	0.42	0.44	0.41	0.02	4.87
Total OECD	**25.71**	**27.27**	**27.53**	**28.65**	**29.46**	**28.24**	**2.53**	**9.84**
Other Asia	3.62	3.62	3.58	3.49	3.51	3.55	-0.07	-2.00
Latin America	5.15	5.17	5.22	5.12	5.26	5.19	0.04	0.82
Middle East	3.13	3.16	3.21	3.22	3.24	3.21	0.07	2.29
Africa	1.48	1.50	1.52	1.55	1.49	1.51	0.03	2.26
Total DCs	**13.39**	**13.45**	**13.53**	**13.39**	**13.50**	**13.47**	**0.07**	**0.56**
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	3.98	3.99	4.03	3.97	4.05	4.01	0.03	0.74
Total "Other regions"	**18.16**	**18.21**	**18.28**	**18.42**	**18.74**	**18.42**	**0.26**	**1.43**
Total non-OPEC production	**57.25**	**58.93**	**59.35**	**60.45**	**61.71**	**60.12**	**2.86**	**5.00**
Processing gains	2.21	2.25	2.25	2.25	2.25	2.25	0.04	1.67
Total non-OPEC supply	**59.47**	**61.18**	**61.59**	**62.70**	**63.95**	**62.37**	**2.90**	**4.88**
Previous estimate	59.45	61.06	61.44	62.55	63.69	62.19	2.74	4.61
Revision	0.02	0.12	0.15	0.15	0.27	0.17	0.16	0.26

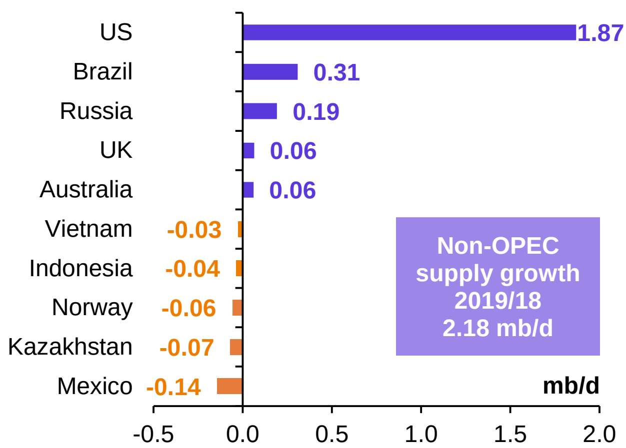
Note: Totals may not add up due to independent rounding.
Non-OPEC supply includes Qatar.
Source: OPEC Secretariat.

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



Source: OPEC Secretariat.

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



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

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

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18 Growth	%
Americas	23.99	25.15	24.96	25.91	26.76	25.70	1.70	7.11
of which US	*16.66*	*17.91*	*18.11*	*18.64*	*19.45*	*18.53*	*1.87*	*11.22*
Europe	3.83	3.88	3.67	3.76	3.99	3.83	0.00	-0.12
Asia Pacific	0.41	0.45	0.46	0.48	0.51	0.47	0.06	14.87
Total OECD	**28.24**	**29.48**	**29.09**	**30.15**	**31.25**	**30.00**	**1.76**	**6.24**
Other Asia	3.55	3.50	3.44	3.46	3.46	3.47	-0.09	-2.40
Latin America	5.19	5.22	5.44	5.58	5.72	5.49	0.30	5.73
Middle East	3.21	3.21	3.22	3.24	3.24	3.23	0.02	0.67
Africa	1.51	1.55	1.56	1.59	1.62	1.58	0.07	4.47
Total DCs	**13.47**	**13.48**	**13.66**	**13.88**	**14.04**	**13.77**	**0.30**	**2.24**
FSU	14.29	14.56	14.23	14.19	14.58	14.39	0.10	0.73
of which Russia	*11.35*	*11.53*	*11.40*	*11.61*	*11.61*	*11.54*	*0.19*	*1.70*
Other Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.00	-1.08
China	4.01	4.05	3.97	3.96	3.98	3.99	-0.02	-0.46
Total "Other regions"	**18.42**	**18.74**	**18.31**	**18.26**	**18.69**	**18.50**	**0.08**	**0.46**
Total non-OPEC production	**60.12**	**61.69**	**61.07**	**62.29**	**63.98**	**62.27**	**2.15**	**3.57**
Processing gains	2.25	2.28	2.28	2.28	2.28	2.28	0.03	1.25
Total non-OPEC supply	**62.37**	**63.97**	**63.35**	**64.56**	**66.26**	**64.54**	**2.18**	**3.49**
Previous estimate	62.19	63.59	63.44	64.64	66.01	64.43	2.24	3.59
Revision	0.17	0.38	-0.10	-0.07	0.25	0.11	-0.06	-0.11

*Note: * 2019 = Forecast.*
Non-OPEC supply includes Qatar.
Source: OPEC Secretariat.

OECD

Total OECD oil supply in 2018 is estimated to have grown by 2.53 mb/d to average 28.24 mb/d, up by 94 tb/d since the last month's assessment. OECD Americas, following an upward revision by 22 tb/d m-o-m, is expected to have increased by 2.50 mb/d y-o-y to average 23.99 mb/d. Oil supply in OECD Europe, was also revised up by 71 tb/d, showing minor growth of 0.01 mb/d to average 3.83 mb/d (of which 3.16 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 1.76 mb/d is forecast for OECD oil supply in **2019** to average 30.00 mb/d, representing an upward revision of 50 tb/d compared to last month's assessment. While OECD Americas and OECD Asia Pacific are projected to grow by 1.70 mb/d and 0.06 mb/d to average 25.70 mb/d and 0.47 mb/d, respectively, oil production in OECD Europe is anticipated to remain flat at 3.83 mb/d.

OECD Americas

US

US crude oil output (including lease condensate) in January 2018 declined m-o-m by 90 tb/d to average 11.87 mb/d. However output was higher by 1.88 mb/d, y-o-y. Considering the latest revisions in 4Q18 as published by the EIA, average crude oil production in 2018 is estimated at 10.96 mb/d, indicating y-o-y growth of 1.61 mb/d, almost triple the growth seen in 2017. The growth seen in 2018 comes on the back improved oil price levels as well as a reported rise in free cash flow of operators active in the shale regions. The m-o-m decrease in January was mainly due to lower output in the Gulf Coast (PADD3), as output in Texas came in lower by 64 tb/d m-o-m to average 4.83 mb/d, the first monthly decline seen since August

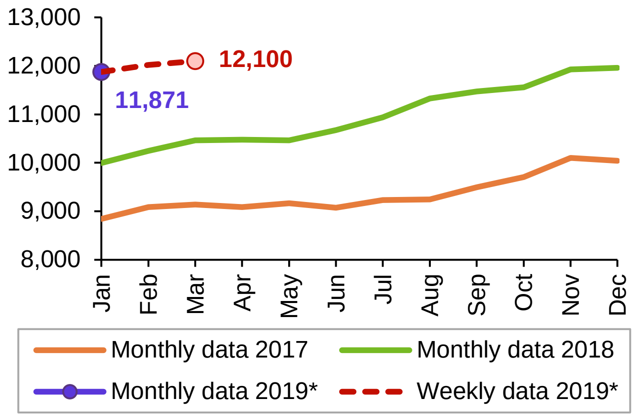
2017. Among the major states, North Dakota was the only state to see m-o-m growth in crude oil output. While production was steady in New Mexico and the Gulf of Mexico, other states saw a decline in production in January. It seems that US oil projects are beginning to show delays as producers are reportedly curbing spending. Thriving West Texas production in 2018 overwhelmed existing pipeline capacity out of the region, pressuring local prices and leading to the proposal of nine pipeline projects to add 5.4 mb/d in take-away capacity through the first half of 2021. However, as some companies have reportedly cut spending, the proposed Permian Gulf Coast pipeline may now be unlikely to materialize. According to some of the industry's biggest service companies, oil companies in the US and Canada are expected to see a double-digit drop in spending year.

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

State	Dec 18	Jan 19	*Change* Jan 19/Dec 18
Alaska	496	496	*0*
Colorado	513	500	*-13*
Oklahoma	584	580	*-4*
New Mexico	815	815	*0*
North Dakota	1,367	1,376	*9*
Federal Offshore - Gulf of Mexico (GoM)	1,904	1,904	*0*
Texas	4,896	4,832	*-64*
Total US crude oil production	**11,961**	**11,871**	***-90***

Sources: US EIA and OPEC Secretariat.

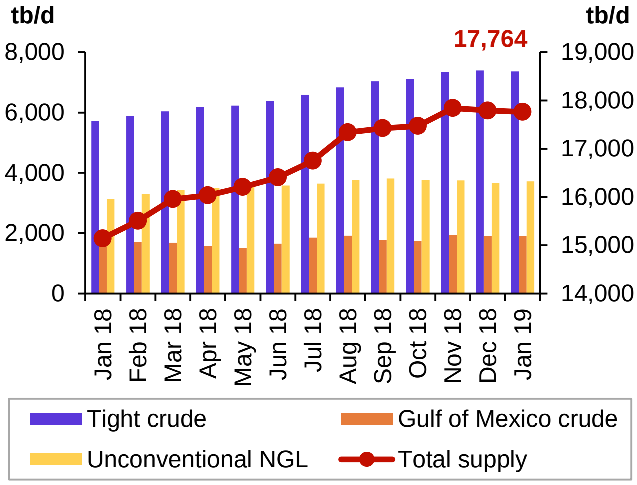
Graph 5 - 7: US monthly crude oil production in 2017-2019 vs. weekly forecast in 2019



*Note: * 2019 = Forecast.*
Sources: US EIA and OPEC Secretariat.

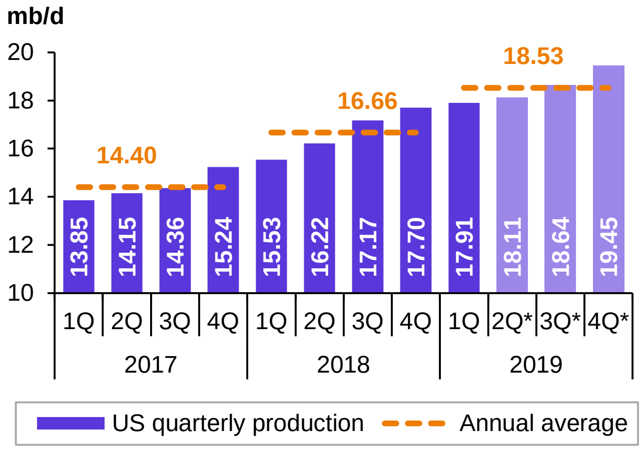
US crude oil production in 2019 is likely to expand by 1.46 mb/d, y-o-y to average 12.42 mb/d. The highest incremental production is expected in the Gulf Coast, albeit at a slower pace compared to a year ago due to the pipeline constraints in Permian Basin. More than 64% of crude output in 2018 was produced in the Gulf Coast (PADD 3) at an average of 7.06 mb/d and seeing y-o-y growth of 1.20 mb/d, mainly coming from Texas, New Mexico and the Gulf of Mexico. With regard to crude oil production by state, more than 40% of total crude oil output – at an average of 4.43 mb/d – came from Texas. This was mainly from the Permian Basin, which saw almost 59% of total US crude output growth at 0.94 mb/d in 2018. Oil production in the US Lower 48 in 2018 grew by 1.56 mb/d y-o-y to average 8.73 mb/d, with the month of December averaging at 9.55 mb/d. Comparing December 2018 to December 2017 shows a growth by more than 20%. For 2019, growth is expected to slow to a maximum of 13%. The share of tight crude out of the forecast growth of 1.46 mb/d in 2019 is projected 1.34 mb/d to average 7.70 mb/d, and for the Gulf of Mexico is 0.15 mb/d to average 1.89 mb/d, while conventional crude (non-shale) is projected to decline by 0.03 mb/d to average 2.63 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

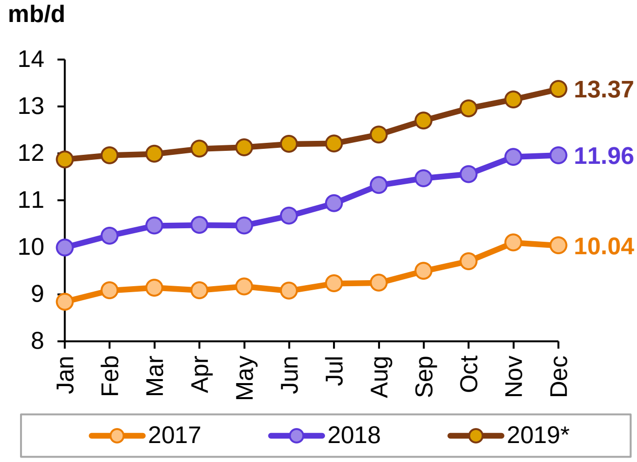


*Note: * 2Q19-4Q19 = Forecast.*
Sources: US EIA and OPEC Secretariat.

US liquids output in January (excluding processing gains) showed a decrease of 0.05 mb/d m-o-m to average 17.74 mb/d, up by 2.60 mb/d y-o-y. According to the EIA, this was due to a decrease in production of crude oil and other liquids, mainly ethanol, by 90 tb/d and 5 tb/d to average 11,871 tb/d and 1,348 tb/d, respectively, while NGL output showed a m-o-m increase of 66 tb/d to 4.55 mb/d.

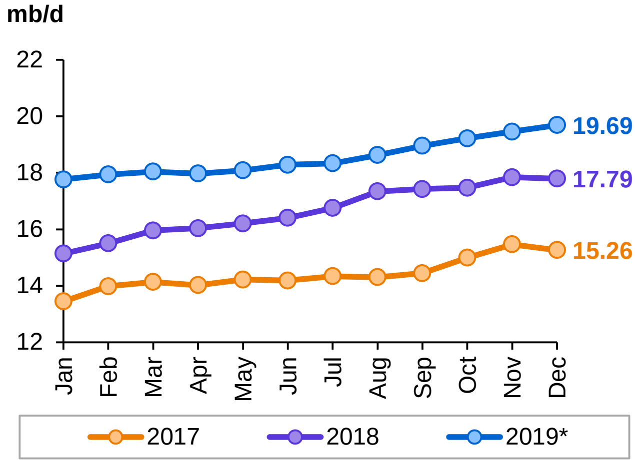
US liquids supply in 2018 is estimated to have grown by 2.26 mb/d to average 16.66 mb/d, revised up by 14 tb/d from the previous month's report, following an upward revision by 56 tb/d in 4Q18.

Graph 5 - 10: US monthly crude oil supply



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

Graph 5 - 11: US monthly total liquids supply



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

US liquids supply in 2019 is forecast to reach an average of 18.53 mb/d, representing y-o-y growth of 1.87 mb/d, revised up by 0.07 mb/d mainly in 1Q19 and 2Q19, compared with last month's assessment. Preliminary indications – such as drilling activities – show that the oil rig count has declined since November 2018 until the end of March 2019. In terms of started wells, these have increased to show a boost in production in February and March, although some shale producers are guiding flat-to-gradually declining activity levels, focusing on capital discipline.

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

	2016	2017	*Change 2017/16*	2018*	*Change 2018/17*	2019*	*Change 2019/18*
Tight crude	4.43	4.96	*0.53*	6.56	*1.60*	7.90	*1.34*
Gulf of Mexico crude	1.60	1.68	*0.08*	1.74	*0.06*	1.89	*0.15*
Conventional crude oil	2.80	2.71	*-0.09*	2.66	*-0.05*	2.63	*-0.03*
Unconventional NGLs	2.76	3.02	*0.27*	3.58	*0.56*	3.95	*0.37*
Conventional NGLs	0.75	0.76	*0.01*	0.77	*0.01*	0.78	*0.01*
Biofuels + Other liquids	1.27	1.27	*0.00*	1.35	*0.08*	1.38	*0.03*
US total supply	**13.61**	**14.40**	***0.80***	**16.66**	***2.26***	**18.53**	***1.87***

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

US tight crude output in January 2019 is estimated to have declined by 41 tb/d m-o-m to average 7.36 mb/d, an increase of 1.64 mb/d y-o-y, according to preliminary shale play and tight oil production estimates. The main m-o-m drop in US tight crude output from shale and tight formations through horizontal wells occurred in the Permian Basin in January.

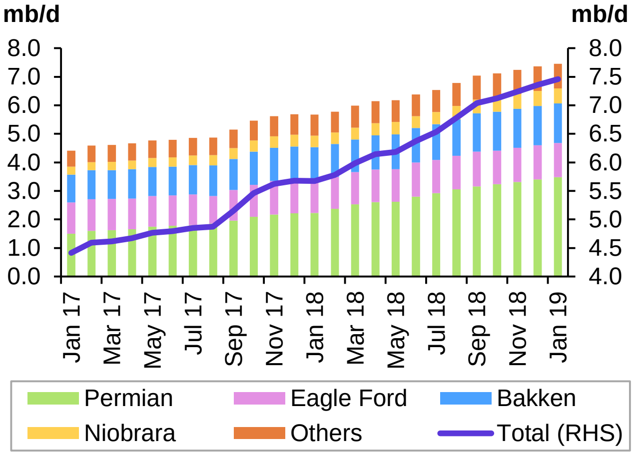
Table 5 - 6: US tight oil production growth, mb/d

Shale play	2017		2018		2019*	
tb/d	Production	*Y-o-y change*	Production	*Y-o-y change*	Production	*Y-o-y change*
Permian tight	1.77	*0.44*	2.80	*1.03*	3.45	*0.65*
Bakken shale	1.06	*0.03*	1.26	*0.20*	1.48	*0.22*
Eagle Ford shale	1.09	*0.02*	1.18	*0.09*	1.34	*0.16*
Niobrara shale	0.34	*0.02*	0.48	*0.14*	0.63	*0.15*
Other tight plays	0.70	*0.02*	0.84	*0.14*	1.00	*0.16*
Total	**4.96**	***0.53***	**6.56**	***1.60***	**7.90**	***1.34***

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

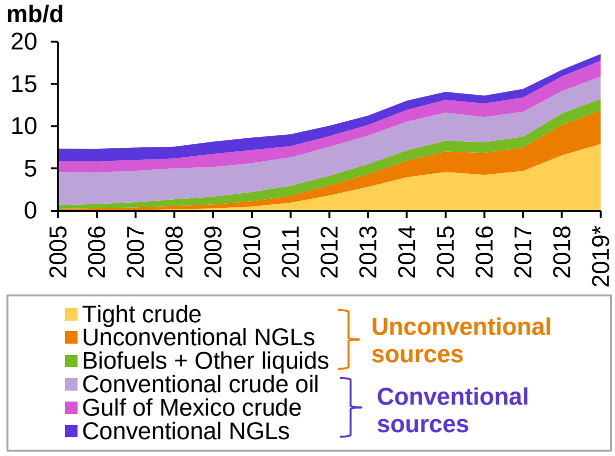
Y-o-y growth in US tight crude output for 2019 is forecast at a slower pace of 1.34 mb/d to average 7.90 mb/d, which is 0.26 mb/d less than estimated for 2018, due to fundamental constraints, mainly limited pipeline capacity to transfer Permian oil to the USGC as well as less drilling activity outside of the main shale plays.

Graph 5 - 12: US tight crude breakdown



Souces: US EIA and OPEC Secretariat.

Graph 5 - 13: US liquids production breakdown



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

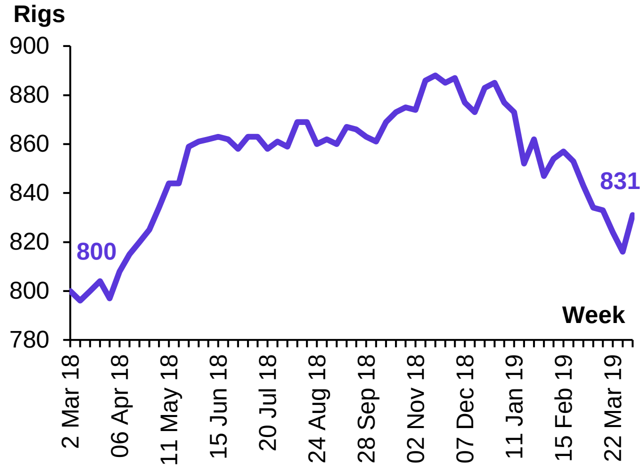
US rig, well and drilled but uncompleted wells (DUC) counts

Overall **US rig count** increased by 19 units all in land regions in the week ending 5 April 2019 to 1,025 rigs, according to a report by Baker Hughes. US onshore active rigs have now reached 1,000 rigs. The US oil rig count increased by 15 units w-o-w to 831 oil rigs, mainly in the Permian Basin which added 8 units to stand at 462 rigs. For the other basins, the Williston, DJ-Niobrara and Marcellus Basins added 1, 1 and 3 units w-o-w, to stand at 61, 30 and 68 rigs, respectively.

In 1Q19, the US oil rig count increased by 60 units to average 848 rigs, representing growth of 8%, while showing a q-o-q decline by 30 units. At the same time, a total of 2,951 horizontal (oil & gas) wells were spudded in 1Q19, representing a decline of 244 wells, q-o-q. The number of total completed wells also declined by 98 units to 2,796 wells. Wells starting to produce oil increased by 328 units to 2,985 wells over the quarter, and saw an increase of around 600 units just in February and March, whereby crude oil production is expected to show an increase in these months (***Graph 5 - 15***).

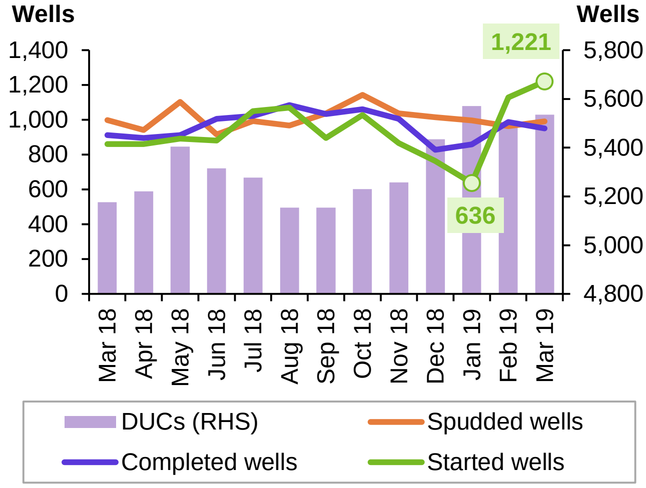
Total **DUC horizontal wells** in tight and shale plays in January increased by 136 units to average 5,571 wells, while they declined in February by 70 units to average 5,501 wells and increased again in March to 5,535 wells, according to Rystad Energy.

Graph 5 - 14: US weekly oil rig count



Sources: Baker Hughes and OPEC Secretariat.

Graph 5 - 15: US well activities vs DUCs

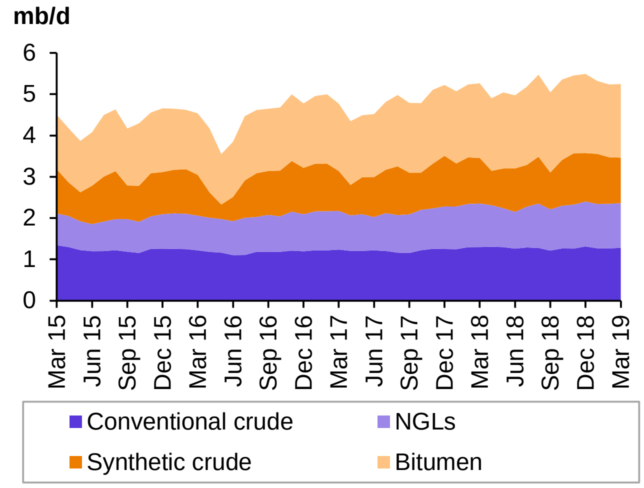


Sources: Rystad Energy and OPEC Secretariat.

Canada

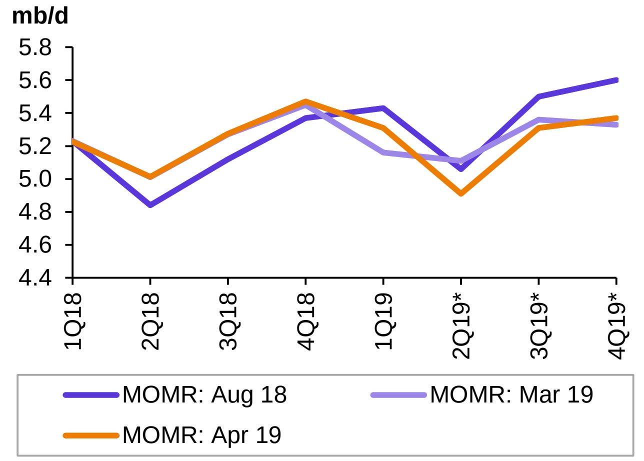
Canada's liquids supply rose by 0.04 mb/d in December 2018 m-o-m to average 5.53 mb/d, a historical record following m-o-m growth of 0.31 mb/d in October and 0.10 mb/d in November. Incremental production in December mainly came from conventional crude oil adding 51 tb/d to average 1.31 mb/d, mainly achieved in offshore fields, which saw a rise of 0.06 mb/d or 5%, y-o-y based on official data. In second place, Canada's NGLs supply rose by 23 tb/d m-o-m to average 1.09 mb/d, up by 0.06 mb/d or 6%, y-o-y and finally, oil sands production declined by 38 tb/d m-o-m to average 3.13 mb/d, but was higher by 0.15 mb/d, y-o-y with average production at 2.95 mb/d in 2018.

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



Source: OPEC Secretariat.

Graph 5 - 17: Impact of Alberta mandate for production adjustment on 2019 supply forecast



*Note: * 2Q19 - 4Q19 = Forecast.*
Source: OPEC Secretariat.

The slump in storage capacity, the wide differential between the price of WCS and WTI as well as the pipeline capacity limitations prompted the Alberta government to mandate temporary production adjustments effective January 1 that took 325 tb/d out of the market. Preliminary production data shows that Alberta crude and oil sands production fell to a minimum of 3.34 mb/d in January, indicating 79% conformity, and a drop of 0.26 mb/d from the December level, mainly due to a decline in raw bitumen which was partly offset by slightly higher synthetic crude oil production. While the curtailment mandates in 1Q19 represented a preliminary decline of 0.25 mb/d in oil sands output in Alberta compared to the base line, the net production impact of these curtailments are expected to be relatively muted in 2Q19 due to the effects of spring maintenance. In comparison, in 2017, oil sands production in 2Q17 declined by 0.45 mb/d. Oil sands spring maintenance in 2019 is expected to remove at least 0.4 mb/d. Suncor will account for the largest share of average 2Q19 maintenance outage (80 tb/d offline). Cenovus, Imperial, Syncrude, CNRL, ConocoPhillips

and Devon Energy are each forecast to account for average 2Q19 outages of between 20 and 55 tb/d, according to Rystad Energy. Moreover, Enbridge announced that its Line 3 replacement pipeline project will be delayed for a year and open for export in 2H20.

The oil supply forecast for Canada in 2019 now shows a contraction of 0.02 mb/d y-o-y to average 5.23 mb/d. More outages in 2Q19 due to heavy maintenance and different projects' turnaround, compared to last month's forecast, indicate that production is expected to decline, mainly in Alberta. Due to the recent announcement of a delay in permitting for Enbridge's 370 tb/d Line 3 replacement project, and further delays for the 830 tb/d Keystone XL pipeline, oil sands producers are now pulling back on the completion of new projects.

According to secondary sources, there are some major projects at risk for delay, either in start date, construction, or for a final investment decision. The first three projects, **Christina Lake Phase 2b**, **Kirby North**, and **Primrose** were all planned to add capacity for a combined 80 tb/d in 2019 but companies are deferring further spending while there is uncertainty with regard to pipeline takeaway and government mandates.

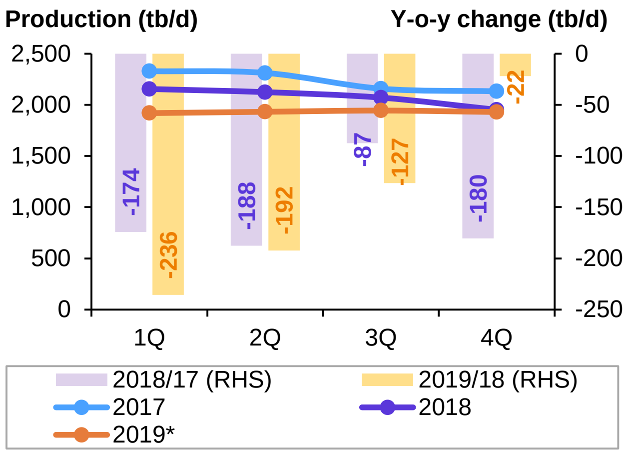
Canada's liquids supply in **2018**, following an upward revision to 2Q-4Q18, is estimated to have increased by 0.39 mb/d y-o-y to average 5.25 mb/d, revised up by 8 tb/d compared with the previous month's assessment. Canada's oil supply in **2019** is now forecast to see a contraction of 0.02 mb/d, y-o-y.

Mexico

Average **Mexico's liquids output in February 2019** increased by 0.09 mb/d m-o-m to average 1.95 mb/d, but was lower by a massive 0.25 mb/d y-o-y. Crude oil output was up by 78 tb/d m-o-m to average 1.70 mb/d as heavy crude production recovered to 1.1 mb/d, but was down by 208 tb/d or 11% y-o-y. NGLs output in February also inched up by a minor 6 tb/d m-o-m to average 0.24 mb/d. For 2019, some institutes revised up their forecasts as Mexico's national oil company – PEMEX – forecasts that crude oil production will reach 1.77 mb/d by year-end. The only Mexican oil field production remaining steady in 2018 was the offshore complex of Ku-Maloob-Zaap, with annual production at 0.82 mb/d while all other fields were in decline.

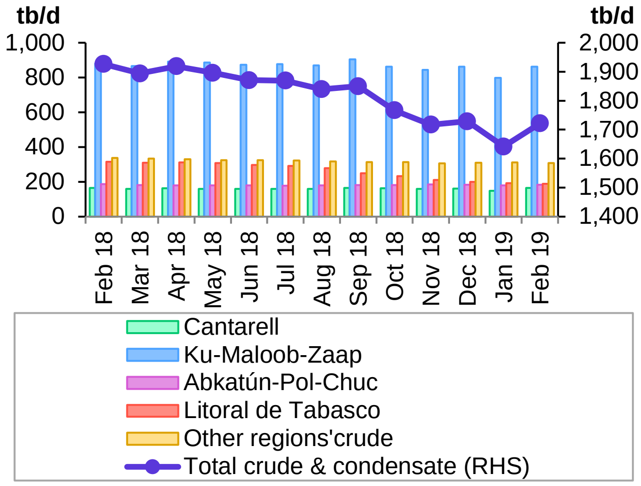
Mexico's liquids production declined by 0.16 mb/d, y-o-y in 2018. The country's liquids supply in **2019** was revised up by a minor 5 tb/d - following stronger than expected production performance in 1Q19, and is now forecast to decline by 0.14 mb/d to average 1.93 mb/d.

Graph 5 - 18: Mexico's quarterly liquids supply



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

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



Sources: Pemex and OPEC Secretariat.

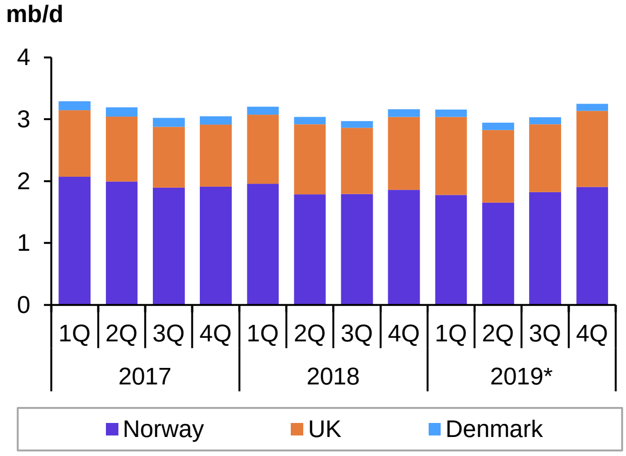
OECD Europe

OECD Europe's preliminary oil supply was up by 0.02 mb/d m-o-m in February 2019 to reach 3.88 mb/d, down by 0.06 mb/d y-o-y, following an upward revision to UK production in 2018.

The region's oil supply in **2018** is estimated to have reached 3.83 mb/d, indicating y-o-y growth of 0.01 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 0.10 mb/d and 0.05 mb/d to average 1.12 mb/d and 0.74 mb/d, respectively.

For **2019**, oil supply in the region is forecast to see a stagnant trend at 3.83 mb/d. The projected increase of 0.06 mb/d for the UK is expected to be offset by production declines in other countries of the region. North Sea oil production is expected to see a gradual ramp-up from 4Q19 onward, owing to the startup of the giant Norwegian Johan Sverdrup field.

Graph 5 - 20: North Sea quarterly liquids supply



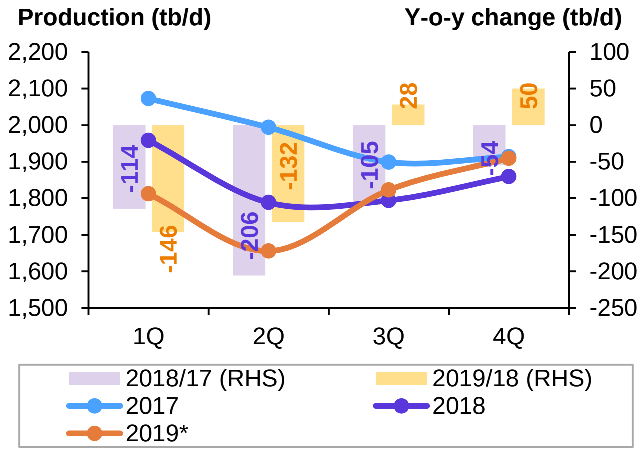
*Note: * 2019 = Forecast.*
Source: OPEC Secretariat.

Norway

Preliminary **Norway's liquids production** figures for **February 2019** by NPD, show average daily production of 1.75 mb/d of crude, NGLs and condensate, indicating a decline of 0.07 mb/d m-o-m, following a drop in crude oil production by 72 tb/d to average 1.39 mb/d. In 2018, crude oil production declined by 6.5%, or 0.1 mb/d, y-o-y to average 1.49 mb/d.

For 2019, total liquids output is forecast to decline at a lesser rate of 0.06 mb/d to average 1.79 mb/d, due to the possible incremental production coming by the startup of the Johan Sverdrup field. Norwegian oil production generally has dropped in the last two years due to field decline and technical outages. Equinor is targeting record-high Norwegian oil and gas production in 2025 on the back of projects such as Johan Sverdrup, due onstream in November 2019, Martin Linge, due on stream in 2020, and Johan Castberg, due on stream in 2022. Norway's continental shelf is a testing ground for new technology and digital solutions.

Graph 5 - 21: Norway's quarterly liquids supply



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

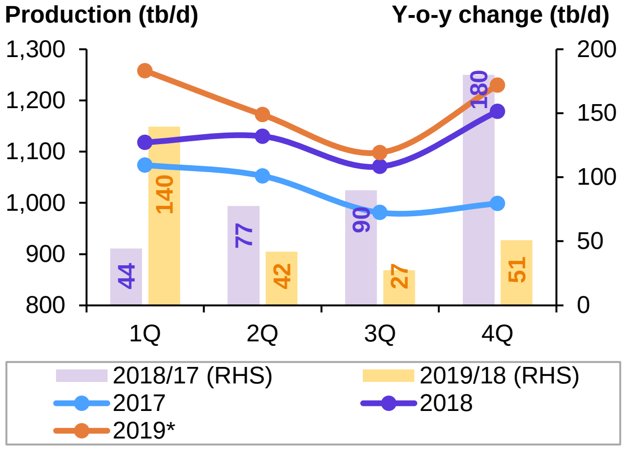
UK

In **February 2019**, **UK crude oil output** increased by 89 tb/d to average 1.14 mb/d, higher by 0.15 mb/d, y-o-y. Consequently, liquids output in February increased by 0.09 mb/d to average 1.29 mb/d, although production of NGLs showed a minor decline of 5 tb/d to average 113 tb/d. Preliminary data for March indicates that despite the rise in crude production, supply likely remained stagnant at 1.29 mb/d due to lower loading programmes for Brent and Forties.

As highlighted in the February MOMR report, first oil was produced from the second phase of development of the giant Clair Ridge project in the West of Shetland region, offshore UK, in late November. A first forecast for UK oil supply growth for 2018 was projected at 0.10 mb/d, based on projects ramp ups, with no further official announcements made during the year.

Recently revised data from the UK's Oil and Gas Authority (OGA), shows a rise in liquids production estimates for 2018 by 73 tb/d to average 1.124 mb/d, compared with the last MOMR, to now show y-o-y growth of 0.10 mb/d. This has raised the baseline for the assessment of UK liquids supply for 2019. Moreover, due to the higher-than-expected oil supply in the first months of 2019, the supply forecast for 1Q19 was revised up by 121 tb/d now to average 1.26 mb/d. While the projected total supply for 2019 has thus been revised to average 1.19 mb/d, forecast y-o-y growth remains at 0.06 mb/d.

Graph 5 - 22: UK quarterly liquids supply



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

OECD Asia Pacific

Australia

Royal Dutch Shell shipped the first condensate cargo from its Prelude Floating LNG (FLNG) project in Western Australia. Condensate production is expected to start ahead of first LNG. Shell started upstream production in December and has since been commissioning the 3.6 million ton/y facility, according to secondary sources. The project will produce 1.3 million tons/y of condensate and 400,000 tons/y of LPG. Prelude is the last of seven new LNG projects to be built in Australia over the past several years that will make Australia the world's largest LNG exporter ahead of Qatar.

Regarding crude oil production, following the successful completion of the two-well programme in the Van Gogh oil field, Santos – an independent oil and gas producer – has lifted first oil from the new infill project. The offshore Van Gogh infill project began in September 2018 and its output of heavy sweet crude may surpass 40 tb/d, but the crude production estimates for 2019 are not available yet. Vincent field is another heavy sweet Australian grade that is expected to resume production in mid-2019 – which has been out of the market since May 2018 – following work to increase output by 40 tb/d.

Developing Countries (DCs)

Total developing countries' (DCs) oil supply for 2018 is estimated to have reached an average of 13.47 mb/d, revised up by 0.06 mb/d compared to the last MOMR, following upward revisions in Other Asia (2016, 2017 and 2018 mainly for Indonesia and Malaysia based on most recent data published) as well as in Latin America on the back of revised supply data for Argentina and Brazil. Overall y-o-y growth thus increased to 0.07mb/d. While Africa, Latin America and the Middle East regions show y-o-y growth of 0.03 mb/d, 0.04 mb/d and 0.07 mb/d to average 1.51 mb/d, 5.19 mb/d and 3.21 mb/d, respectively, oil supply in the Other Asia region shows a y-o-y contraction of 0.07 mb/d, to average 3.55 mb/d.

For **2019**, following the anticipation of 0.30 mb/d y-o-y growth in Latin America owing to the planned new project production startups and ramp-ups at the recently installed FPSOs in Brazil, oil supply in DCs is forecast to grow by 0.30 mb/d to average 13.77 mb/d. Indeed, the expected y-o-y growth coming from Africa (0.07 mb/d) and the Middle East (0.02mb/d) will be completely offset by expected continuous declines in the Other Asia region (-0.09 mb/d).

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

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
2017	13.26	13.37	13.46	13.47	13.39	*-0.14*
2018	13.45	13.53	13.39	13.50	13.47	*0.07*
2019*	13.48	13.66	13.88	14.04	13.77	*0.30*

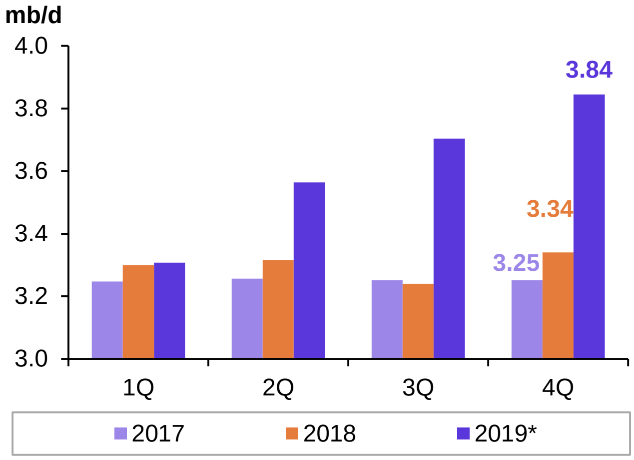
*Note: * 2019 = Forecast.*
Source: OPEC Secretariat.

Latin America

Brazil

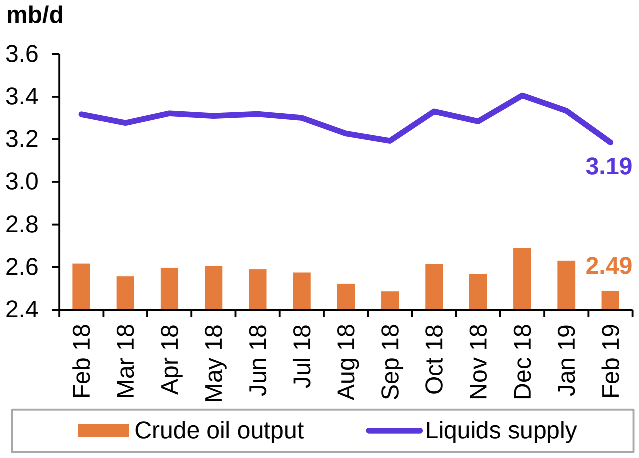
Brazil's preliminary crude oil output in February 2019, despite the start-up of the P-67 platform in the Lula Norte area and the P-76 at Buzios, dropped by 142 tb/d m-o-m to average 2.49 mb/d, the lowest level since September 2018. Output of NGLs declined m-o-m by 6 tb/d to average 93 tb/d, while biofuels output remained steady at 603 tb/d. January saw a production decline in Brazil due to maintenance at the P-74 and FPSO Cidade de São Paulo platforms, in the Búzios and Sapinhoá fields, respectively. Contrary to the past maintenance carried out in 2016-2018, Petrobras announced planned heavy maintenance to start 2019, but less in March-June. If maintenance is kept to a minimum from March to June as planned, then strong production growth is projected based on the six 150 tb/d capacity FPSOs that started last year and have continued to ramp up so far this year. According to Petrobras in February, average oil production in FPSO P-43 in the Barracuda field located in the Campos Basin declined by 33 tb/d m-o-m and production also declined by 29 tb/d in the Jubarte field in the pre-salt zone in the Northern Campos, due to maintenance. Preliminary production in February was 2.08 mb/d, 1% lower than the volume produced in January. This was mainly due to the operational issues in the P-18 and P20 platforms, which operate in the Marlim field, in the Campos Basin, and the FPSO Cidade de Angra dos Reis, located in the Lula field, in the Santos Basin pre-salt.

Graph 5 - 23: Brazil's quarterly liquids supply



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

Graph 5 - 24: Brazil's monthly liquids supply



Source: OPEC Secretariat.

Brazilian liquids production in 2018 was revised up by 37 tb/d to average 3.30 mb/d, following revisions to biofuels production data in all quarters by F.O.Licht. Brazilian liquids production in 2018 is now estimated to have grown by 0.05 mb/d, y-o-y. Brazil's liquids supply for **2019** is forecast to now grow by 0.31 mb/d to average 3.61 mb/d, revised down by 57 tb/d compared to the last month's assessment due to lower-than-expected output in 1Q19, the extended maintenance in 2H19 and the lack of growth in biofuel production for this year.

FSU

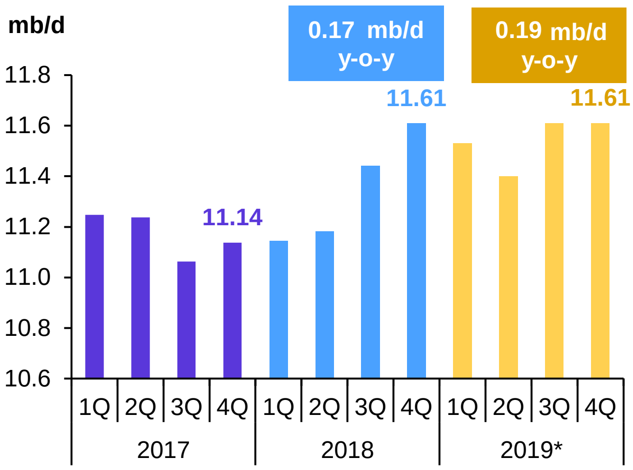
FSU oil production for 2018 is estimated to have grown by 0.24 mb/d to average 14.29 mb/d, unchanged from the previous forecast.

For **2019**, FSU oil supply is forecast to reflect the voluntary production adjustments only for 1H19 under the Declaration of Cooperation (DoC). FSU oil supply in 2019 is forecast to increase by 0.10 mb/d to average 14.39 mb/d. Oil supply in Russia based on running projects' ramp ups and assuming annual natural declines and voluntary downward adjustments to the agreed-upon production levels in 1H19, is expected to increase by 0.19 mb/d, while Kazakhstan and FSU others supply is likely to see a contraction of 0.07 mb/d or a steady production at 0.80 mb/d.

Russia

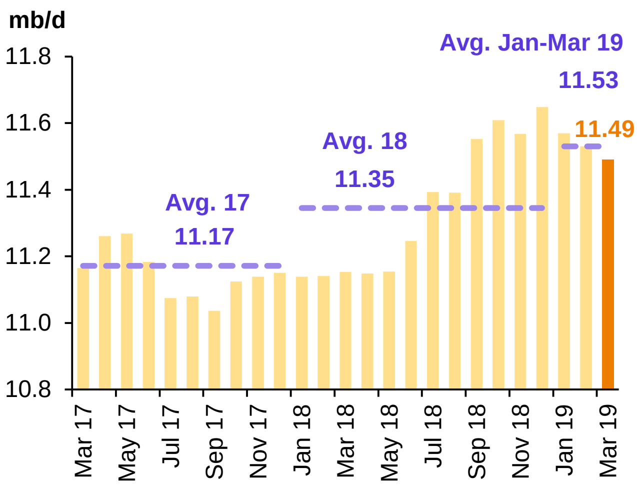
Preliminary data for **March 2019** shows a drop in **Russian liquids supply** by 0.04 mb/d, m-o-m to average 11.49 mb/d. Liquids output is forecast to grow by 0.19 mb/d in 2019 to average 11.54 mb/d, following a downward revision for 1Q19 by 21 tb/d as well as an upward revision by 0.11 mb/d for 2H19. Oil supply in 2Q19 is projected to continue to decline by 0.13 mb/d to average 11.40 mb/d. Incremental production of oil, NGLs and condensate could come from several projects, such as Uvat, East-Siberian, Vankorneft, Yamal LNG and Messoyakha. Russia's oil supply for the year 2018 is estimated to have reached a record high to average 11.35 mb/d, representing y-o-y growth of 0.17 mb/d.

Graph 5 - 25: Russia's quarterly liquids supply



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

Graph 5 - 26: Russia's monthly liquids supply



Sources: Nefta Compass and OPEC Secretariat.

Caspian

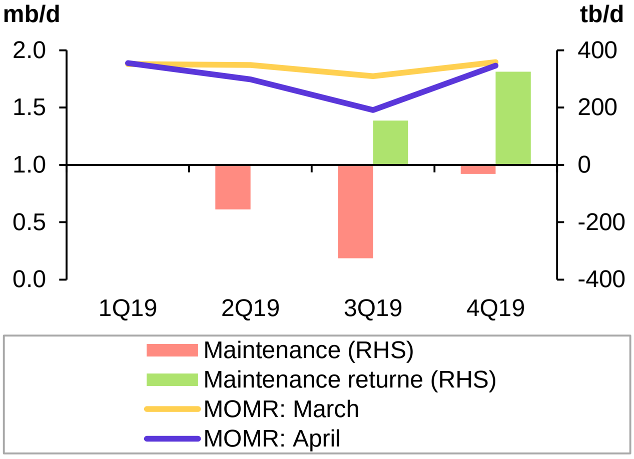
Kazakhstan

In **Kazakhstan**, **February 2019** liquids output was up by minor 0.01 mb/d m-o-m to average 1.90 mb/d. Crude oil inched up by 8 tb/d to average 1.64 mb/d, higher by 57 tb/d, y-o-y, while NGLs output remaining unchanged at an average of 0.27 mb/d.

As per the latest announcement, the Kashagan field's production will shut down for 45 days in accordance with regulatory requirements. In 2019, the operating company plans to overhaul the Bolashak oil and gas treatment plant ground and the D marine complex, starting 14 April, 2019. Considering the full stoppage of operations, the daily outages would amount to 155 tb/d in 2Q19. Moreover, according to the plan announced by different operators, oil production in the Tengiz field will also shut down from first August for 42 days and in the Karachaganak for 28 days from 15 September. Total announced output outages in 3Q19 and 4Q19 are now projected at 0.29 mb/d and 0.03 mb/d, respectively.

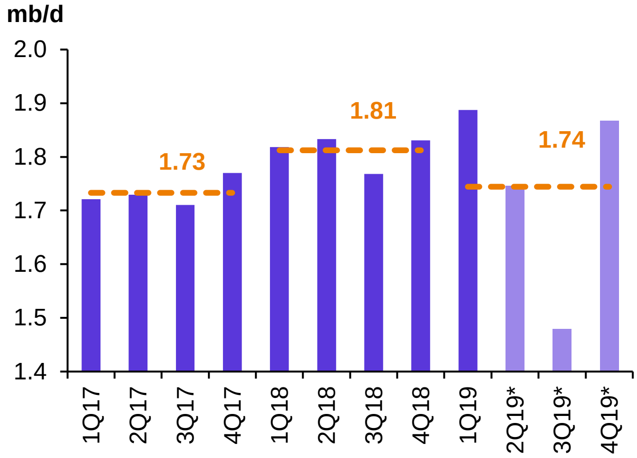
Hence, liquids production in 2019, based on the planned maintenance, is forecast to decline by 0.07 mb/d, y-o-y to average 1.74 mb/d. Kazakh oil supply in 2018 is estimated to have grown by 0.08 mb/d to average 1.81 mb/d.

Graph 5 - 27: Kazakhstan's supply forecast revision due to the maintenance



Note: 2019 = Forecast.
Source: OPEC Secretariat.

Graph 5 - 28: Kazakhstan's quarterly liquids output



*Note: * 2Q19 - 4Q19 = Forecast.*
Source: OPEC Secretariat.

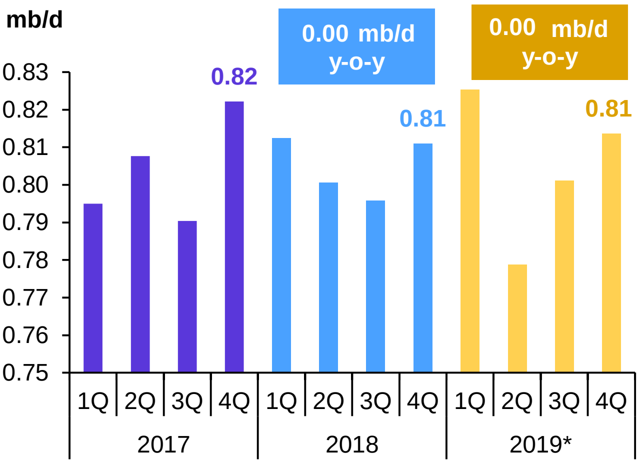
Azerbaijan

Azerbaijan's liquids output increased by a minor 8 tb/d m-o-m to average 0.83 mb/d in **February**, which includes 0.71 mb/d of crude oil (+2 tb/d m-o-m) and 0.12 mb/d (+6 tb/d m-o-m) of NGLs (mainly field condensate). 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, despite an increase in field condensate, is forecast to remain unchanged compared to last year, representing annual production at 0.80 mb/d.

Azerbaijan oil supply in **2018** was stagnant y-o-y at 0.80 mb/d.

Graph 5 - 29: Azerbaijan's quarterly liquids supply



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

China

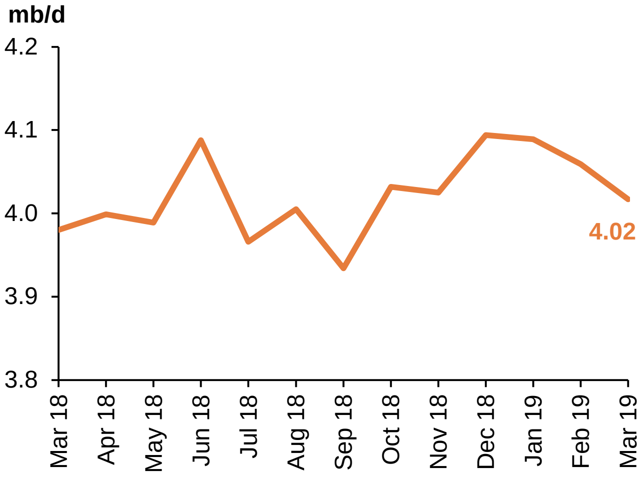
China's liquids production in February decreased by 0.03 mb/d m-o-m to average 4.06 mb/d, according to official data, but was up by 0.09 mb/d, y-o-y. Crude oil output in February dropped by 32 tb/d to average 3.78 mb/d, although it was 26 tb/d higher than a year earlier.

Liquids supply in **2018** is estimated to have grown by 0.03 mb/d, following an upward revision for biofuel production in all quarters, to average 4.01 mb/d.

China's state-controlled Sinopec, plans to spend around $8.9 billion on its upstream sector, largely focused on China, up by 41% compared with 2018. A significant chunk of the capex is expected to go to natural gas developments. It is worth noting that despite spending around $6.3 billion in 2018 in the upstream sector, Sinopec's oil and gas output grew by only 0.6% to average 1.24 mboe/d. Sinopec expects its domestic oil production will remain largely flat at 682 tb/d in 2019.

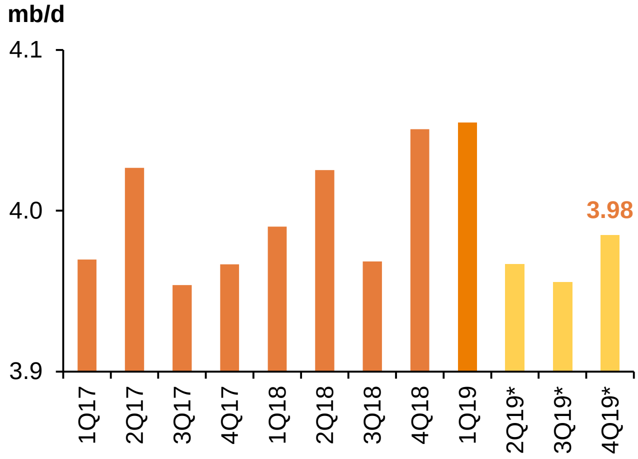
Oil supply in **2019** is estimated to see a mild contraction of 0.02 mb/d to average 3.99 mb/d compared with a year earlier.

Graph 5 - 30: China's monthly liquids output



Source: OPEC Secretariat.

Graph 5 - 31: China's quarterly liquids output



*Note: * 2Q19 - 4Q19 = Forecast.*
Source: OPEC Secretariat.

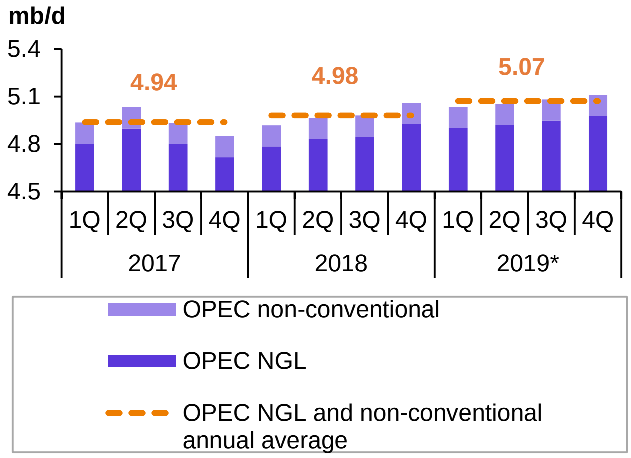
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids in 2018 are estimated 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, remaining unchanged from last month's assessment.

Preliminary production data in **March 2019** shows steady output at an average of 5.04 mb/d compared to a month earlier, of which 0.13 mb/d is classified as OPEC non-conventional liquids, while the largest share, at 4.90 mb/d, is attributed to NGL production.

Graph 5 - 32: OPEC NGL and non-conventional liquids output



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

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

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

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

OPEC crude oil production

According to secondary sources, **total OPEC-14 preliminary crude oil production** averaged 30.02 mb/d in March, a decrease of 534 tb/d over the previous month. Crude oil output decreased mostly in Saudi Arabia, Venezuela, Iraq, and IR Iran, while production increased in Libya, Congo and Nigeria.

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

	2017	2018	3Q18	4Q18	1Q19	Jan 19	Feb 19	Mar 19	*Mar/Feb*
Algeria	1,047	1,042	1,059	1,055	1,021	1,019	1,026	1,018	*-7*
Angola	1,634	1,505	1,470	1,497	1,449	1,444	1,448	1,454	*7*
Congo	252	318	320	320	327	315	321	344	*23*
Ecuador	530	519	526	517	522	520	524	524	*0*
Equatorial Guinea	133	125	124	116	119	112	121	124	*3*
Gabon	200	186	184	185	204	195	204	214	*9*
Iran, I.R.	3,813	3,553	3,603	2,982	2,718	2,731	2,726	2,698	*-28*
Iraq	4,446	4,550	4,606	4,668	4,626	4,712	4,647	4,522	*-126*
Kuwait	2,708	2,746	2,797	2,774	2,714	2,723	2,709	2,709	*-1*
Libya	811	952	892	1,059	963	883	902	1,098	*196*
Nigeria	1,658	1,719	1,704	1,741	1,730	1,733	1,723	1,733	*11*
Saudi Arabia	9,954	10,311	10,422	10,749	10,028	10,179	10,118	9,794	*-324*
UAE	2,915	2,986	2,982	3,234	3,067	3,075	3,068	3,059	*-9*
Venezuela	1,911	1,354	1,272	1,191	966	1,151	1,021	732	*-289*
Total OPEC	**32,013**	**31,865**	**31,961**	**32,087**	**30,454**	**30,793**	**30,557**	**30,022**	***-534***

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

	2017	2018	3Q18	4Q18	1Q19	Jan 19	Feb 19	Mar 19	*Mar/Feb*
Algeria	1,059	1,041	1,066	1,067	1,027	1,033	1,025	1,023	*-2*
Angola	1,632	1,478	1,475	1,440	1,422	1,470	1,423	1,373	*-50*
Congo	263	327	329	330	356	353	342	371	*28*
Ecuador	531	517	524	516	..	524	533	..	*..*
Equatorial Guinea	129	120	118	112	..	109	101	..	*..*
Gabon	210	194	192	206	..	214	217	..	*..*
Iran, I.R.	3,867	..	3,789	..	..	..	..	..	*..*
Iraq	4,469	4,410	4,460	4,460	4,540	4,575	4,545	4,500	*-45*
Kuwait	2,704	2,737	2,784	2,755	2,712	2,715	2,707	2,713	*6*
Libya	..	..	..	..	..	..	..	..	*..*
Nigeria	1,536	1,605	1,611	1,671	1,673	1,646	1,690	1,685	*-5*
Saudi Arabia	9,959	10,317	10,399	10,790	10,053	10,243	10,136	9,787	*-350*
UAE	2,967	3,001	2,998	3,285	3,055	3,070	3,050	3,045	*-5*
Venezuela	2,035	1,516	1,451	1,469	1,289	1,488	1,432	960	*-472*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	***..***

Notes: .. Not available.
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

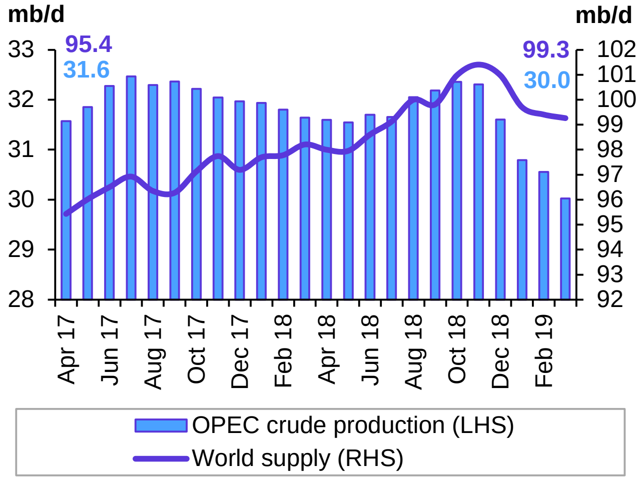
World oil supply

Preliminary data indicates that **global oil supply** decreased by 0.14 mb/d to average 99.26 mb/d in March 2019, compared with the previous month.

An increase in non-OPEC supply (including OPEC NGLs) of 0.39 mb/d in March, compared with the previous month was mainly driven by US and Brazil. This was offset by a remarkable decline in OPEC crude oil production of 534 tb/d, this equates to a total increase in global oil output of 1.05 mb/d y-o-y.

The **share of OPEC crude oil in total global production** declined by 0.5% to 30.2% in March 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 - 33: OPEC and world oil supply



Source: OPEC Secretariat.

Product Markets and Refinery Operations

***Product markets** globally showed solid gains over the month, as refining margins saw an extension of the upward trend recorded in February 2019, reaching the highest y-t-d levels boosted by soaring gasoline cracks after steep multi-month declines, particularly in Europe and Asia.*

*In the **US**, a combination of planned and unplanned refinery outages affected gasoline production, resulting in considerable declines in inventory levels. This supported prices and lent considerable support to refining economics.*

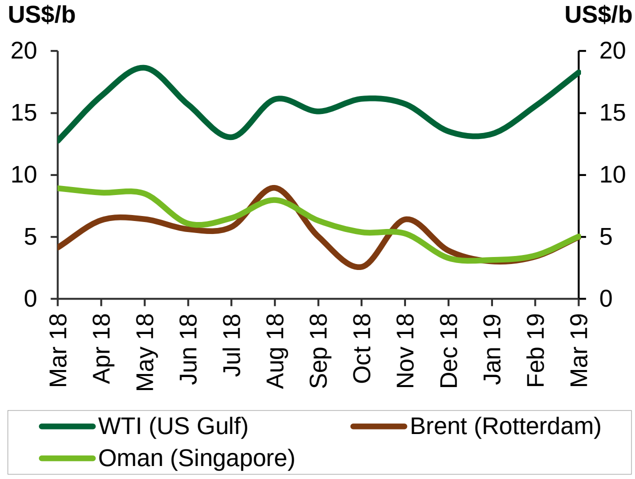
*In **Europe,** strength emerged from stronger gasoline exports to the US and Africa, despite weaker middle distillate fundamentals due to narrower arbitrage opportunities.*

*In **Asia**, robust performance at the top of the barrel supported by scheduled and unscheduled refinery maintenance provided much relief to the gasoline surplus environment that has been seen in recent months.*

Refinery margins

US refinery margins rose, supported by a considerable fall in US gasoline inventory levels that led to a tighter market over the month. This was attributed to lower output, due to planned maintenance, but most importantly due to unplanned outages as two fires – Texas ExxonMobil just outside Houston and California Philips 66's Carson refineries in LA – negatively affected the gasoline balance triggering strong bullish market sentiment. Consequently, gasoline prices soared, reaching a monthly average of $86.00/b having jumped by $15.70 compared to a month earlier. The ongoing shift to summer grades most likely added to the bullishness, thereby further contributing to the positive outcome in product markets. US refinery margins for WTI averaged $18.28/b in March, up by $2.72 m-o-m and by $5.51 y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

Refinery margins in **Europe also** gained strength in March. They were broadly affected by a robust performance at the top of the barrel, attributed to stronger gasoline exports to the US and Africa, despite weaker middle distillate fundamentals. In contrast to what was observed in other markets, fuel oil cracks in Europe moved upwards due to a pick-up in exports to Asia, while arrivals from Russia declined further, which together provided additional support for refining margins. Refinery turnarounds in the region during the month limited product supplies and contributed to the positive performance. Refinery margins for Brent in Europe averaged $4.99/b in March, up by $1.58, compared with a month earlier, and by 84¢ y-o-y.

Asian refinery margins trended upwards as gasoline and naphtha markets strengthened amid spring turnarounds. Gasoline restocking ahead of elections scheduled for April in India and Indonesia, as well as ongoing preparations for the Holy month of Ramadan, spurred additional import requirements that pressured inventory levels and helped ease the region's gasoline surplus. As observed in the other main trading hubs, product prices, particularly that of gasoline, rose over the month pressured by lower availability, having risen by $8.47 compared with $5.24 recorded in the previous month as the market tightened. Similarly, onshore middle distillate stocks in Singapore fell by 6.87%, equivalent to 840 mb in March, lending further support to Asian product markets. Refinery margins for Oman in Asia gained $1.53 m-o-m to average $5.04/b in March, which was lower by $3.89 y-o-y.

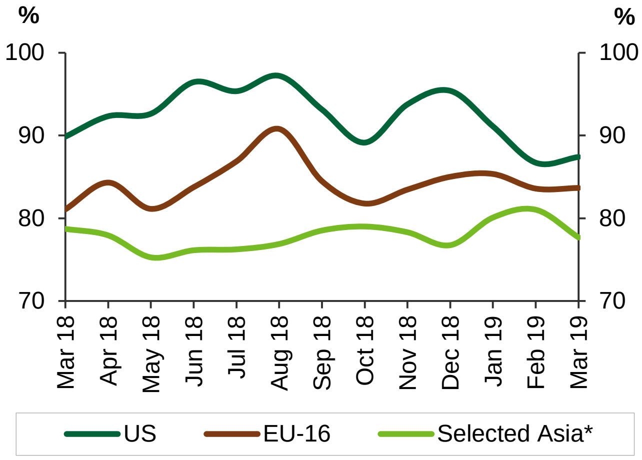
Refinery operations

In the **US**, refinery utilization rates increased in March to average 84.41%, which corresponds to a throughput of 16.26 mb/d. This represented a drop of 0.7 pp and 130 tb/d, respectively, compared with the previous month. Y-o-y, the March refinery utilization rate was down by 2.5 pp, with throughputs showing a drop of 701 tb/d.

European refinery utilization averaged 83.67%, corresponding to a throughput of 10.37 mb/d. This is a m-o-m rise of 0.1 pp or 100 tb/d. On a y-o-y basis, utilization rates increased by 2.6 pp while throughput was up by 330 tb/d.

In **selected Asia** — comprising Japan, China, India and Singapore — refinery utilization rates declined, averaging 77.69% in March, corresponding to a throughput of 21.79 mb/d. Compared with the previous month, throughputs were down by 3.4 pp and 940 tb/d. Meanwhile, y-o-y they were down by 1.0 pp, but up by 360 tb/d.

Graph 6 - 2: Refinery utilization rates



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

Product markets

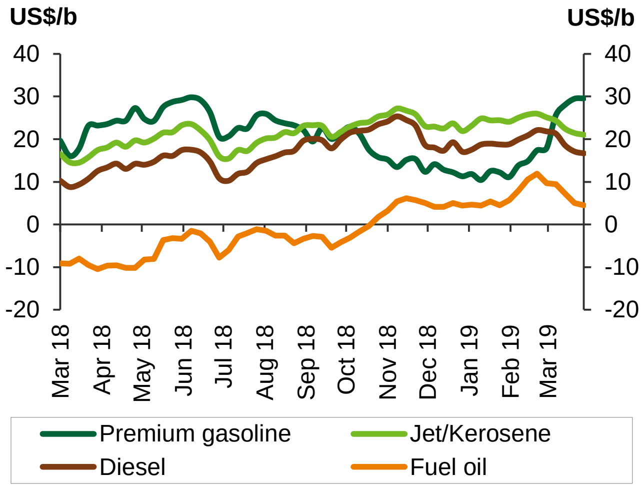
US market

US gasoline cracks moved higher, with fundamentals strengthening due to market tightness caused by prevailing refinery turnarounds, although refinery intakes increased slightly compared to a month ago. Furthermore, unscheduled refinery outages in Houston and California affected gasoline supplies, sending bullish sentiment into the market. This, along with considerable inventory drawdowns, prompted a hike in gasoline prices which jumped by a hefty $15.70 in March.

The inventory draws that supported the market allowed gasoline crack spreads to continue to strengthen, gaining a hefty $12.53 m-o-m to average $27.84/b in March, up by $8.13 y-o-y.

The USGC **jet/kerosene** weakened on pressure from the open arbitrage between Northwest Europe and New York Harbour as strong imports into PADD-1 led to considerable stock builds.

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



Sources: Argus Media and OPEC Secretariat.

The US jet/kerosene crack spread against WTI averaged $22.42/b in March, down by $2.88 m-o-m, but up by $6.92 y-o-y.

US **gasoil crack spreads** against WTI trended downwards despite a 6.4% m-o-m decline in gasoil inventory levels in March. Waning heating oil demand as the winter season came to an end triggered bearish sentiment. The US gasoil crack spread against WTI averaged $18.56/b, down by $2.31 m-o-m, but up by $8.35 y-o-y.

US **fuel oil crack spreads** against WTI lost some ground pressured by a closed arbitrage window to Asia due to unfavourable economics. Another bearish factor was the relatively high HSFO availability caused by FCC maintenance. This resulted in lower HSFO conversion to gasoline, contributing to the poor performance recorded during the month In March, the US fuel oil crack spread against WTI averaged $6.74/b, down by $2.79 m-o-m, but up by $15.96 y-o-y.

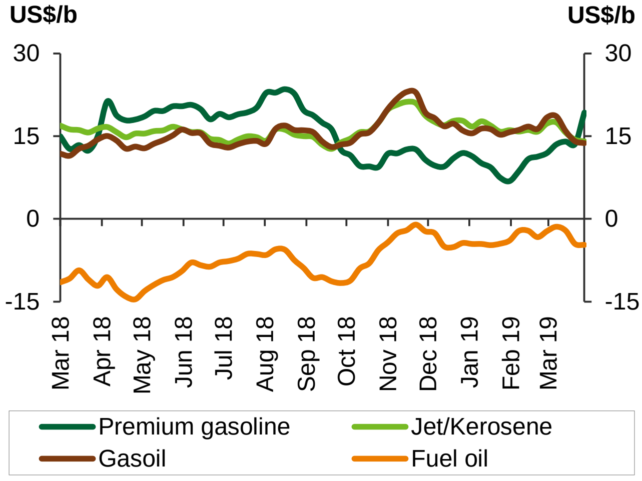
European market

The **gasoline crack spreads** in Rotterdam rose sharply in March, on the back of open arbitrage opportunities to the West. Declines in US gasoline output and favourable economics encouraged exports from Europe leading to a considerable drop in Amsterdam-Rotterdam-Antwerp (ARA) inventory levels, which contributed to the positive performance.

During the month, gasoline prices rose the highest compared to all other products in Europe, jumping by $6.65, partly caused by additional support from the summer-grade specification shift.

The gasoline crack spread against Brent averaged $15.00/b in March, up by $4.57 m-o-m and by $1.55 y-o-y.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

The **jet/kerosene crack spreads** against Brent lost some ground over the month, pressured by weaker fundamentals as demand remained subdued. However, the negative impact from the demand side pressure was somewhat tempered by the decline in domestic supply attributed to turnarounds, which prevented further losses. The Rotterdam jet/kerosene crack spread against Brent averaged $15.49/b, down by 67¢ m-o-m and by 65¢ y-o-y.

European **gasoil crack spreads** against Brent weakened in March pressured by an 11.97% rise in ARA inventories attributed to favourable diesel price differentials between Northwest Europe and the Mediterranean, which encouraged imports and placed cracks under pressure. ICE futures flipped from backwardation to contango in mid-March as higher delivery arrivals weighed on front month contracts. In addition, lower heating oil demand due to warmer weather further contributed to the poor performance. The gasoil crack spread against Brent averaged $15.74/b, which was lower by $1.10 m-o-m, but higher by $2.99 y-o-y.

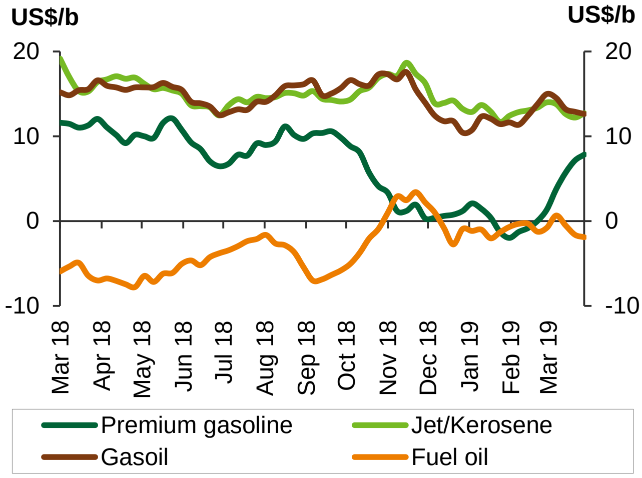
At the bottom of the barrel, **fuel oil 3.5% cracks spreads** in Rotterdam moved up slightly due to an increase in total exports that rose by 10.9% in March. In addition, volume deliveries from ARA to Singapore also rose in March supported by the favourable East-West spreads registered previously. Another bullish factor was a decline in Russian imports as they fell 28% m-o-m. This contributed to a drop in ARA inventory levels, which fell to a 12-month record low, resulting in a tighter market and support for fuel oil margins. In Europe, fuel oil cracks averaged minus $6.35/b in March, gaining 99 ¢ m-o-m, and $7.54 y-o-y.

Asian market

The **Asian gasoline 92** crack spread against Dubai reversed the declining trend and rebounded sharply from the slump witnessed a month ago. During March gasoline cracks returned to positive territory, jumping to levels not seen since October 2018 to reach a new y-t-d record high. This recovery came after five consecutive month of declines and was driven by strong gasoline inventory drawdowns as planned outages, as well as Vietnam's Nghi Son refinery's unplanned shutdown, reduced outputs.

The Singapore gasoline crack spread against Oman in March averaged minus $5.92/b, up by $5.98 m-o-m, but down by $5.57 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus Media and OPEC Secretariat.

Singapore light **distillate naphtha crack spreads** gained some ground as demand for naphtha-derived blending components for gasoline picked up during the month, despite hefty steam cracker maintenance activities. The Singapore naphtha crack spread against Oman averaged minus $6.67/b, having increased by $1.21 m-o-m, but with a decline of $6.99 y-o-y.

In the middle of the barrel, the **jet/kerosene** crack spreads in Asia weakened slightly as air travel activities returned to normal after China's peak travelling season due to the Lunar New Year holidays the previous month. In addition, weaker kerosene demand for the heating sector attributed to warmer weather capped further gains. The Singapore jet/kerosene crack spread against Oman averaged $12.91/b, down by 60¢ m-o-m and by $3.33 y-o-y.

The Singapore **gasoil crack spread** weakened during the month, pressured by lower arbitrage opportunities as, contrary to what was witnessed last month, exports of Indian volumes to the west became economically unfavourable. The Singapore gasoil crack spread against Oman averaged $13.75/b, down by 27¢ m-o-m and by $1.74 y-o-y.

The Singapore **fuel oil crack spread** lost some ground, pressured by higher supplies as conversion units went offline for maintenance. Consequently, fuel oil arrivals in Singapore and stock levels rose relative to what had been registered in recent months. Singapore fuel oil cracks against Oman averaged minus 77¢/b, down by 21¢ m-o-m, but up by $5.05 y-o-y.

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

Event	Time frame	Asia	Europe	US	Observations
Spring peak maintenance season	Apr 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 relatively high global stock levels particularly at the top of the barrel, as well as the demand slow-down.
Post maintenance season dynamics	May 19	↓ Some negative impacts on product markets	↓ Some negative impacts on product markets	↓ Some negative impacts on product markets	Rising product outputs will lead to rising inventory levels triggering bearish sentiment, placing refining margins under pressure.
Higher air cooling demand	Jun 19 - Aug 19	-	↑ Some positive impact on HSFO cracks	-	Strong high sulphur fuel oil demand (HSFO) from Saudi Arabia is expected to pick up supporting HSFO cracks.
International Maritime Organization (IMO) 2020	2019	↑ Some positive impact on gasoil, low sulphur fuel oil (LSFO) markets ↓ Weaker HSFO crack spreads	↑ Some positive impact on gasoil, LSFO markets ↓ Weaker HSFO crack spreads	↑ Some positive impact on gasoil, LSFO markets ↓ Weaker HSFO crack spreads	The IMO 2020 regulations could support some demand shift from HSFO to LSFO and gasoil strengthening product market as 1 January 2020 approaches.

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				*Refinery utilization, %*			
	Jan 19	Feb 19	Mar 19	Change Mar/Feb	Jan 19	Feb 19	Mar 19	Change Mar/Feb
US	**17.10**	**16.13**	**16.26**	**0.13**	**91.10**	**86.71**	**87.41**	**0.7 pp**
Euro-16	**10.58**	**10.36**	**10.37**	**0.01**	**85.36**	**83.59**	**83.67**	**0.1 pp**
France	1.13	1.16	1.02	-0.14	90.26	92.66	81.79	-10.9 pp
Germany	1.82	1.72	1.83	0.10	82.95	78.66	83.41	4.8 pp
Italy	1.37	1.23	1.32	0.09	66.76	59.87	64.47	4.6 pp
UK	1.10	1.10	1.00	-0.09	83.40	83.40	76.24	-7.2 pp
Selected Asia*	**22.05**	**22.73**	**21.79**	**-0.94**	**80.09**	**81.04**	**77.69**	**-3.4 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
Total OECD	**37.43**	**38.13**	**37.99**	**37.60**	**37.58**	**38.89**	**37.90**	**37.49**
OECD Americas	**18.78**	**19.09**	**19.31**	**18.79**	**19.50**	**19.79**	**19.15**	**18.79**
of which US	16.51	16.88	17.32	16.75	17.50	17.68	17.33	16.50
OECD Europe	**11.91**	**12.24**	**11.99**	**11.89**	**11.69**	**12.43**	**11.92**	**11.89**
of which:								
France	1.14	1.17	1.10	1.12	0.94	1.21	1.15	1.10
Germany	1.93	1.91	1.80	1.89	1.86	1.78	1.65	1.79
Italy	1.30	1.40	1.35	1.35	1.33	1.37	1.35	1.30
UK	1.09	1.10	1.06	0.93	1.04	1.14	1.14	1.06
OECD Asia Pacific	**6.75**	**6.80**	**6.70**	**6.92**	**6.39**	**6.66**	**6.82**	**6.81**
of which Japan	3.28	3.22	3.11	3.33	2.85	3.07	3.20	3.19
Total Non-OECD	**41.41**	**42.27**	**43.65**	**43.28**	**43.56**	**44.17**	**44.44**	**44.71**
of which:								
China	10.77	11.35	12.03	11.75	12.04	12.10	12.25	12.57
Middle East	6.93	7.06	7.28	7.08	7.22	7.67	7.86	7.89
Russia	5.58	5.59	5.72	5.69	5.65	5.81	5.73	5.71
Latin America	4.66	4.54	4.47	4.47	4.54	4.46	4.00	3.83
India	4.68	4.73	4.83	4.93	4.80	4.78	4.83	5.20
Africa	2.20	2.21	2.15	2.18	2.26	2.07	2.32	2.32
Total world	**78.84**	**80.39**	**81.64**	**80.87**	**81.14**	**83.06**	**82.34**	**82.20**

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

		Feb 19	Mar 19	Change Mar/Feb	Average 2018	Year-to-date 2019
US Gulf (Cargoes FOB):						
Naphtha*		57.25	61.91	4.66	68.51	56.79
Premium gasoline	*(unleaded 93)*	70.30	86.00	15.70	85.78	73.15
Regular gasoline	*(unleaded 87)*	64.42	76.43	12.01	80.17	66.16
Jet/Kerosene		80.29	80.58	0.29	85.35	78.91
Gasoil	*(0.2% S)*	75.86	76.72	0.86	80.99	74.26
Fuel oil	*(3.0% S)*	62.87	62.92	0.05	60.17	60.24
Rotterdam (Barges FoB):						
Naphtha		55.14	58.80	3.66	66.47	54.82
Premium gasoline	*(unleaded 98)*	74.43	81.08	6.65	87.34	74.58
Jet/Kerosene		80.16	81.57	1.41	86.93	79.27
Gasoil/Diesel	*(10 ppm)*	80.75	81.82	1.07	85.94	79.27
Fuel oil	*(1.0% S)*	61.41	62.98	1.57	62.33	59.76
Fuel oil	*(3.5% S)*	56.66	59.73	3.07	59.04	55.59
Mediterranean (Cargoes FOB):						
Naphtha		53.98	57.61	3.63	65.79	53.56
Premium gasoline**		64.40	72.52	8.12	79.08	65.38
Jet/Kerosene		77.75	79.33	1.58	85.10	76.96
Diesel		80.88	81.71	0.83	85.66	79.16
Fuel oil	*(1.0% S)*	64.13	64.50	0.37	63.53	62.14
Fuel oil	*(3.5% S)*	58.69	61.11	2.42	60.36	57.24
Singapore (Cargoes FOB):						
Naphtha		56.54	60.24	3.70	67.24	56.25
Premium gasoline	*(unleaded 95)*	66.27	74.42	8.15	79.93	67.25
Regular gasoline	*(unleaded 92)*	64.36	72.83	8.47	77.66	65.44
Jet/Kerosene		77.93	79.82	1.89	84.81	76.50
Gasoil/Diesel	*(50 ppm)*	78.44	80.66	2.22	84.67	77.04
Fuel oil	*(180 cst)*	63.86	66.14	2.28	65.24	62.60
Fuel oil	*(380 cst 3.5% S)*	63.79	65.56	1.77	64.74	62.48

*Note: * Barges.*

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

Sources: Argus Media and OPEC Secretariat.

Tanker Market

*Average **dirty tanker spot freight rates** declined further in March, continuing the downward trend seen in the first quarter. Lower rates were reported in most dirty classes, mainly attributed to high vessel supply, while market activities remain thin, in general. Other factors, including refinery maintenance and weather also weighed on tonnage demand during the month. Average dirty tanker freight rates saw a drop from the previous month, as Suezmax and Aframax rates dropped by 13% and 9%, m-o-m, respectively.*

***Clean tanker spot freight rates** showed some improvement in the West, supported mainly by higher rates in Northwest Europe on the back of balanced tonnage availability and occasional shortages in prompt vessel supply. In the East, lack of activity dominated different classes resulting in a drop in rates across several routes.*

Spot fixtures

According to preliminary data, **global fixtures** inched up by a slight by 0.8% in March compared with the previous month. Compared with the same period a year earlier, global fixtures showed an increase of 48% in March. **OPEC spot fixtures** rose by 1.15 mb/d to average 19.86 mb/d.

Fixtures on the **Middle-East-to-East route** averaged 11.04 mb/d in March, which is higher by 0.38 mb/d compared with the previous month, while fixtures on the **Middle East-to-West** route averaged 2.05 mb/d, a drop of 0.17 mb/d m-o-m.

Outside the Middle East, fixtures averaged 6.77 mb/d in March, showing an increase of 0.94 mb/d m-o-m.

Table 7 - 1: Spot fixtures, mb/d

	Jan 19	Feb 19	Mar 19	Change Mar 19/Feb 19
All areas	**19.77**	**28.25**	**28.48**	**0.23**
OPEC	13.76	18.71	19.86	1.15
Middle East/East	7.91	10.66	11.04	0.38
Middle East/West	1.38	2.22	2.05	-0.17
Outside Middle East	4.47	5.83	6.77	0.94

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

According to preliminary data, **OPEC sailings** rose by 0.9% m-o-m in March to average 25.48 mb/d. This is an increase of 4% from the same month a year earlier. On the contrary, **Middle East sailings** declined by 0.17 mb/d from the previous month.

Arrivals in March were mixed, registering mostly increases in **North America, Europe and West Asia** by 7.5%, 1.5% and 2.8%, respectively, compared to the previous month. Concurrently, arrivals to the **Far East** showed a drop of 4.8% from the previous month to average 8.63 mb/d.

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

	Jan 19	Feb 19	Mar 19	*Change* Mar 19/Feb 19
Sailings				
OPEC	25.32	25.26	25.48	0.22
Middle East	18.47	18.57	18.40	-0.17
Arrivals				
North America	10.23	9.88	10.62	0.74
Europe	11.11	11.88	12.06	0.18
Far East	9.20	9.07	8.63	-0.43
West Asia	4.44	4.29	4.41	0.12

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC freight rates were the only class in the dirty sector that showed positive earnings in March, although the gains remain relatively low. VLCC average freight rates went up by WS6 points, or 14%, to stand at WS49 points over the month. Improvements were seen on all reported routes.

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

	Size *1,000 DWT*	Jan 19	Feb 19	Mar 19	*Change* Mar 19/Feb 19
Middle East/East	230-280	56	52	60	8
Middle East/West	270-285	24	26	30	5
West Africa/East	260	56	52	58	6

Sources: Argus Media and OPEC Secretariat.

Stable demand for VLCCs at the beginning of March set the platform for an increase in rates; however, a decline in cargo demand following the completion of March requirements, combined with a lack of tonnage demand in the East put pressure on the freight rates and limited gains in several areas. As a result, VLCC spot freight rates for tankers operating on the **Middle East to-East routes** showed a slight increase, up by WS8 points from the previous month to stand at WS60 points in March.

Freight rates registered for tankers on the **Middle East-to-West routes** went up by WS5 points m-o-m to average WS30 points, while VLCC spot freight rates for tankers trading on **West Africa-to-East routes** increased by 11% m-o-m to stand at WS58 points in March.

Suezmax

Average Suezmax spot freight rates declined in March. Rates for tankers operating on the **West Africa-to-US Gulf Coast (USGC) route** decreased by 19% m-o-m to average WS51 points. Rates on the **NWE-to-USGC route** fell by 6% in March from the previous month, to average WS47 points.

The Suezmax market had a negative start to the beginning of the month, with rates falling across all trading routes to below operational cost levels. The decline in freight rates came on the back of tonnage builds and few loading requirements, with exceptionally quiet periods in the main markets such as the USGC, North Sea and West Africa, which all showed limited tonnage demand in general and rates ended mostly flat.

A short-lived tightening of Suezmax availability in the East supported freight rates temporarily, or at least prevented them from dropping further.

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

	Size *1,000 DWT*	Jan 19	Feb 19	Mar 19	*Change* Mar 19/Feb 19
West Africa/US Gulf Coast	130-135	77	63	51	-12
Northwest Europe/US Gulf Coast	130-135	65	50	47	-3

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax freight rates mostly declined in March from the previous month, while all freight rates remained above levels registered in the same month a year earlier.

Spot freight rates for tankers operating on the **Mediterranean-to-Mediterranean** stayed at the same level as in the previous month and averaged at WS95 points in March. Spot rates registered on the **Mediterranean-to-NWE route** declined by WS2 points m-o-m to average WS89 points. Freight rates on both routes were higher by 9% than seen in the same month a year earlier. In the North Sea and the Baltic, average spot freight rates were not supported by demand for the ice class as the winter season is about to end, although the market did capitalise on a point when the Baltic market was firming due to lesser availability of the ice class.

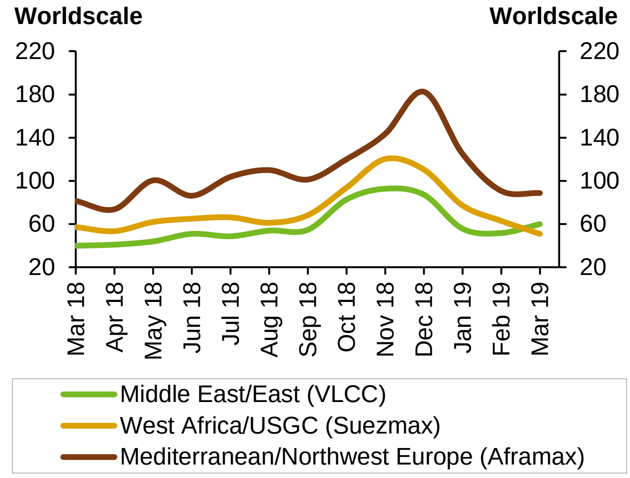
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size *1,000 DWT*	Jan 19	Feb 19	Mar 19	*Change* Mar 19/Feb 19
Indonesia/East	80-85	112	93	97	4
Caribbean/US East Coast	80-85	168	141	99	-42
Mediterranean/Mediterranean	80-85	131	95	95	0
Mediterranean/Northwest Europe	80-85	125	91	89	-2

Sources: Argus Media and OPEC Secretariat.

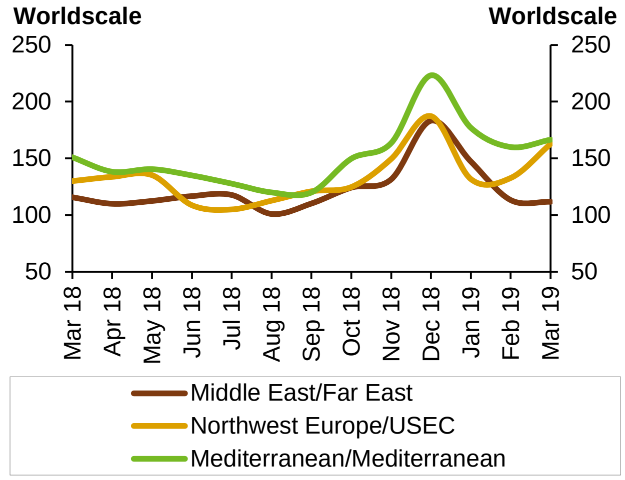
In the Caribbean, freight rates for Aframax tankers operating on the **Caribbean-to-US East Coast (USEC) route** declined by 30% from the previous month to average WS99 points in March.

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.

Aframax freight rates in the East increased slightly from the previous month as spot freight rates registered on the **Indonesia-to-East routes** rose by WS4 points m-o-m, to average WS97 points.

Clean tanker freight rates

In March, **clean tanker spot freight rates** saw a mixed performance.

To the **East of Suez**, clean tanker spot freight rates declined by 5% compared with the previous month, mainly driven by a decline in spot freight rates for tankers trading on the Singapore-to-East route, which showed a drop of WS11 points to stand at WS144 points.

The **Middle East-to-East** route showed a drop of WS2 points to average WS112 points in March.

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

	Size *1,000 DWT*	Jan 19	Feb 19	Mar 19	*Change* Mar 19/Feb 19
East of Suez					
Middle East/East	30-35	147	113	112	-2
Singapore/East	30-35	186	154	144	-11
West of Suez					
Northwest Europe/US East Coast	33-37	132	133	163	30
Mediterranean/Mediterranean	30-35	177	160	167	7
Mediterranean/Northwest Europe	30-35	187	170	176	6

Sources: Argus Media and OPEC Secretariat.

In the **West of Suez**, spot freight rates for tankers operating on the NWE-to-USEC route rose by 23% to average WS163 points.

In the Mediterranean, clean spot freight rates increased in March compared with the previous month. Clean spot freight rates for tankers trading on the **Mediterranean-to-Mediterranean** and the **Mediterranean-to-NWE** routes rose by WS7 points and WS6 points, respectively, in March, compared with the previous month, to average WS167 points and WS176 points,.

Oil Trade

*In March 2019, preliminary data showed that **US** crude oil imports increased by 86 tb/d from the previous month to stand at 6.8 mb/d, which is 862 tb/d below the level seen a year earlier. US product imports increased by 143 tb/d, or 7%, m-o-m to average 2.1 mb/d, and they dropped by 64 tb/d y-o-y.*

***Japan**'s crude oil imports dropped in February by 157 tb/d, or 5%, m-o-m to average 3.1 mb/d, an increase 99 tb/d y-o-y. Japan's product imports went up in February by 21 tb/d m-o-m to average 621 tb/d.*

***China**'s crude oil imports maintained high levels in February as they increased by 197 tb/d, or 2%, from the previous month, to stand at 10.3 mb/d. On an annual basis, China's crude imports were up by a significant 1.8 mb/d. China's product imports dropped in February by 265 tb/d from the previous month, to average 1.1 mb/d, showing a drop of 376 tb/d from the previous year.*

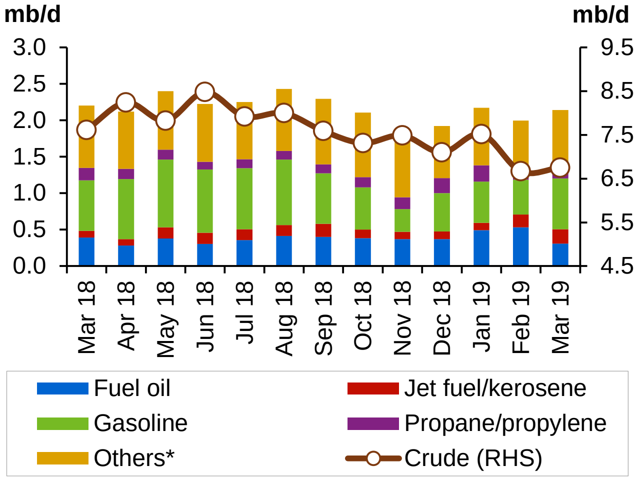
*In February, **India**'s crude imports averaged 4.5 mb/d, down by 174 tb/d from a month before, and lower by 135 tb/d from the same month a year earlier. Product imports were up from the previous month, averaging 1 mb/d, which represents a gain of 228 tb/d, or 28% m-o-m and 235 tb/d y-o-y.*

US

In March, preliminary data showed that **US crude oil imports** increased by 86 tb/d from the previous month to stand at 6.8 mb/d, which was 862 tb/d below the level seen a year earlier.

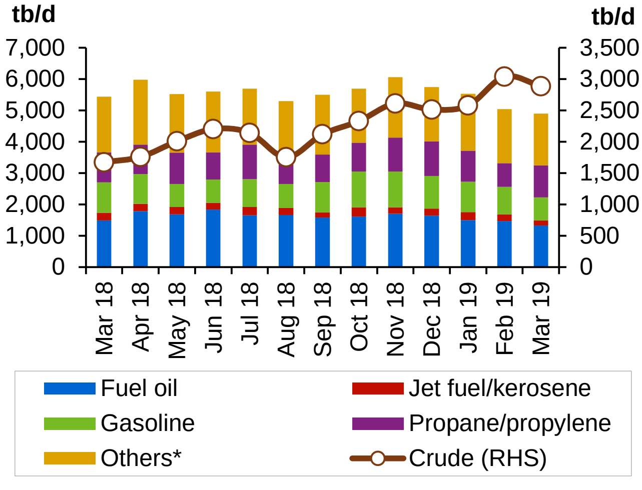
US product imports increased by 143 tb/d, or 7%, m-o-m to average 2.1 mb/d, while they dropped by 64 tb/d y-o-y.

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



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

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



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

US crude and product exports declined in March from the previous month by 152 tb/d and 135 tb/d, respectively, to average 2.9 mb/d and 4.9 mb/d. On an annual basis, crude exports were higher by 1.2 m/d, while product exports dropped by 537 tb/d from the previous year.

As a result, **US total net imports in March increased by 516 tb/d m-o-m to average 1.1 mb/d**, yet they remained lower by 1.6 mb/d from the previous year.

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

	Jan 19	Feb 19	Mar 19	Change Mar 19/Feb 19
Crude oil	4,945	3,632	3,870	238
Total products	-3,356	-3,034	-2,756	278
Total crude and products	**1,589**	**598**	**1,114**	**516**

Sources: US EIA and OPEC Secretariat.

In January, Canada, the **top crude supplier to the US**, held a share of 53% of total US crude imports, as its exports to the US rose from the previous month by 278 tb/d. Saudi Arabia came in as the second crude supplier to the US, holding a share of 10% of total crude imports, while Venezuela followed in third place with a share of 8%. Imports from Saudi Arabia dropped from the month before by 131 tb/d.

US crude imports from OPEC Member Countries (MCs) were higher in January than the previous month by 91 tb/d, or 4%, and accounted for 30% of total US crude imports.

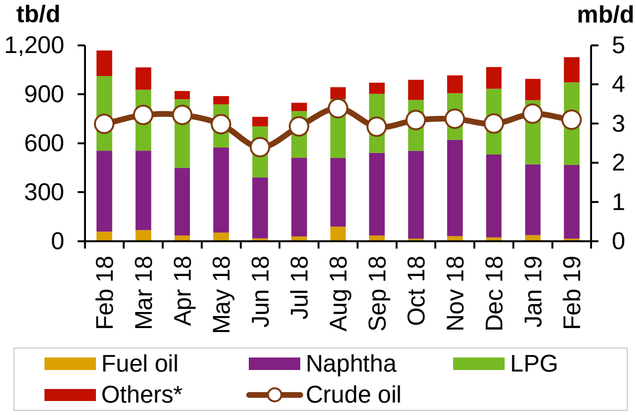
US product imports from OPEC MCs declined by 57 tb/d from a month earlier to stand at 268 tb/d, and had a share of 13% of total products imported by the US.

In terms of the **product supplier share**, Canada and Russia were the first and second suppliers to the US with shares of 31% and 10%, respectively. Imports from both countries were up from a month before by 71 tb/d and 78 tb/d, respectively. The Netherlands came in as third product supplier to the US, holding a share of 5% of total products imported by the US.

Japan

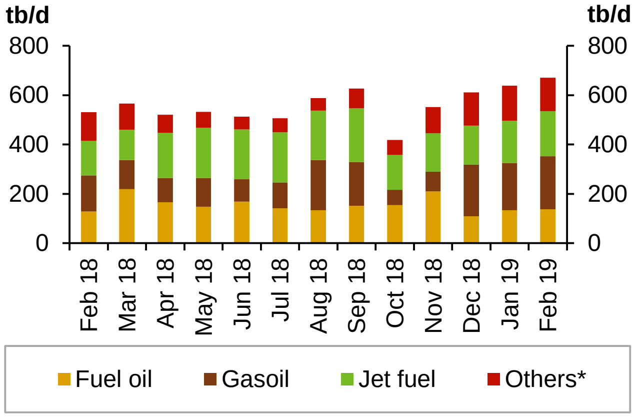
Japan's crude oil imports dropped in February by 157 tb/d, or 5%, m-o-m to average 3.1 mb/d, while they showed an increase of 99 tb/d y-o-y.

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.

Regarding **crude supplier share**, Saudi Arabia remained the top supplier to Japan, holding a share of 37% of total crude imports, despite showing a drop from the previous month by 207 tb/d to average 1.2 mb/d in February. The UAE was the second largest supplier to Japan, with a share of 26% of the country's total crude imports. Kuwait held third place, with a share of 10%, and its crude exports to Japan were higher than in the previous month by 69 tb/d.

Japan's product imports, not including LPG, inched up in February by 21 tb/d m-o-m to average 621 tb/d and **Japan's product exports** were up by 32 tb/d from the previous month to average 671 tb/d.

Accordingly, **Japan's net imports declined in February by 168 tb/d m-o-m to average 3 mb/d**, and showed a y-o-y decline by 131 tb/d.

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

	Dec 18	Jan 19	Feb 19	*Change* Feb 19/Jan 19
Crude oil	2,995	3,250	3,093	-157
Total products	54	-39	-50	-11
Total crude and products	**3,049**	**3,211**	**3,043**	**-168**

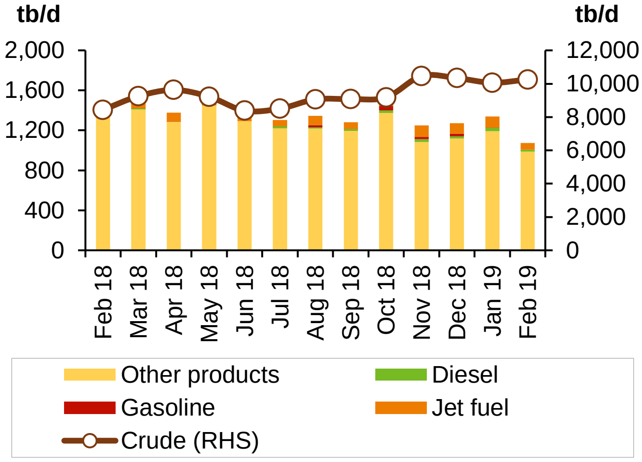
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

China

As in previous months, **China's crude oil imports** maintained high levels in February increasing by 197 tb/d, or 2%, from the previous month and stood at 10.3 mb/d. On an annual basis, China's crude imports soared by a sizeable 1.8 mb/d. Y-t-d, the figures reflect an increase of 1.1 mb/d, or 13%.

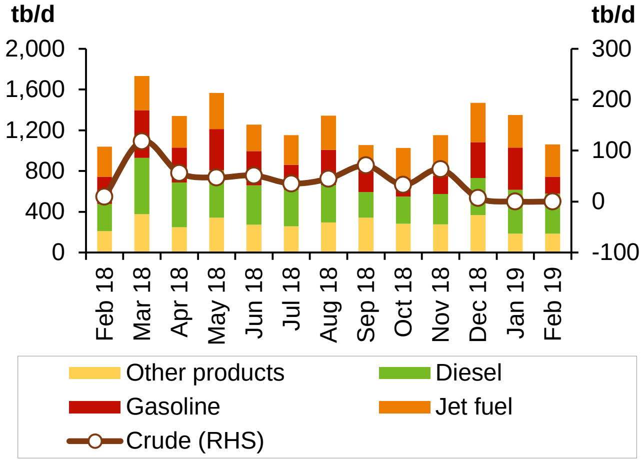
In February, China reported an increase in its crude intake by around 410 tb/d m-o-m. In terms of the suppliers' ranking, Saudi Arabia, Russia and Angola were the **top crude suppliers to China** in February, holding shares of 15.2%, 14.6% and 11.3%, respectively. In February, supplies from both Russia and Angola were down from the previous month by 40 tb/d and 210 tb/d, respectively, while imports from Saudi Arabia rose by 160 tb/d.

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



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

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



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

China's product imports dropped in February by 265 tb/d from the previous month, to average 1.1 mb/d, thereby showing a decline of 376 tb/d from the previous year.

China did not **export** any **crude** for the second month in a row, while its **product exports** decreased from last month by 292 tb/d, to average 1.1 mb/d.

As a result, **China's net oil imports in February increased by 223 t/d, or 2%, from the previous month to average 10.3 mb/d**, and showed an increase of 1.4 mb/d from the previous year.

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

	Dec 18	Jan 19	Feb 19	Change Feb 19/Jan 19
Crude oil	10,331	10,059	10,256	197
Total products	-197	-13	14	27
Total crude and products	**10,134**	**10,046**	**10,270**	**223**

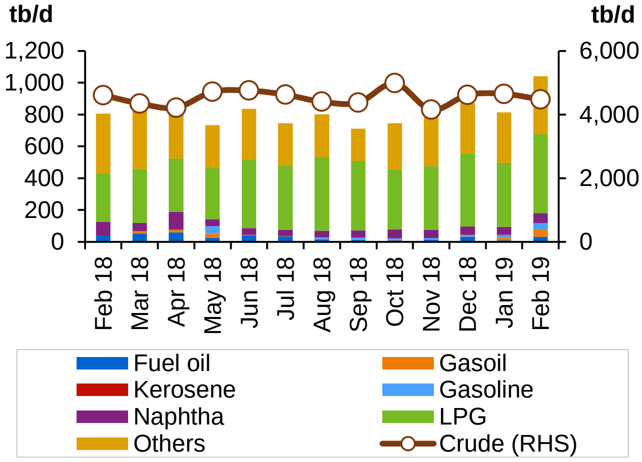
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

In February 2019, **India's crude imports** averaged 4.5 mb/d, down from a month before by 174 tb/d, and below the same month a year earlier by 135 tb/d. Nevertheless, refinery runs showed an increase of around 220 tb/d in February compared to the previous month.

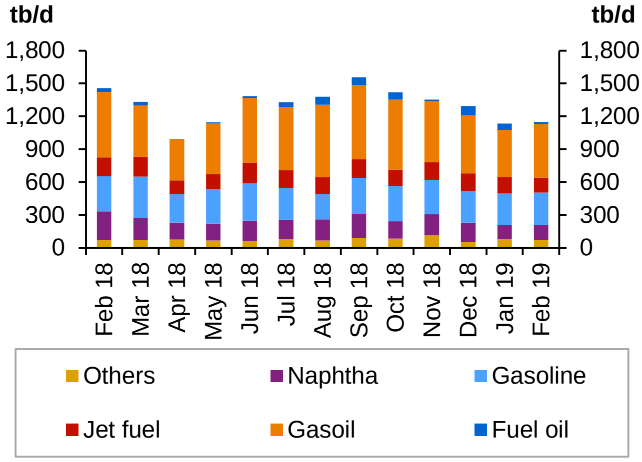
India's product imports in February were up from the previous month to average 1 mb/d, which represents a gain of 228 tb/d, or 28%, m-o-m and 235 tb/d y-o-y. The increase in monthly product imports was seen across all products imported in February but mainly in imports of LPG.

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 exports increased slightly in February by 15 tb/d, or 1%, from the previous month to average 1.1 mb/d, while they were lower by 309 tb/d from a year before. The monthly increase came mainly on the back of higher exports of diesel.

Consequently, **India's net imports in February increased by 39 tb/d to average 4.4 mb/d**, up by 1% from the previous month, and higher by 10% from a year before.

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

	Dec 18	Jan 19	Feb 19	Change Feb 19/Jan 19
Crude oil	4,615	4,648	4,474	-174
Total products	-423	-320	-107	212
Total crude and products	**4,192**	**4,328**	**4,367**	**39**

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 February 2019, **total crude oil exports from the FSU** rose by 209 tb/d, or 3%, m-o-m to average 7.3 mb/d.

In the **Transneft system**, crude exports through Russian pipelines went up in February by 187 tb/d m-o-m, to average 4.3 mb/d. In **Europe**. total shipments from the Black Sea increased by 84 tb/d, or 17%, m-o-m to average 570 tb/d. Baltic Sea exports rose by 89 tb/d m-o-m as shipments from the Ust-Luga port increased by 158 tb/d, although they were offset by declines in the Primorsk port. Druzhba pipeline total shipments were higher by 38 tb/d m-o-m to average 1 mb/d. In **Asia**, Kozmino shipments declined by 19 tb/d, or 2.9%, m-o-m to average 639 tb/d.

Exports through the **Lukoil system** were stable from the previous month in the Barents Sea and the Baltic Sea.

Regarding **Other Routes**, in **Asia**, Russia's Far East total exports increased from the previous month by an average of 16 tb/d to stand at 405 tb/d. Central Asia's total exports stood at 203 tb/d, down by 25 tb/d from the previous month. In **Europe**, Black Sea total exports declined by 20 tb/d m-o-m as a result of lower shipments from Novorossiysk (CPC), which declined by 50 tb/d m-o-m. In the Mediterranean Sea, Baku–Tbilisi–Ceyhan (BTC) supplies rose from the previous month by 39 tb/d, or 6%, to average 700 tb/d.

FSU total product exports increased by 150 tb/d, or 5%, from last month to average 3.4 mb/d. Most of the product exports showed increases from the previous month with the exception of naphtha, which dropped by 71 tb/d m-o-m.

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

			2018	3Q18	4Q18	Jan 19	Feb 19
Transneft system							
	Europe	**Black Sea total**	**544**	**568**	**550**	**486**	**570**
		Novorossiysk port terminal - total	544	568	550	486	570
		of which: Russian oil	383	402	407	314	332
		Others	160	167	143	173	238
		Baltic Sea total	**1,306**	**1,227**	**1,413**	**1,298**	**1,387**
		Primorsk port terminal - total	758	719	803	787	719
		of which: Russian oil	758	719	803	787	719
		Others	0	0	0	0	0
		Ust-Luga port terminal - total	549	508	610	510	668
		of which: Russian oil	375	352	446	325	514
		Others	173	156	164	185	154
		Druzhba pipeline total	**997**	**1,006**	**1,009**	**994**	**1,032**
		of which: Russian oil	965	973	977	962	999
		Others	32	32	32	32	33
	Asia	**Pacific ocean total**	**619**	**632**	**628**	**658**	**639**
		Kozmino port terminal - total	619	632	628	658	639
		China (via ESPO pipeline) total	**577**	**600**	**601**	**637**	**632**
		China Amur	577	600	601	637	632
	Total Russia's crude exports		**4,043**	**4,032**	**4,202**	**4,072**	**4,260**
Lukoil system							
	Europe &	**Barents Sea total**	**135**	**152**	**121**	**162**	**161**
	North America	Varandey offshore platform	135	152	121	162	161
	Europe	**Baltic Sea total**	**7**	**7**	**7**	**6**	**7**
		Kalinigrad port terminal	7	7	7	6	7
Other routes							
	Asia	**Russian Far East total**	**371**	**353**	**395**	**389**	**405**
		Aniva Bay port terminal	119	89	119	115	103
		De Kastri port terminal	252	264	276	274	302
		Central Asia total	**233**	**247**	**222**	**228**	**203**
		Kenkiyak-Alashankou	233	247	222	228	203
	Europe	**Black Sea total**	**1,386**	**1,299**	**1,457**	**1,510**	**1,490**
		Novorossiysk port terminal (CPC)	1,323	1,251	1,392	1,433	1,383
		Supsa port terminal	61	45	65	77	107
		Batumi port terminal	2	3	0	0	0
		Kulevi port terminal	0	0	0	0	0
		Mediterranean Sea total	**693**	**696**	**707**	**661**	**700**
		Baku–Tbilisi–Ceyhan (BTC)	693	696	707	661	700
Russian rail							
		Russian rail	**32**	**30**	**35**	**35**	**48**
		of which: Russian oil	32	30	35	35	48
		Others	0	0	0	0	0
	Total FSU crude exports		**6,901**	**6,816**	**7,145**	**7,064**	**7,273**
Products							
		Gasoline	212	211	208	221	249
		Naphtha	517	505	487	644	573
		Jet	37	42	36	26	30
		Gasoil	1,006	972	920	1,075	1,187
		Fuel oil	930	905	885	956	1,015
		VGO	277	261	250	291	309
	Total FSU product exports		**2,980**	**2,896**	**2,786**	**3,213**	**3,363**
Total FSU oil exports			**9,881**	**9,712**	**9,931**	**10,277**	**10,636**

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

*Preliminary data for February showed that total **OECD commercial oil stocks** fell by 18.3 mb m-o-m to stand at 2,863 mb. This was 7.0 mb higher than the same time one year ago, and around 7.5 mb above the latest five-year average. Compared with the seasonal norm, crude indicated a surplus of 25.0 mb, while product stocks showed a deficit of 17.5 mb. In terms of days of forward cover, OECD commercial stocks rose by 0.4 days m-o-m in February to stand at 60.6 days. This was 0.2 days above the same period in 2018 and 1.1 days below the latest five-year average.*

*Preliminary data for March showed that **US total commercial oil stocks** fell by 15.6 mb m-o-m to stand at 1,229.1 mb. At this level, total US commercial stocks stood at 32.8 mb above the same period a year ago, and 12.6 mb higher than the latest five-year average. Within components, crude and product stocks fell by 3.4 mb and 12.2 mb, m-o-m, respectively.*

OECD

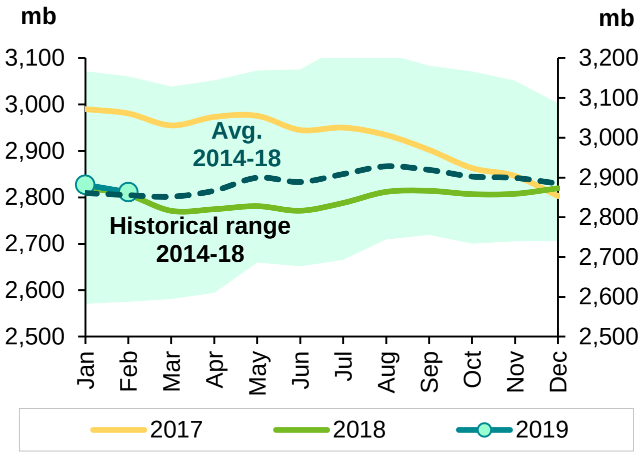
Preliminary data for February showed that **total OECD commercial oil stocks** fell by 18.3 mb m-o-m, reversing the stock build of the last month. At 2,863 mb, total OECD commercial oil stocks were 7.0 mb higher than the same time one year ago, and 7.5 mb above the latest five-year average.

Within components, crude stocks indicated a surplus of 25.0 mb, while product stocks were 17.5 mb below the latest five-year average. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 330 mb since January 2017.

In February, OECD commercial crude stocks rose slightly by 1.1 mb, while product stocks fell by 19.4 mb, m-o-m.

Within the regions, OECD Americas, OECD Europe and OECD Asia Pacific, total commercial oil stocks fell by 7.8 mb, 4.0 mb and 6.6 mb, m-o-m, respectively.

Graph 9 - 1: OECD commercial oil stocks



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

OECD **commercial crude stocks** rose by 1.1 mb m-o-m in February, ending the month at 1,437 mb. This was 22.7 mb above the same time a year ago, and 25.0 mb higher than the latest five-year average. Compared with the previous month, OECD Americas registered a stock build, while OECD Europe and OECD Asia Pacific experienced a stock draw.

By contrast, OECD **total product inventories** fell by 19.4 mb m-o-m in February to stand at 1,426 mb. This was 15.7 mb below the same time a year ago, and 17.5 mb lower than the seasonal norm. Within the OECD regions, OECD Americas, OECD Europe and OECD Asia Pacific total product stocks fell by 11.9 mb, 3.1 mb and 4.4 mb, m-o-m, respectively.

In terms of **days of forward cover**, OECD commercial stocks rose by 0.4 days m-o-m in February to stand at 60.6 days. This was 0.2 days above the same period in 2018 and 1.1 days below the latest five-year average. Within the regions, OECD Americas had 0.8 days of forward cover higher than the historical average, to stand at 60.9 days. OECD Europe's stocks stood at 4.1 days below the latest five-year average

to finish the month at 66.6 days. OECD Asia Pacific indicated a deficit of 2.2 days below the seasonal norm to stand at 48.6 days.

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

	Dec 18	Jan 19	Feb 19	*Change* Feb 19/Jan 19	Feb 18
Crude oil	1,414	1,436	1,437	1.1	1,415
Products	1,459	1,445	1,426	-19.4	1,442
Total	**2,873**	**2,881**	**2,863**	**-18.3**	**2,856**
Days of forward cover	**59.9**	**60.2**	**60.6**	**0.4**	**60.3**

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 7.8 mb m-o-m in February, reversing the build of the last two months. At 1,545 mb, they stood 71.3 mb above a year ago, and 67.4 mb above the latest five-year average. Within components, crude stocks rose by 4.1 mb, while product stocks fell by 11.9 mb, m-o-m.

Commercial crude oil stocks in OECD Americas rose by 4.1 mb m-o-m in February to stand at 810 mb. This was 54.8 mb higher than the same time a year ago, and 50.9 mb above the latest five-year average. The build in crude oil stocks came mainly from lower US crude throughput, which decreased by 1.05 mb/d to average 15.89 mb/d.

In contrast, **total product stocks** in OECD Americas fell by 11.9 mb m-o-m in February to stand at 734 mb. This was 16.5 mb above the same time one year ago, as well as the seasonal norm. Higher consumption in the region, combined with lower output, was behind the product stock draw.

OECD Europe

OECD Europe's total commercial stocks fell by 4.0 mb m-o-m in February, ending the month at 936 mb. This was 45.6 mb lower than the same time a year ago, and 38.5 mb below the latest five-year average. Crude and product stocks fell by 0.9 mb and 3.1 mb, m-o-m, respectively.

OECD Europe's **commercial crude stocks** fell by 0.9 mb m-o-m in February, ending the month at 408 mb. This was 9.6 mb below a year earlier and 2.8 mb lower than the latest five-year average. The drop in crude oil stocks could be attributed to lower crude supply in the region, while lower refinery throughput in the Euro-16 limited a further drop.

OECD Europe's **commercial product stocks** also fell by 3.1 mb m-o-m to end February at 527 mb. This was 36.1 mb below the same time a year ago and 35.7 mb below the seasonal norm. The drop in product stocks could be attributed to higher refined products consumption combined with lower refinery output in the OECD Europe region

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks fell by 6.6 mb m-o-m in February to stand at 383 mb. At this level, they were 18.6 mb lower than a year ago and 21.4 mb below the latest five-year average. Within components, crude and product stocks fell by 2.2 mb and 4.4 mb, m-o-m, respectively.

OECD Asia Pacific's **crude inventories** fell by 2.2 mb m-o-m to end the month of February at 219 mb, which was 22.5 mb below one year ago and 23.1 mb lower than the seasonal norm.

OECD Asia Pacific's **total product inventories** also fell by 4.4 mb m-o-m to end February at 164 mb, standing 3.9 mb above the same time a year ago, and 1.7 mb above the seasonal norm.

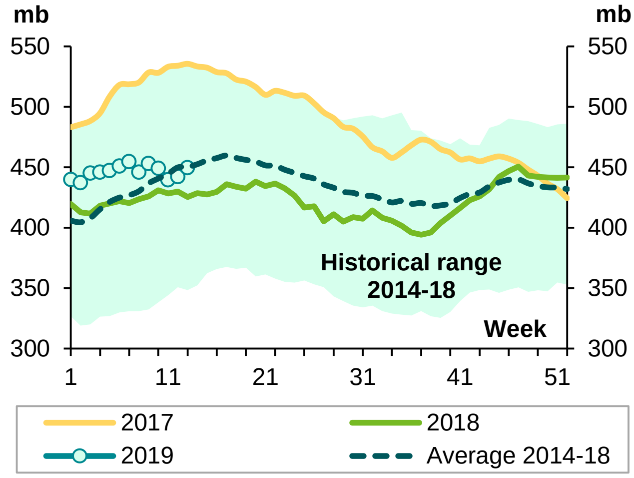
US

Preliminary data for March showed that **US total commercial oil stocks** fell by 15.6 mb m-o-m to stand at 1,229.1 mb. At this level, total US commercial stocks stood at 32.8 mb, or 2.7%, above the same period a year ago, and 12.6 mb, or 1.0%, higher than the latest five-year average. Within components, crude and product stocks fell by 3.4 mb and 12.2 mb, m-o-m, respectively.

US **commercial crude stocks** fell in March to stand at 449.5 mb, which was 26.1 mb, or 6.2%, above last year at the same time, but 3.5 mb, or 0.8%, below the latest five-year average. This drop came from higher crude throughput, which increased by 130 tb/d to average around 16.3 mb/d. In March, stocks in Cushing, Oklahoma, fell by 0.4 mb to end the month at 47.1 mb.

Total product stocks also fell by 12.2 mb m-o-m in March to stand at 779.6 mb, which is 6.8 mb, or 0.9%, above the level seen at the same time in 2018, and 16.1 mb, or 2.1%, above the seasonal average. Within products, with the exception of residual fuel oil and other unfinished product stocks, all other inventories witnessed stock draws.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

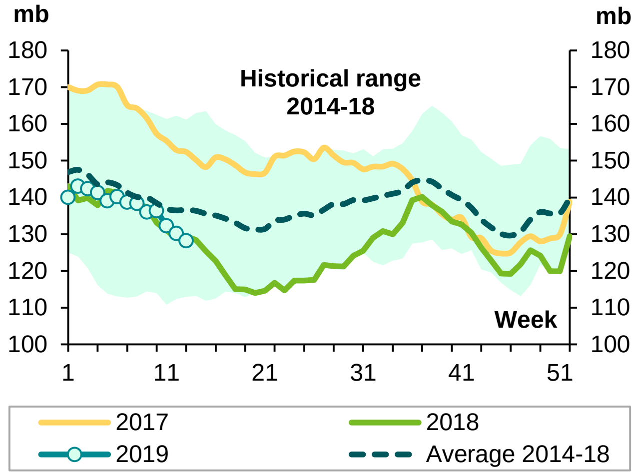
Gasoline stocks fell by 13.9 mb m-o-m in March to stand at 236.8 mb. At this level, they were 2.8 mb, or 1.2%, lower than levels at the same time last year, but 1.3 mb, or 0.6%, higher than the seasonal norm. This monthly drop came on the back of higher gasoline demand, which increased by around 330 tb/d to average 9.2 mb/d. Relatively higher gasoline output limited a further drop in gasoline stocks.

Distillate stocks also fell by 7.8 mb m-o-m in March, to end the month at 128.2 mb. At this level, they stood at 2.2 mb, or 1.7%, below the same period a year ago, and 9.1 mb, or 6.6%, below the latest five-year average. The stock draw could be attributed to higher distillate demand, which increased by around 200 tb/d to average 4.3 mb/d.

Jet fuel oil stocks were down by 1.7 mb m-o-m to stand at 40.3 mb in March. At this level, they are 0.1 mb lower than a year ago at the same time, and 0.1 mb below the latest five-year average.

By contrast, **residual fuel stocks** rose by 1.4 mb m-o-m, ending March at 29.4 mb, which is 5.6 mb, or 16.1%, below the same time a year ago and 8.9 mb, or 23.3%, lower than the latest five-year average.

Graph 9 - 3: US weekly distillate inventories



Sources: US EIA and OPEC Secretariat.

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

	Jan 19	Feb 19	Mar 19	Change Mar 19/Feb 19	Mar 18
Crude oil	**448.8**	**452.9**	**449.5**	**-3.4**	**423.4**
Gasoline	261.3	250.7	236.8	-13.9	239.6
Distillate fuel	140.1	136.0	128.2	-7.8	130.4
Residual fuel oil	29.4	28.0	29.4	1.4	35.0
Jet fuel	41.2	42.0	40.3	-1.7	40.4
Total products	**821.7**	**791.8**	**779.6**	**-12.2**	**772.8**
Total	**1,270.5**	**1,244.7**	**1,229.1**	**-15.6**	**1,196.3**
SPR	**649.1**	**649.1**	**649.1**	**0.0**	**665.5**

Sources: US EIA and OPEC Secretariat.

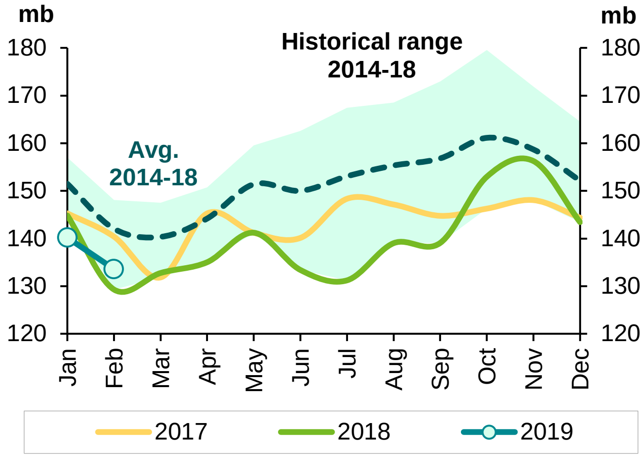
Japan

In **Japan, total commercial oil stocks** fell by 6.6 mb m-o-m in February for the third consecutive month. At 133.6 mb, they were 4.3 mb, or 3.3%, above one year ago, but 8.5 mb, or 6.0%, below the latest five-year average. Within components, crude and product stocks fell by 2.2 mb and 4.4 mb, m-o-m, respectively.

Japanese **commercial crude oil stocks** fell in February to stand at 77.3 mb. This was 1.4 mb, or 1.7%, below the same period a year ago, and 7.1 mb, or 8.4%, below the seasonal norm. The drop was driven by lower crude imports, which decreased by 157 tb/d, or 4.8%. Lower refinery throughput limited a further drop in crude oil stocks.

Japan's **total product inventories** also fell m-o-m by 4.4 mb to end February at 56.3 mb. This was 5.7 mb, or 11.2%, higher than the same month last year, but 1.4 mb, or 2.4%, below the seasonal norm. With the exception of naphtha, all products witnessed a stock draw.

Graph 9 - 4: Japan's commercial oil stocks



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

Gasoline stocks fell by 0.5 mb m-o-m to stand at 10.2 mb in February. At this level, they were 0.2 mb, or 2.0%, lower than a year ago, and they are 1.1 mb, or 9.7%, lower than the latest five-year average. The drop was mainly driven by lower gasoline output, which declined by 8.4% from the previous month. However, lower domestic sales, which decreased by 3.1%, limited a further drop in gasoline stocks.

Distillate stocks also fell by 3.4 mb m-o-m to stand at 23.2 mb in February. This was 2.3 mb, or 11.1%, above the same time a year ago, but 0.8 mb, or 3.2%, below the seasonal average. Within distillate components, jet fuel, kerosene and gasoil fell m-o-m by 5.0%, 19.1% and 8.7%, respectively. The drop in jet fuel stocks was driven by higher domestic sales, while the decline in output was behind the fall in gasoil and kerosene stocks.

Total residual fuel oil stocks also fell by 0.6 mb m-o-m in February to stand at 13.4 mb. This was 1.7 mb, or 14.4%, above the same period a year ago, and 0.6 mb, or 4.5%, higher than the latest five-year average. Within fuel oil components, fuel oil A stocks rose by 3.4%, while fuel oil B.C stocks fell by 8.7%, m-o-m. The build in fuel oil A was driven by lower domestic sales, while the drop in fuel oil B.C stocks could be attributed to lower output.

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

	Dec 18	Jan 19	Feb 19	Change Feb 19/Jan 19	Feb 18
Crude oil	**79.4**	**79.5**	**77.3**	**-2.2**	**78.7**
Gasoline	9.7	10.7	10.2	-0.5	10.4
Naphtha	10.6	9.4	9.5	0.1	7.6
Middle distillates	29.5	26.6	23.2	-3.4	20.9
Residual fuel oil	14.2	14.0	13.4	-0.6	11.7
Total products	**64.0**	**60.7**	**56.3**	**-4.4**	**50.6**
Total**	**143.4**	**140.2**	**133.6**	**-6.6**	**129.3**

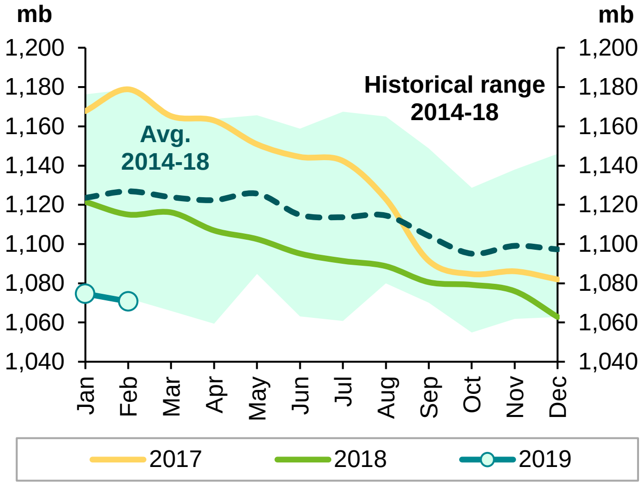
*Note: * At the end of the month.*
*** Includes crude oil and main products only.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

EU plus Norway

Preliminary data for February showed that **total European commercial oil stocks** fell by 4.0 mb m-o-m to stand at 1,070.7 mb. This was 44.3 mb, or 4.0%, below the same time a year ago, and 52.2 mb, or 4.6%, lower than the latest five-year average. Within components, crude and product stocks fell by 0.9 mb and 3.1 mb, m-o-m, respectively.

European **crude inventories** fell in February to stand at 466.0 mb. This was 8.4 mb, or 1.8%, higher than the same period a year ago, but 13.7 mb, or 2.8%, higher than the latest five-year average. The draw in crude oil stocks came despite lower refinery throughput in EU countries.

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



Sources: Argus, Euroilstock and OPEC Secretariat.

European **total product stocks** also fell by 3.1 mb m-o-m, ending February at 604.8 mb. This was 35.9 mb, or 5.6%, lower than the same time a year ago, and 38.5 mb, or 6.0%, lower than the seasonal norm. Within products, distillates witnessed a stock build, while gasoline, residual fuel and naphtha experienced a stock draw.

Gasoline stocks fell by 2.7 mb m-o-m in February to stand at 115.7 mb. At this level, they are 11.1 mb, or 8.8%, lower than the same time a year ago, and 6.8 mb, or 5.5%, below the latest five-year average.

Residual fuel stocks also fell by 1.0 mb m-o-m to end February at 62.1 mb. At this level, they remained 6.6 mb, or 9.5%, lower than the same time one year ago, and 11.4 mb, or 15.3%, lower than the seasonal norm.

Naphtha stocks also decreased by 0.9 mb m-o-m to end February at 30.8 mb. Naphtha stocks stood at 0.4 mb, or 1.3%, higher than last year's level at the same time, and were about 4.8 mb, or 17.9%, higher than the latest five-year average. The draw in the three product categories could be attributed to lower refinery output.

In contrast, **distillate stocks** rose by 1.6 mb m-o-m in February to stand at 396.2 mb. At this level, they were 18.6 mb, or 4.5%, below the last year at the same time, while they stood at 25.1 mb, or 6.0%, below the seasonal norm. This build could be driven by lower domestic consumption in the region.

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

	Dec 18	Jan 19	Feb 19	*Change* Feb 19/Jan 19	Feb 18
Crude oil	**459.8**	**466.8**	**466.0**	**-0.9**	**474.4**
Gasoline	115.0	118.4	115.7	-2.7	126.8
Naphtha	29.9	31.7	30.8	-0.9	30.4
Middle distillates	394.4	394.6	396.2	1.6	414.8
Fuel oils	63.6	63.2	62.1	-1.0	68.7
Total products	**603.0**	**607.9**	**604.8**	**-3.1**	**640.7**
Total	**1,062.8**	**1,074.7**	**1,070.7**	**-4.0**	**1,115.0**

Sources: Argus, Euroilstock and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

Singapore

At the end of February, **total product stocks in Singapore** rose by 2.7 mb m-o-m for the fourth consecutive month to stand at 50.4 mb, the highest level since August 2017. This was 6.0 mb, or 13.5%, above the same period a year ago. Light distillates, middle distillates and fuel oil stocks witnessed stock builds in February.

Most of the gains came from **residual fuel stocks**, which increased by 1.3 mb m-o-m, ending February at 21.5 mb. At this level, they were 1.0 mb, or 4.4%, below the same period a year ago. This build was mainly driven by lower sales of marine fuels in Singapore.

Light and middle distillate stocks also rose in February by 1.0 mb and 0.4 mb, m-o-m, respectively. At 16.7 mb, light distillate stocks were 3.7 mb, or 28.5%, above the same time a year ago. Middle distillate stocks stood at 12.2 mb at the end of February, indicating a surplus of 3.3 mb, or 37.1%, compared with the same time a year ago.

ARA

Total product stocks in ARA fell by 2.8 mb m-o-m in February, reversing the build of the last two months. At this level, they were 5.5 mb, or 12.1%, below the same time a year ago. With the exception of gasoil, all other product stocks witnessed builds.

Gasoline and naphtha stocks fell by 2.1 mb and 0.3 mb, m-o-m, in February to stand at 9.6 mb and 1.9 mb, respectively. Gasoline remained 1.7 mb, or 15.0%, below last year's level. Naphtha stocks were 0.9 mb, or 32.1%, below the same time last year.

Jet fuel stocks also fell by 0.4 mb m-o-m in February, ending the month at 4.8 mb. They stood at 0.3 mb, or 6.7%, above a year ago at the same time.

In contrast, **gasoil stocks** rose by 0.2 mb m-o-m in February to stand at 17.9 mb. This was 3.9 mb, or 17.9%, below last year's level at the same time.

Balance of Supply and Demand

Demand for OPEC crude in 2018 *stood at 31.4 mb/d, 1.5 mb/d lower than the 2017 level and around 0.2 mb/d lower than the last monthly report. 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 are 0.1 mb/d and 0.2 mb/d higher than the demand for OPEC crude. OPEC crude production averaged 32.0 mb/d in the 3Q18, around 0.3 mb/d higher than the demand for OPEC crude. In the 4Q18, OPEC crude production stood at 32.1 mb/d, around 1.5 mb/d higher than the demand for OPEC crude.*

Demand for OPEC crude in 2019 *is forecast to decline by 1.1 mb/d to average 30.3 mb/d, 0.2 mb/d less than the last assessment. In 1Q19, OPEC crude production averaged 30.5 mb/d, about 0.4 mb/d higher than the demand for OPEC crude.*

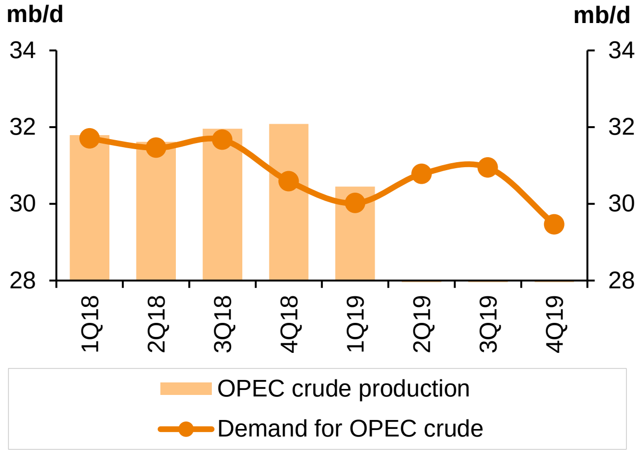
Balance of supply and demand in 2018

Demand for OPEC crude for 2018 was revised down by 0.2 mb/d from the previous report to stand at 31.4 mb/d, 1.5 mb/d lower than 2017 level.

Compared with the last monthly report, 1Q18 was revised down by 0.1 mb/d, while 2Q18 and 3Q18 were revised down by 0.2 mb/d each. 4Q18 was also revised lower by 0.3 mb/d.

When compared to the same quarter in 2017, 1Q18 was 0.1 mb/d higher, while the second and third quarters were 1.2 mb/d and 2.2 mb/d lower. The fourth quarter has fallen by 2.8 mb/d.

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



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

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 are 0.1 mb/d and 0.2 mb/d lower than the demand for OPEC crude. OPEC crude production averaged 32.0 mb/d in the 3Q18, around 0.3 mb/d higher than the demand for OPEC crude. In the 4Q18, OPEC crude production stood at 32.1 mb/d, around 1.5 mb/d higher than the demand for OPEC crude.

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

	2017	1Q18	2Q18	3Q18	4Q18	2018	*Change* 2018/17
(a) World oil demand	**97.29**	**97.80**	**98.02**	**99.35**	**99.60**	**98.70**	**1.41**
Non-OPEC supply	59.47	61.18	61.59	62.70	63.95	62.37	2.90
OPEC NGLs and non-conventionals	4.94	4.92	4.96	4.98	5.06	4.98	0.04
(b) Total non-OPEC supply and OPEC NGLs	**64.40**	**66.10**	**66.56**	**67.68**	**69.01**	**67.35**	**2.94**
Difference (a-b)	**32.88**	**31.70**	**31.46**	**31.67**	**30.59**	**31.35**	**-1.53**
OPEC crude oil production	**32.01**	**31.79**	**31.61**	**31.96**	**32.09**	**31.86**	**-0.15**
Balance	**-0.87**	**0.09**	**0.15**	**0.29**	**1.50**	**0.51**	**1.38**

Notes: 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 for 2019 was revised down by 0.2 mb/d from the previous report to stand at 30.3 mb/d, 1.1 mb/d lower than the 2018 level.

Compared with the last monthly report, both 1Q19 and 4Q19 were revised down by 0.4 mb/d each, while 2Q19 was revised up by 0.1 mb/d. The 3Q18 remained unchanged from the last month.

When compared to the same quarter in 2018, both second and third quarters are forecast to fall by 0.7 mb/d each, while the first and fourth quarters are expected to fall by 1.7 mb/d and 1.1 mb/d, respectively. In 1Q19, OPEC crude production averaged 30.5 mb/d, about 0.4 mb/d higher than the demand for OPEC crude.

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

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18
(a) World oil demand	**98.70**	**99.02**	**99.18**	**100.59**	**100.83**	**99.91**	**1.21**
Non-OPEC supply	62.37	63.97	63.35	64.56	66.26	64.54	2.18
OPEC NGLs and non-conventionals	4.98	5.04	5.05	5.08	5.11	5.07	0.09
(b) Total non-OPEC supply and OPEC NGLs	**67.35**	**69.00**	**68.40**	**69.65**	**71.37**	**69.61**	**2.27**
Difference (a-b)	**31.35**	**30.02**	**30.78**	**30.94**	**29.46**	**30.30**	**-1.05**
OPEC crude oil production	**31.86**	**30.45**					
Balance	**0.51**	**0.44**					

*Notes: * 2019 = Forecast.*
Totals may not add up due to independent rounding.
Non-OPEC supply includes Qatar.
Source: OPEC Secretariat.

Appendix

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

	2015	2016	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
World demand													
OECD	46.52	46.97	47.42	47.69	47.24	48.16	48.14	47.81	47.94	47.40	48.40	48.34	48.02
Americas	24.59	24.87	25.06	25.20	25.40	25.78	25.74	25.53	25.43	25.63	26.06	26.00	25.78
Europe	13.83	13.99	14.30	13.95	14.19	14.68	14.32	14.29	13.97	14.16	14.67	14.30	14.28
Asia Pacific	8.10	8.11	8.06	8.54	7.65	7.70	8.08	7.99	8.53	7.61	7.67	8.05	7.96
DCs	30.89	31.51	32.13	32.44	32.60	32.86	32.56	32.61	32.98	33.15	33.42	33.12	33.17
FSU	4.58	4.63	4.70	4.66	4.65	4.94	5.01	4.82	4.75	4.74	5.03	5.11	4.91
Other Europe	0.67	0.70	0.72	0.73	0.69	0.73	0.82	0.74	0.75	0.71	0.75	0.84	0.76
China	11.49	11.80	12.32	12.28	12.84	12.65	13.07	12.71	12.61	13.18	12.99	13.42	13.05
(a) Total world demand	**94.16**	**95.61**	**97.29**	**97.80**	**98.02**	**99.35**	**99.60**	**98.70**	**99.02**	**99.18**	**100.59**	**100.83**	**99.91**
Non-OPEC supply													
OECD	25.36	24.85	25.71	27.27	27.53	28.65	29.46	28.24	29.48	29.09	30.15	31.25	30.00
Americas	21.08	20.58	21.49	22.93	23.37	24.52	25.13	23.99	25.15	24.96	25.91	26.76	25.70
Europe	3.82	3.85	3.82	3.94	3.79	3.70	3.89	3.83	3.88	3.67	3.76	3.99	3.83
Asia Pacific	0.46	0.42	0.39	0.41	0.38	0.42	0.44	0.41	0.45	0.46	0.48	0.51	0.47
DCs	13.78	13.53	13.39	13.45	13.53	13.39	13.50	13.47	13.48	13.66	13.88	14.04	13.77
FSU	13.69	13.85	14.05	14.10	14.14	14.33	14.57	14.29	14.56	14.23	14.19	14.58	14.39
Other Europe	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
China	4.40	4.09	3.98	3.99	4.03	3.97	4.05	4.01	4.05	3.97	3.96	3.98	3.99
Processing gains	2.17	2.19	2.21	2.25	2.25	2.25	2.25	2.25	2.28	2.28	2.28	2.28	2.28
Total non-OPEC supply	**59.54**	**58.66**	**59.47**	**61.18**	**61.59**	**62.70**	**63.95**	**62.37**	**63.97**	**63.35**	**64.56**	**66.26**	**64.54**
OPEC NGLs + non-conventional oils	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) Total non-OPEC supply and OPEC NGLs	**64.23**	**63.47**	**64.40**	**66.10**	**66.56**	**67.68**	**69.01**	**67.35**	**69.00**	**68.40**	**69.65**	**71.37**	**69.61**
OPEC crude oil production (secondary sources)	31.24	32.21	32.01	31.79	31.61	31.96	32.09	31.86	30.45				
Total supply	95.47	95.68	96.42	97.89	98.17	99.64	101.10	99.21	99.46				
Balance (stock change and miscellaneous)	1.31	0.07	-0.87	0.09	0.15	0.29	1.50	0.51	0.44				
OECD closing stock levels, *mb*													
Commercial	2,989	3,002	2,853	2,816	2,816	2,866	2,873	2,873					
SPR	1,588	1,600	1,568	1,575	1,570	1,565	1,547	1,547					
Total	**4,577**	**4,602**	**4,421**	**4,391**	**4,386**	**4,432**	**4,420**	**4,420**					
Oil-on-water	1,017	1,102	1,025	1,036	1,014	1,041	1,058	1,058					
Days of forward consumption in OECD, *days*													
Commercial onland stocks	64	63	60	60	58	60	60	60					
SPR	34	34	33	33	33	33	32	32					
Total	**97**	**97**	**92**	**93**	**91**	**92**	**92**	**92**					
Memo items													
(a) - (b)	**29.93**	**32.14**	**32.88**	**31.70**	**31.46**	**31.67**	**30.59**	**31.35**	**30.02**	**30.78**	**30.94**	**29.46**	**30.30**

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
World demand													
OECD	-	-	-	-	-	-	-0.08	-0.02	-	-0.03	-0.03	-0.12	-0.05
Americas	-	-	-	-	-	-	-	-	-	-0.01	-0.01	-0.01	-0.01
Europe	-	-	-	-	-	-	-	-	-	-0.02	-0.02	-0.02	-0.02
Asia Pacific	-	-	-	-	-	-	-0.08	-0.02	-	-0.01	-0.01	-0.09	-0.03
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	**-**	**-**	**-**	**-**	**-**	**-**	**-0.08**	**-0.02**	**-**	**-0.03**	**-0.03**	**-0.12**	**-0.05**
Non-OPEC supply													
OECD	-0.01	-	-	0.03	0.07	0.08	0.18	0.09	0.44	-0.03	0.01	0.15	0.14
Americas	-	-	-	-	0.01	0.01	0.08	0.02	0.34	-0.08	-0.05	0.08	0.07
Europe	-0.01	-0.01	-0.01	0.03	0.06	0.07	0.10	0.06	0.10	0.05	0.05	0.05	0.06
Asia Pacific	-	-	-	-	-	-	-	-	-	-	0.01	0.01	-
DCs	-0.01	0.01	0.01	0.05	0.05	0.05	0.06	0.05	-0.14	0.03	0.07	-0.01	-0.01
FSU	-	-	-	-	-	-	-	-	0.01	-0.13	-0.18	0.08	-0.05
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	0.01	0.05	0.03	0.03	0.03	0.03	0.07	0.03	0.03	0.03	0.04
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-0.01	-	0.02	0.12	0.15	0.15	0.27	0.17	0.38	-0.10	-0.07	0.25	0.11
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-0.01**	**-**	**0.02**	**0.12**	**0.15**	**0.15**	**0.27**	**0.17**	**0.38**	**-0.10**	**-0.07**	**0.25**	**0.11**
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-				
Total supply	-0.01	-	0.02	0.12	0.15	0.15	0.27	0.17	-				
Balance (stock change and miscellaneous)	-0.01	-	0.02	0.12	0.15	0.15	0.35	0.19	-				
OECD closing stock levels (mb)													
Commercial	-	-	-	-	-	-2	15	15					
SPR	-	-	-	-	-	-	2	2					
Total	-	-	-	-	-	-2	17	17					
Oil-on-water	-	-	-	-	-	-	-4	-4					
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-	-					
SPR	-	-	-	-	-	-	-	-					
Total	-	-	-	-	-	-	-	-					
Memo items													
(a) - (b)	**0.01**	**-**	**-0.02**	**-0.12**	**-0.15**	**-0.15**	**-0.35**	**-0.19**	**-0.37**	**0.06**	**0.04**	**-0.36**	**-0.16**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the March 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

	2016	2017	2018	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18
Closing stock levels, mb												
OECD onland commercial	**3,002**	**2,853**	**2,873**	**3,002**	**3,031**	**3,019**	**2,969**	**2,853**	**2,816**	**2,816**	**2,866**	**2,873**
Americas	1,598	1,498	1,544	1,598	1,606	1,596	1,571	1,498	1,468	1,471	1,541	1,544
Europe	989	943	929	989	1,022	999	965	943	970	958	936	929
Asia Pacific	415	412	400	415	404	424	433	412	378	388	390	400
OECD SPR	**1,600**	**1,568**	**1,547**	**1,600**	**1,600**	**1,588**	**1,578**	**1,568**	**1,575**	**1,570**	**1,565**	**1,547**
Americas	697	665	651	697	694	681	676	665	667	662	662	651
Europe	481	480	477	481	484	484	479	480	485	486	481	477
Asia Pacific	421	423	420	421	422	423	423	423	422	422	422	420
OECD total	**4,602**	**4,421**	**4,420**	**4,602**	**4,630**	**4,608**	**4,547**	**4,421**	**4,391**	**4,386**	**4,432**	**4,420**
Oil-on-water	**1,102**	**1,025**	**1,058**	**1,102**	**1,043**	**1,052**	**998**	**1,025**	**1,036**	**1,014**	**1,041**	**1,058**
Days of forward consumption in OECD, days												
OECD onland commercial	**63**	**60**	**60**	**64**	**64**	**63**	**62**	**60**	**60**	**58**	**60**	**60**
Americas	64	59	60	65	64	63	62	59	58	57	60	61
Europe	69	66	65	72	72	68	67	68	68	65	65	67
Asia Pacific	51	52	50	49	53	54	52	48	49	50	48	47
OECD SPR	**34**	**33**	**33**	**34**	**34**	**33**	**33**	**33**	**33**	**33**	**32**	**32**
Americas	28	26	26	28	28	27	27	26	26	26	26	26
Europe	34	34	34	35	34	33	33	34	34	33	34	34
Asia Pacific	52	53	53	50	55	54	51	50	55	55	52	49
OECD total	**97**	**92**	**93**	**98**	**98**	**97**	**95**	**93**	**93**	**91**	**92**	**92**

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 18/17	1Q19	2Q19	3Q19	4Q19	2019	Change 19/18
US	14.1	13.6	14.4	17.2	17.7	16.7	2.3	17.9	18.1	18.6	19.5	18.5	1.9
Canada	4.4	4.5	4.9	5.3	5.5	5.2	0.4	5.3	4.9	5.3	5.4	5.2	0.0
Mexico	2.6	2.5	2.2	2.1	2.0	2.1	-0.2	1.9	1.9	1.9	1.9	1.9	-0.1
OECD Americas	**21.1**	**20.6**	**21.5**	**24.5**	**25.1**	**24.0**	**2.5**	**25.1**	**25.0**	**25.9**	**26.8**	**25.7**	**1.7**
Norway	1.9	2.0	2.0	1.8	1.9	1.8	-0.1	1.8	1.7	1.8	1.9	1.8	-0.1
UK	1.0	1.0	1.0	1.1	1.2	1.1	0.1	1.3	1.2	1.1	1.2	1.2	0.1
Denmark	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.1	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	**3.8**	**3.8**	**3.8**	**3.7**	**3.9**	**3.8**	**0.0**	**3.9**	**3.7**	**3.8**	**4.0**	**3.8**	**0.0**
Australia	0.4	0.3	0.3	0.3	0.4	0.3	0.0	0.4	0.4	0.4	0.4	0.4	0.1
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.0**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**
Total OECD	**25.4**	**24.9**	**25.7**	**28.6**	**29.5**	**28.2**	**2.5**	**29.5**	**29.1**	**30.1**	**31.3**	**30.0**	**1.8**
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	0.9	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	0.9	0.8	0.8	0.8	0.8	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	**3.7**	**3.7**	**3.6**	**3.5**	**3.5**	**3.6**	**-0.1**	**3.5**	**3.4**	**3.5**	**3.5**	**3.5**	**-0.1**
Argentina	0.7	0.7	0.6	0.6	0.7	0.6	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	3.3	3.6	3.7	3.8	3.6	0.3
Colombia	1.0	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	**5.2**	**5.1**	**5.2**	**5.1**	**5.3**	**5.2**	**0.0**	**5.2**	**5.4**	**5.6**	**5.7**	**5.5**	**0.3**
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Qatar	2.0	2.0	1.9	2.0	2.0	2.0	0.1	2.0	2.0	2.0	2.0	2.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	**3.3**	**3.3**	**3.1**	**3.2**	**3.2**	**3.2**	**0.1**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**	**0.0**
Cameroon	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.6	0.7	0.7	0.7	0.0
Ghana	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.3	0.2	0.0
Africa other	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Africa	**1.6**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**0.0**	**1.5**	**1.6**	**1.6**	**1.6**	**1.6**	**0.1**
Total DCs	**13.8**	**13.5**	**13.4**	**13.4**	**13.5**	**13.5**	**0.1**	**13.5**	**13.7**	**13.9**	**14.0**	**13.8**	**0.3**
FSU	**13.7**	**13.9**	**14.1**	**14.3**	**14.6**	**14.3**	**0.2**	**14.6**	**14.2**	**14.2**	**14.6**	**14.4**	**0.1**
Russia	10.8	11.1	11.2	11.4	11.6	11.3	0.2	11.5	11.4	11.6	11.6	11.5	0.2
Kazakhstan	1.6	1.6	1.7	1.8	1.8	1.8	0.1	1.9	1.7	1.5	1.9	1.7	-0.1
Azerbaijan	0.9	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.4	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
China	**4.4**	**4.1**	**4.0**	**4.0**	**4.1**	**4.0**	**0.0**	**4.1**	**4.0**	**4.0**	**4.0**	**4.0**	**0.0**
Non-OPEC production	**57.4**	**56.5**	**57.3**	**60.5**	**61.7**	**60.1**	**2.9**	**61.7**	**61.1**	**62.3**	**64.0**	**62.3**	**2.1**
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.3	2.3	2.3	2.3	2.3	0.0
Non-OPEC supply	**59.5**	**58.7**	**59.5**	**62.7**	**64.0**	**62.4**	**2.9**	**64.0**	**63.3**	**64.6**	**66.3**	**64.5**	**2.2**
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
OPEC (NGL+NCF)	**4.7**	**4.8**	**4.9**	**5.0**	**5.1**	**5.0**	**0.0**	**5.0**	**5.1**	**5.1**	**5.1**	**5.1**	**0.1**
Non-OPEC & OPEC (NGL+NCF)	**64.2**	**63.5**	**64.4**	**67.7**	**69.0**	**67.3**	**2.9**	**69.0**	**68.4**	**69.6**	**71.4**	**69.6**	**2.3**

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 2018/17	2Q18	3Q18	4Q18	1Q19	Feb 19	Mar 19	Change Mar/Feb
US	509	875	1,031	*157*	1,037	1,051	1,073	1,045	1,048	1,023	*-25*
Canada	131	207	191	*-15*	106	208	177	185	230	151	*-79*
Mexico	26	17	27	*9*	25	30	32	26	24	30	*6*
OECD Americas	665	1,099	1,249	*150*	1,168	1,289	1,282	1,257	1,302	1,204	*-98*
Norway	17	15	15	*0*	14	14	17	15	16	17	*1*
UK	9	9	7	*-2*	6	8	8	13	14	14	*0*
OECD Europe	96	92	85	*-7*	82	84	90	92	94	95	*1*
OECD Asia Pacific	7	15	21	*5*	21	22	23	24	25	22	*-3*
Total OECD	**768**	**1,206**	**1,355**	***149***	**1,271**	**1,395**	**1,396**	**1,372**	**1,421**	**1,321**	***-100***
Other Asia*	204	208	222	*14*	216	228	224	232	236	233	*-3*
Latin America	111	112	123	*11*	120	126	123	128	123	129	*6*
Middle East	75	68	65	*-4*	67	64	62	66	66	67	*1*
Africa	43	38	45	*7*	45	50	50	54	55	56	*1*
Total DCs	**432**	**426**	**454**	***28***	**447**	**468**	**460**	**481**	**480**	**485**	***5***
Non-OPEC rig count	**1,200**	**1,632**	**1,809**	***177***	**1,718**	**1,863**	**1,855**	**1,853**	**1,901**	**1,806**	***-95***
Algeria	54	54	50	*-4*	52	48	47	47	44	52	*8*
Angola	6	3	4	*1*	3	4	5	5	5	5	*0*
Congo	2	2	3	*1*	3	3	4	4	4	4	*0*
Ecuador	4	6	8	*2*	6	9	11	9	8	7	*-1*
Equatorial Guinea**	1	1	1	*0*	1	1	1	1	1	1	*0*
Gabon	1	1	3	*3*	4	3	4	7	7	7	*0*
Iran**	143	156	157	*2*	157	157	157	157	157	157	*0*
Iraq	43	49	59	*10*	60	58	61	65	67	67	*0*
Kuwait	44	54	51	*-3*	54	50	45	44	44	41	*-3*
Libya	1	1	5	*4*	1	7	9	11	9	15	*6*
Nigeria	6	9	13	*5*	13	15	12	14	14	14	*0*
Saudi Arabia	125	118	117	*-1*	112	119	123	118	116	115	*-1*
UAE	51	52	55	*4*	54	56	57	58	58	57	*-1*
Venezuela	58	49	32	*-17*	30	27	26	25	27	22	*-5*
OPEC rig count	**537**	**553**	**558**	***5***	**550**	**557**	**563**	**565**	**561**	**564**	***3***
World rig count***	**1,737**	**2,185**	**2,368**	***183***	**2,268**	**2,419**	**2,418**	**2,418**	**2,462**	**2,370**	***-92***
of which:											
Oil	1,313	1,678	1,886	*209*	1,803	1,945	1,934	1,936	1,980	1,899	*-81*
Gas	370	466	448	*-17*	432	440	453	455	457	443	*-14*
Others	54	42	33	*-9*	34	34	31	26	25	28	*3*

*Note: * Other Asia includes Indonesia.*
*** Estimated data when Baker Hughes Incorporated did not reported the data.*
**** Data excludes China and FSU.*
Totals may not add up due to independent rounding.

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

Glossary of Terms

Abbreviations

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

Acronyms

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

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

OPEC Basket average price *US$/b*

up 2.54 in March	March 2019	66.37
	February 2019	63.83
	Year-to-date	**62.90**

March OPEC crude production *mb/d, according to secondary sources*

down 0.53 in March	March 2019	30.02
	February 2019	30.56

Economic growth rate *per cent*

	World	OECD	US	Japan	Euro-zone	China	India
2018	3.6	2.3	2.9	0.8	1.8	6.6	7.3
2019	3.2	1.7	2.4	0.6	1.2	6.1	7.1

Supply and demand *mb/d*

2018		**18/17**	**2019**		**19/18**
World demand	98.7	1.4	World demand	99.9	1.2
Non-OPEC supply	62.4	2.9	Non-OPEC supply	64.5	2.2
OPEC NGLs	5.0	0.0	OPEC NGLs	5.1	0.1
Difference	**31.4**	**–1.5**	**Difference**	**30.3**	**–1.1**

OECD commercial stocks *mb*

	Dec 18	Jan 19	Feb 19	Feb 19/Jan 19	Feb 18
Crude oil	1,414	1,436	1,437	1.1	1,415
Products	1,459	1,445	1,426	–19.4	1,442
Total	**2,873**	**2,881**	**2,863**	**–18.3**	**2,856**
Days of forward cover	59.9	60.2	60.6	0.4	60.3

Next report to be issued on 14 May 2019.