Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket rose 2.0% in April to average $51.34/b. Crude oil futures recovered on the high conformity by OPEC and non-OPEC with voluntary production adjustments, and expectations for an extension to year-end; however, upward potential was seen as limited by a resurgence in oil output, particularly in the US. ICE Brent increased 2.4% to $53.82/b and NYMEX WTI rose 2.9% to $51.12/b. The Brent-WTI spread narrowed slightly to $2.70/b, but still kept the arbitrage open for US crude exports. Money manager net long positions rose 30% from end of March until the middle of April, but dropped by the one of largest weekly falls on record in the last week of April.

World Economy

The forecast for global economic growth remains at 3.3% in 2017, compared to growth in 2016 of 3.0%.The recent growth dynamic in the global economy has been confirmed with the exception of the US, which is still expected to rebound in the remainder of the year. While US growth remains at 2.2%, Euro-zone growth in 2017 was revised to 1.7% from 1.6%. Japan's 2017 growth forecast remains at 1.2%. China's 2017 growth was also revised higher to 6.5% from 6.3%, while India's forecast remains at 7.0%. Russia's and Brazil's 2017 growth forecasts remain unchanged at 1.2% and 0.5%, respectively.

World Oil Demand

World oil demand in 2016 was revised higher by 65 tb/d to reflect the most recent data. Total world oil demand growth for 2016 stood at 1.44 mb/d to average 95.12 mb/d. For 2017, oil demand growth is anticipated to be around 1.27 mb/d unchanged from the previous report with total oil demand expected at 96.38 mb/d. Non-OECD will continue to lead growth at 1.04 mb/d, while OECD continues to grow albeit at a reduced pace of 0.23 mb/d.

World Oil Supply

Non-OPEC oil supply in 2016 was revised marginally lower due to a downward adjustment in Russian oil supply in 4Q16 to now show a contraction of 0.71 mb/d to average 57.3 mb/d. The forecast for 2017 was revised up by 0.37 mb/d to show growth of 0.95 mb/d, following upward adjustments in all quarters, mostly in the US, to average 58.3 mb/d. The revisions were driven by actual production data for February, as well as higher expectations for the remainder of the year. OPEC NGLs and non-conventional oil production in 2017 was revised up by 40 tb/d to average 6.22 mb/d, representing growth of 0.17 mb/d. In April, OPEC production decreased by 18 tb/d, according to secondary sources, to average 31.73 mb/d.

Product Markets and Refining Operations

Product markets strengthened in April in the Atlantic basin, supported by stronger domestic demand amid higher export opportunities. Lower inflows and heavy refinery maintenance also resulted in a tighter market. The main support came from the gasoline, with US domestic demand recovering in April from the slump suffered during the first quarter amid the shift to summer grades and higher exports to Latin America. Meanwhile, Asia margins continued healthy on the back of firm regional demand at a time of peak maintenance in the region.

Tanker Market

Average tanker spot freight rates fell 0.4% from the month before, despite a stronger VLCC market. VLCC spot freight rates improved, rising by 20% on average, as a result of enhanced activity in the market and a tightening in tonnage supply. Nevertheless, the decline in average dirty spot freight rates was driven by the drop in Suezmax and Aframax freight rates, which ended the month down 8% and 10%, respectively, as tonnage demand for both classes was limited, while tonnage oversupply was dominant.

Stock Movements

Total OECD commercial oil stocks fell in March to stand at 3,013 mb. At this level, OECD commercial oil stocks are 276 mb above the latest five-year average. Crude and products stocks indicated a surplus of around 187 mb and 89 mb above the seasonal norm, respectively. In terms of forward cover, OECD commercial stocks stood at 64.8 days, some 4.8 days higher than the latest five-year average.

Balance of Supply and Demand

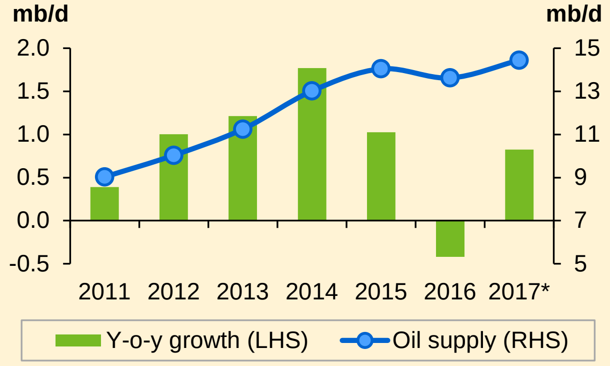
Demand for OPEC crude in 2016 now stands at 31.8 mb/d, which is 2.0 mb/d higher than in the previous year. In 2017, demand for OPEC crude is projected at 31.9 mb/d, around 0.2 mb/d higher than last year.

Feature Article

Non-OPEC oil supply development

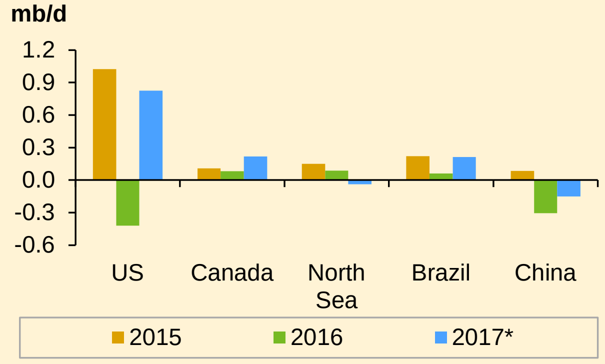
Low oil prices in 2016 led to a reduction of around 23% in global E&P investments compared to the previous year, together with the deferral of several upstream projects. Particularly in North America, E&P spending fell by around 38%, as observed in the 48% y-o-y decline in US rig counts, as well as lower well completions. Non-OPEC oil supply decreased sharply in 2016, contracting by 0.7 mb/d from the high growth of 2.3 mb/d in 2014 and 1.5 mb/d in 2015. Non-OPEC supply in 2016 saw contractions in OECD Americas (0.5 mb/d), China (0.3 mb/d), and Latin America (0.1 mb/d), while an increase was seen in the FSU (0.2 mb/d), driven by robust output from Russia. The oil supply contraction in OECD Americas in 2016 was mainly due to US onshore crude oil output which includes tight oil, along with annual declines in Mexico and outages in the Canadian oil sands. US oil production showed a y-o-y decline of 0.4 mb/d in 2016, but this trend has reversed so far in 2017, primarily due to higher oil prices together with cost cuts (***Graph 1***).

Graph 1: US liquids supply and y-o-y growth, mb/d



Note: 2017 = Forecast.*
Source: OPEC Secretariat.

Graph 2: Supply changes in selected countries



Note: 2017 = Forecast.*
Source: OPEC Secretariat.

The non-OPEC supply performance in 2017 will depend on many factors, including the world economy; higher spending by oil companies, particularly in North America; new economic and energy policies in major economies, especially the US; and the timely implementation of oil projects in Canada and Brazil, as well as oil price developments and to some extent geopolitics.

US oil and gas companies have already stepped up activities in 2017 as they start to increase their spending amid a recovery in oil prices. As a result, US crude oil production surpassed 9 mb/d in February 2017, about 0.5 mb/d higher than the low seen in September 2016. For 2017, total US liquids production is forecast to increase by 0.82 mb/d with crude oil contributing 0.6 mb/d. In the first two months of this year, tight crude output increased by 0.10 mb/d from December 2016, while NGLs output rose by 0.26 mb/d over the same period. With the pick-up seen in drilling activities, as well as increased cash flows, US tight crude output is expected to rise rapidly and increase by 0.6 mb/d in 2017.

Overall, non-OPEC supply in 2017 is expected to increase by 0.95 mb/d. In addition to the growth in the US, higher oil production is expected in Canada (0.22 mb/d) and Brazil (0.21 mb/d), while Mexico and China are forecast to see the largest contractions (***Graph 2***).

A large part of the excess supply overhang contained in floating storage has been reduced and the improvement in the world economy should help support oil demand. However, continued rebalancing in the oil market by year-end will require the collective efforts of all oil producers to increase market stability, not only for the benefit of the individual countries, but also for the general prosperity of the world economy.

Table of Contents

Crude Oil Price Movements

The OPEC Reference Basket (ORB) rebounded more than 2% in April to a monthly average of $51.34/b. Most of the uplift occurred earlier in the month on increasing expectations that voluntary OPEC and non-OPEC production adjustments will be extended into the second half of this year. Higher OPEC and non-OPEC conformity adjustments, coupled with limited seasonal stock draws due to higher refinery runs and lower US imports, have further supported prices. Year-to-date (Y-t-d), the ORB value was 61.6% or $19.75 higher at $51.81/b.

Month-on-month (m-o-m), oil futures on both sides of the Atlantic recovered, but their upward potential was still limited by US oil output resurgence. Pressure continue to come from bearish, unbalanced oil market conditions due to increasing US crude oil supplies and lower-than-expected inventory draws. ICE Brent ended $1.28/b higher in April, an increase of 2.4% m-o-m, to stand at $53.82/b, while NYMEX WTI increased by $1.45 or 2.9% m-o-m, to stand at $51.12/b. Y-t-d, ICE Brent is $17.16 or 46.1% higher at $54.40/b, while NYMEX WTI surged $16.08 or 45.2% up to $51.63/b.

The ICE Brent/NYMEX WTI spread narrowed slightly as seasonal US crude oil stock draws and export opportunities underpinned the US benchmark. In the meantime, Brent was undermined by increased supplies in the Atlantic Basin. In April, the spread narrowed to $2.70/b.

Net positions in ICE Brent and NYMEX WTI rose 30% from end of March until the middle of April, but hedge funds cut their combined net long positions , creating one of the largest weekly falls on record to 614 mb in the week to 25 April.

Amid increasing supplies of Atlantic Basin light sweet crudes, the time spreads in both Brent and Dubai showed the widest contango since November. In the US, crude oil inventory draws and export opportunities supported a narrowing of the contango for the second month in a row.

Sweet/sour differentials sustained their narrowing trend in all markets on less, while light sweet crudes formed a glut in the Atlantic Basin.

OPEC Reference Basket

The **ORB** ended the month slightly more than 2% higher on a monthly average basis, supported by a short-lived oil complex rally earlier in the month on increasing expectations that OPEC and non-OPEC voluntary production adjustments will be extended into the second half of this year.

On the other hand, raising US oil production kept pressure on the prices for entire month, holding them within a narrow band.

Meanwhile, limited seasonal stock draws due to higher refinery runs and lower US imports, have further supported prices. Brief supply disruptions from Libya, Nigeria and the North Sea also buoyed oil prices during this period.

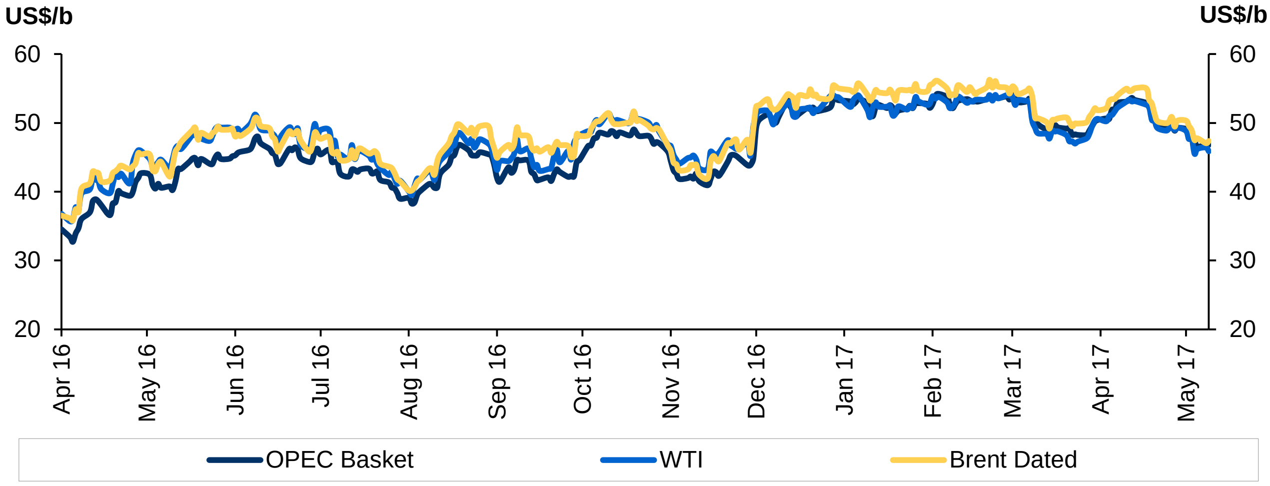
Table 1 - 1: OPEC Reference Basket and selected crudes, US$/b

	Mar 17	Apr 17	Change Apr/Mar	Change %	Year-to-date 2016	Year-to-date 2017
Basket	**50.32**	**51.34**	**1.02**	**2.0**	**32.06**	**51.81**
Arab Light	50.68	51.64	0.96	1.9	32.15	52.02
Basrah Light	49.82	50.75	0.93	1.9	30.59	51.18
Bonny Light	51.91	53.02	1.11	2.1	35.80	53.75
Es Sider	50.00	51.04	1.04	2.1	34.92	51.85
Girassol	51.89	52.68	0.79	1.5	35.61	53.51
Iran Heavy	50.27	51.12	0.85	1.7	30.45	51.57
Kuwait Export	49.87	50.81	0.94	1.9	30.14	51.21
Qatar Marine	50.89	52.39	1.50	2.9	32.84	52.66
Merey	44.14	45.66	1.52	3.4	24.29	45.86
Murban	52.96	54.32	1.36	2.6	37.19	54.84
Oriente	46.83	48.70	1.87	4.0	28.92	48.50
Rabi Light	50.63	51.71	1.08	2.1	34.91	52.33
Sahara Blend	51.40	51.84	0.44	0.9	36.70	53.26
Other Crudes						
Dated Brent	51.60	52.59	0.99	1.9	35.92	53.42
Dubai	51.21	52.31	1.10	2.1	32.73	52.86
Isthmus	52.26	53.81	1.55	3.0	33.17	54.23
LLS	51.36	53.14	1.78	3.5	37.06	53.36
Mars	47.88	49.69	1.81	3.8	31.94	49.61
Minas	48.35	47.95	-0.40	-0.8	33.42	49.52
Urals	49.94	51.55	1.61	3.2	34.32	52.09
WTI	49.58	51.06	1.48	3.0	35.24	51.58
Differentials						
Brent/WTI	2.02	1.53	-0.49	-	0.69	1.84
Brent/LLS	0.24	-0.55	-0.79	-	-1.14	0.06
Brent/Dubai	0.39	0.28	-0.11	-	3.19	0.55

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

On the monthly basis, the ORB values rose by $1.02 to settle at $51.34/b in April, up by 2.0% from March. Compared with the previous year, the ORB value was about 61.6% higher, or $19.75, at $51.81/b.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

ORB component values improved, along with relevant crude oil benchmarks and monthly changes in their respective official selling price (OSP) differentials. In April, crude oil physical benchmarks, namely Dated Brent, Dubai and WTI spot prices, rose by 99¢, $1.10 and $1.48, respectively.

Despite plentiful Atlantic Basin supply pressure on price differentials for light sweet crudes from West and North Africa, basket components they improved alongside crude Brent benchmark outright prices. Saharan Blend, Es Sider, Girassol, Bonny Light and Gabon Rabi values increased by $1 on average, or 2%, to $52.06/b. Physical crude differentials for these grades have been under pressure for several months as supply surged. Gains in regional crude oil benchmarks uplifted OSP offsets and healthy global sour markets continued to support the value of multiple-region destination grades, such as Arab Light, Basrah Light, Iran Heavy and Kuwait Export. On average, these grades increased in value by 92¢ or 1.8% to $51.08/b, for the month. Middle Eastern spot components Murban and Qatar Marine saw their values improve by $1.43 or 2.8% to $53.36/b. The Latin American ORB components, Venezuelan Merey and Ecuador's Oriente also edged up to $45.66/b and $48.70/b, gaining $1.52 or 3.4% and $1.87 or 4.0% respectively.

On 10 April, the ORB stood at $47.31/b.

The oil futures market

Oil futures on both sides of the Atlantic recovered, m-o-m, but their upward potential is still limited by a resurgence of shale and other oil output. Pressure continues to come from a bearish unbalance in oil market conditions due to increasing US crude oil supplies and lower-than-expected inventory draws. Prices are continuing to come under pressure from expectations of higher supply and a slower-than-expected market rebalancing. Moreover, this pressure has kept oil prices range bound since the beginning of the year. Nevertheless, oil futures found support from OPEC and non-OPEC members' high production conformity this month, amid expectations that the output adjustment could be extended beyond the middle of the year. Further reports of a potential drop in some OPEC and non-OPEC crude exports over May, temporary production turbulence mainly in Libya, Nigeria and the North Sea, and geopolitical tensions in the Middle East and Asia Pacific provided support. Bullish managed money activity earlier in the month facilitated the lift in oil prices. This was demonstrated by an increase in net long managed money positions during this period.

ICE Brent ended $1.28 higher in April, an increase of 2.4%, to stand at $53.82/b on a monthly average basis. **NYMEX WTI** increased by $1.45 or 2.9% to stand at $51.12/b. Y-t-d, ICE Brent was $17.16 or 46.1% higher at $54.40/b, while NYMEX WTI surged $16.08 or 45.2% higher to $51.63/b.

Crude oil futures prices improved in the second week of May. On 10 May, ICE Brent stood at $50.22/b and NYMEX WTI at $47.33/b.

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

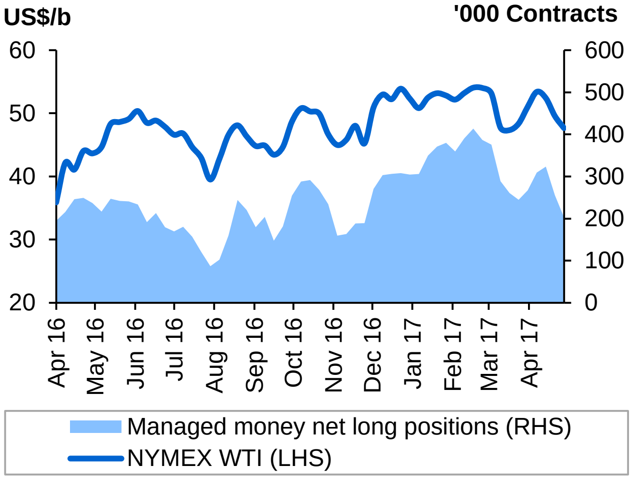
			Change		*Year-to-date*	
	Mar 17	Apr 17	Apr/Mar	%	2016	2017
NYMEX WTI	49.67	51.12	1.45	2.9	35.55	51.63
ICE Brent	52.54	53.82	1.28	2.4	37.24	54.40
Transatlantic spread	**2.86**	**2.70**	**-0.16**	**-0.47**	**1.69**	**2.77**

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

In the period ending 18 April, **managed money activities** increased bets on higher oil prices. Managed money net length in oil futures and options in NYMEX WTI surged by 78,750 contracts or 32.2% from the 28 March week level to 323,364 contracts in the week to 18 April. Similarly, in ICE Brent futures and options, managed money raised net long positions by a hefty 99,657 contracts or 30.4% to 358,433 lots. Total futures and options **open interest volume** in the two exchanges was unchanged at 5.86 million contracts, but the net length positions' share increased to 86.2% from 79.1%.

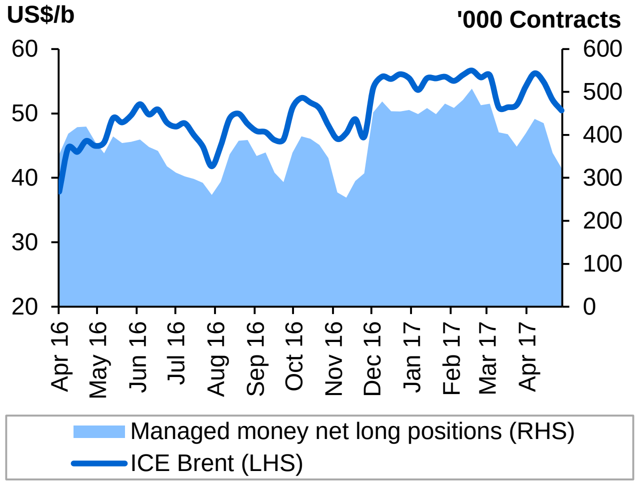
In the week to 25 April, hedge funds lost faith in the prospect of an accelerated rebalancing in the oil market. Hence, they cut their combined net long positions in two main futures and options contracts linked to Brent and WTI by 137 mb to 614 mb. The reduction was one of the largest weekly falls on record, and reverses a cumulative increase of 140 mb over the previous three weeks, according to data from regulators and exchanges. Fund managers are now much less bullish about the outlook for crude oil prices than they were back at the beginning of the year. Bullish long positions outnumber bearish short positions by a ratio of 4:1, down from 7:1 at the beginning of the year and a peak of more than 10:1 in late February.

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



Sources: CFTC and CME Group.

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



Source: IntercontinentalExchange.

The daily average **traded volume** for NYMEX WTI contracts decreased 31,434 lots or 2.7% to 1,117,121 contracts, while that of ICE Brent was 29,912 contracts higher, up 3.2% at 963,538 lots. The daily aggregate traded volume for both crude oil futures markets slipped 1,522 contracts to 2.08 million futures contracts, or roughly 2.1 bb/d of crude oil. The total traded volume NYMEX WTI futures in April was significantly lower at 21.23 million contracts, down about 20%. Similarly, ICE Bent futures volumes decreased 14.7% to 18.31 million contracts.

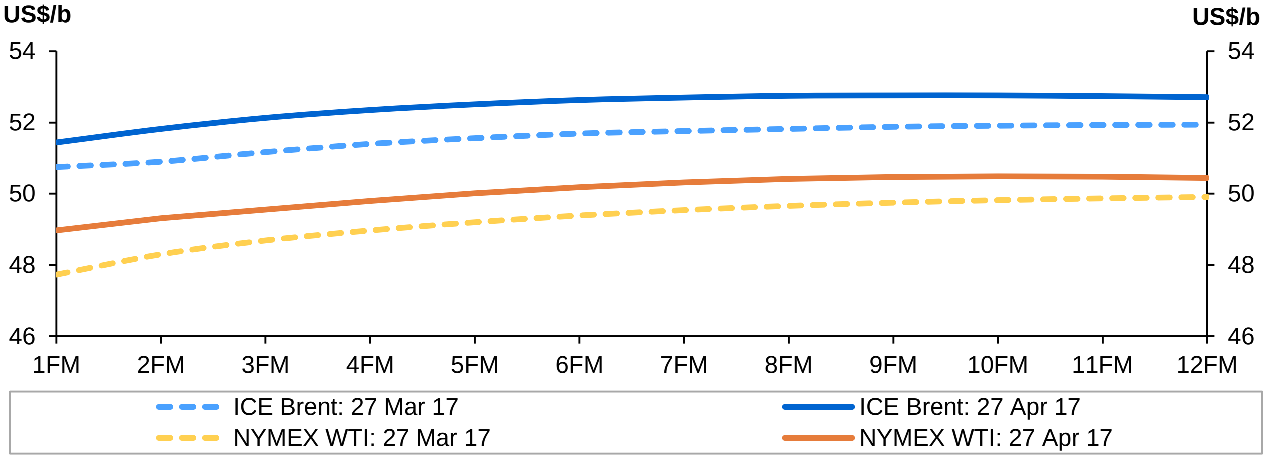
The futures market structure

Amid increasing supplies of **Atlantic Basin light sweet crudes**, pressure in physical crudes became more obvious in April as time spreads in both Brent and Dubai showed the widest contango since November. This supply glut is simultaneously pressuring both markets due to open arbitrage to Asia on the back of a significant narrowing of the Brent-Dubai spread. Part of the weakness in the Atlantic Basin stems from seasonally low demand because of refinery turnarounds. Some 1.5 mb/d of refining capacity is likely to be offline for maintenance around Europe, the Mediterranean and Russia. Record amounts of North Sea crudes have moved east in April.

The **Dubai** contango widened to its highest point since November, despite limited sour crude supplies to an Asian enclave due to OPEC voluntary production adjustments. Crude oil sales from storage tanks around Singapore continued to rise and further weighed on demand for prompt crudes, hence worsening prompt prices relative to forward cargoes. Some refiners have also shunned Middle East grades and turned to Brent-linked supplies, as Brent's premium to Dubai narrowed below $1/b. North Asian refiners are expected to complete maintenance by July, which will increase their crude demand, but they have already bought long-haul barrels from Europe and the United States. In the US oil market, somewhat limited crude oil inventory draws and export opportunities supported the narrowing of the contango for the second month in a row. Meanwhile, further down the futures curve, when the oil market is expected to start balancing, backwardation remained noticeable for all crudes, albeit further out in 1Q18 compared with the previous month.

Dubai's M1/M3 discount increased to 70¢/b from of 25¢/b in the previous month. The **North Sea Brent** M1/M3 discount increased to 80¢/b on average, from 50¢/b in the previous month. In the US, WTI contango eased 25¢ as WTI's M1/M3 discount narrowed to 73¢/b.

Graph 1 - 4: NYMEX WTI and ICE Brent forward curves



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

The **ICE Brent/NYMEX WTI spread** narrowed slightly as US crude stock draws and export prospects underpinned the US benchmark. In the meantime, its European counterpart Brent was undermined by increased supplies of light sweet crudes in the Atlantic Basin. The first-month ICE Brent/NYMEX WTI $2.86/b spread narrowed to $2.70/b, down 16¢/b. This spread level will continue to support arbitrage economics out of the US, but to a lesser extent compared with 1Q17, particularly to Asia, where several US cargoes were sold to China and elsewhere.

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

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	27 Mar 17	47.73	48.30	48.69	49.39	49.91	2.18
	27 Apr 17	48.97	49.31	49.56	50.18	50.44	1.47
	Change	**1.24**	**1.01**	**0.87**	**0.79**	**0.53**	**-0.71**
ICE Brent	27 Mar 17	50.75	50.90	51.17	51.69	51.94	1.19
	27 Apr 17	51.44	51.82	52.13	52.63	52.71	1.27
	Change	**0.69**	**0.92**	**0.96**	**0.94**	**0.77**	**0.08**

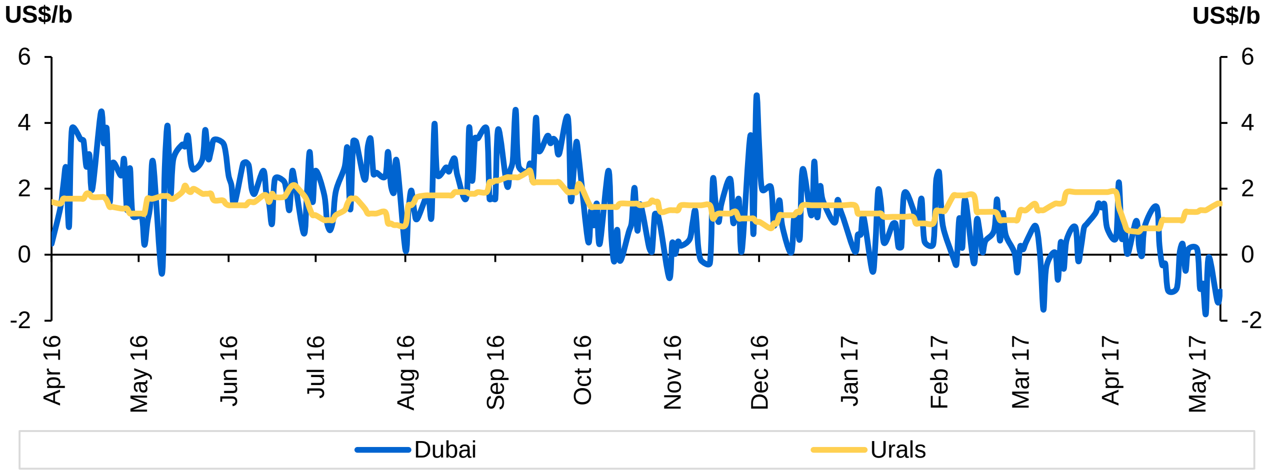
Note: FM = future month.
Sources: CME Group and Intercontinental Exchange.

The light sweet/medium sour crude spread

Sweet/sour differentials sustained their narrowing trend in all markets on the less availability of sour grades, while an increase in US output and a glut in the Atlantic Basin led to an oversupply of light sweet crudes.

In **Europe**, the light sweet North Sea Brent premium to Urals medium sour crude decreased by 62¢ to $1.04/b, its narrowest since September 2105. Urals crude was supported by healthier demand, less supply to European markets and active arbitrage to Asia, with a record low Brent-Dubai spread and rising interest from Indian refiners. Russian crude exports from Baltic Sea ports in May were set to fall to 6.7 million tonnes from 7.5 million tonnes in April, according to the preliminary loading schedule. On the other hand, in addition to a regional increase in supplies, North Sea Brent crude was under pressure from an influx of US supply, which countered strong export flows. Almost 20 mb of North Sea crude, mostly Forties and Ekofisk, were en route to Asia, likely making May a record month for flows east. Imports have also picked up. Some 13 mb of US crude and condensate, equivalent to around 113 tb/d, have arrived in Northwest Europe (NWE) so far this year, compared with around 8.4 mb, or 73 tb/d, in the same period one year ago.

Graph 1 - 5: Brent Dated vs. Sour grades (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, the Tapis premium over Dubai shrank further by 24¢ on a monthly average basis to $2.30/b, under pressure from an ample supply of light sweet crude available to refiners. The Dated Brent/Dubai spread also narrowed 11¢, to 24¢/b, the narrowest point since 1H15. Asia Pacific light sweet crudes, such as Tapis, continued to be pressured by a narrowing Brent-Dubai spread, which encouraged the arbitrage flow of Bent related light sweet crudes to the region, this time from all regions. This month also witnessed arbitrage volume movements from the Americas to Asia. Estimated crude shipments from Europe to Asia hit an all-time high of 55.4 mb in April, with flows in the first four months up 9% from the same period a year ago. The flows will continue, as voluntary production adjustments are expected to be extended for another six months, thus allowing Asian refiners to increase purchases of low-sulphur oil from Europe and Africa. The region was also kept well-supplied from storage releases as the contango market structure has disappeared.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars narrowed slightly to $3.45/b, its narrowest in two and a half years. Sour crudes continue to firm on increased demand for export and USGC refinery demand due to less availability of Mideast Gulf sour crudes as they return from seasonal maintenance. High USGC sour crude prices helped draw in alternative Latin American cargoes, which are also going to the Asia Pacific, as reduced Mideast Gulf sour crude exports boosted interest in alternatives.

Commodity Markets

In April, energy commodity prices generally increased, led by higher oil prices, on the expected extension of OPEC and non-OPEC cooperation, while coal prices advanced due to supply disruptions caused by cyclone Debbie in Australia. Meanwhile, among non-energy commodities, agricultural prices were led down by lower prices of vegetable oils, while metals prices were weakened by the restart of production in mines previously affected by strikes and a slower pace of expansion in the manufacturing sectors of China and the US. Average gold prices advanced during the month following soft economic activity in 1Q17 in the US, which translated into lower real interest rate expectations in the country.

Trends in selected commodity markets

During the month, the pace of improvement in manufacturing conditions slowed. The JP Morgan Global Manufacturing Purchasing Managers' Index (PMI) for April declined to 52.8 from its readings of 53.0 − a 69-month peak – in the previous two months. The deceleration in manufacturing prospects was mainly observed in China and the US. This translated into the weakening of metals prices. Furthermore, the declining momentum has coincided with diminishing expectations of a swift passage of growth enhancing reforms by the new US administration after the difficulties experienced moving forward healthcare reform in March. At the same time, with a slower-than-expected performance of the US economy in 1Q17 and the impact of geopolitical tensions, expectations for real interest rates declined, thereby supporting gold prices, while weakening the US dollar.

Agricultural commodities were generally weak for the second consecutive month, led by sharp drops in food prices, but especially in vegetable oils, due to continuing oversupply of oilseeds. The US Department of Agriculture made upward revisions to its forecast for world-ending stocks of wheat, corn, soybeans and rice for the current marketing year. Brazilian output expectations for corn and soybeans were revised up by the National Food Supply Company (Conab) of that country, and are expected to increase by around 38% and 15%, respectively, from the previous year. Wheat prices increased at the end of the month due to frost in the US central Great Plains. Sugar prices dropped sharply also due to lower expected import requirements from India and stable expected output in Brazil despite lower sugarcane output, as the industry takes advantage of favourable sugar prices and exchange rate.

Metals prices generally dropped on the perceived deceleration in the pace of expansion of manufacturing in China, where manufacturing PMI decreased to 50.3 in April versus 51.2 the previous month. Furthermore, previously present post-US election impulses have faded as scarce details about the potential infrastructure boost by the new US administration are now known. Meanwhile, copper prices were also weakened by receding fears of supply disruptions in the two largest copper mines in Chile and Indonesia, while strikes in Peruvian copper mines were ended during the month. Nickel prices dropped sharply on the anticipation that mine operations could restart in the mines closed by the environment ministry after a vote of no-confirmation in the country's congress. Aluminium prices, on the contrary, increased as production is expected to decline in China due to government efforts to reduce pollution. Meanwhile, iron ore dropped sharply following a drop in steel prices. World steel output was reportedly up 5.7% y-o-y and up by 1.8% y-o-y in China in March, according to World Steel Association.

In the group of **energy commodities**, oil prices advanced mainly in the first half of the month on the prospect of extending the OPEC-non OPEC Declaration of Cooperation. Natural gas prices advanced on average in the US, but weakened in the middle of the month as milder temperatures at the beginning of spring were translating into higher-than-average increases in underground storage. Meanwhile in Europe, EU-28 inventories reported by Gas Infrastructure Europe increased slightly to 29.9% of capacity at the end of April vs. 29.4% the previous month. Australian thermal coal prices advanced due to shutdowns in the areas affected by cyclone Debbie in Australia.

Table 2 - 1: Commodity price data

Commodity	Unit	Monthly averages			% Change	Year-to-date	
		Feb 17	Mar 17	Apr 17	Apr 17/Mar 17	2016	2017
Energy*		**69.4**	**65.3**	**67.1**	**2.7**	**45.0**	**67.7**
Coal, Australia	US$/mt	80.4	80.6	84.6	5.1	50.9	82.3
Crude oil, average	US$/b	54.4	50.9	52.2	2.5	34.7	52.8
Natural gas, US	US$/mbtu	2.8	2.9	3.1	7.2	2.0	3.0
Non-energy*		**86.6**	**85.0**	**83.0**	**-2.4**	**76.9**	**85.0**
Agriculture*		**91.4**	**89.2**	**88.0**	**-1.4**	**85.5**	**90.0**
Food*		**95.1**	**92.7**	**90.8**	**-2.1**	**87.7**	**93.5**
Soybean meal	US$/mt	383.0	368.0	352.0	-4.3	334.8	371.3
Soybean oil	US$/mt	835.0	812.0	790.0	-2.7	760.5	827.3
Soybeans	US$/mt	427.0	404.0	389.0	-3.7	376.0	411.3
Grains*		**79.1**	**78.4**	**79.8**	**1.8**	**84.7**	**79.1**
Maize	US$/mt	162.9	159.0	156.4	-1.6	161.1	159.6
Wheat, US, HRW	US$/mt	155.2	154.3	166.1	7.6	189.7	157.2
Sugar, world	US$/kg	0.4	0.4	0.4	-9.0	0.3	0.4
Base metal*		**81.8**	**81.4**	**80.1**	**-1.6**	**64.5**	**80.6**
Aluminum	US$/mt	1,860.8	1,901.5	1,921.2	1.0	1,528.7	1,868.7
Copper	US$/mt	5,940.9	5,824.6	5,683.9	-2.4	4,724.2	5,801.0
Iron ore, cfr spot	US$/dmtu	89.4	87.7	70.2	-19.9	51.5	81.9
Lead	US$/mt	2,311.5	2,280.9	2,220.6	-2.6	1,736.6	2,263.9
Nickel	US$/mt	10,643.3	10,204.7	9,609.3	-5.8	8,600.5	10,107.2
Tin	US$/mt	19,446.5	19,875.2	19,910.3	0.2	15,837.1	19,980.9
Zinc	US$/mt	2,845.6	2,776.9	2,614.9	-5.8	1,721.8	2,738.0
Precious metals*		**97.3**	**96.7**	**99.4**	**2.7**	**92.2**	**96.7**
Gold	US$/toz	1,234.2	1,231.4	1,266.9	2.9	1,196.2	1,231.2
Silver	US$/toz	17.9	17.6	18.0	2.3	15.3	17.6

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

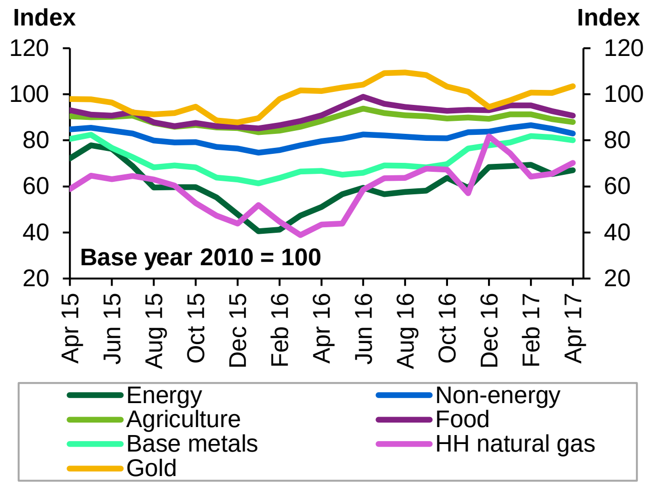
Average energy prices in April increased by 2.7% m-o-m, due to a 2.5% increase in average crude oil prices, while natural gas prices in the US advanced by 7.2% m-o-m, mainly due to base effects, but retreated in Europe by 2.2%. Meanwhile, Australian benchmark thermal coal prices were up by 5.1% due to the impact of cyclone Debbie.

Agricultural prices declined by 1.4% in April, with average food prices dropping by 2.1%. Sugar, soybeans and palm oil declined by 9.0%, 6.7% and 3.7%, respectively. In the group of raw material prices, natural rubber prices fell by 15.9%.

Average base metal prices decreased by 1.6% in March, led by a 2.4% monthly decrease in copper prices and a 5.8% decrease in nickel prices. Average iron ore prices plummeted by 19.9% following lower steel prices.

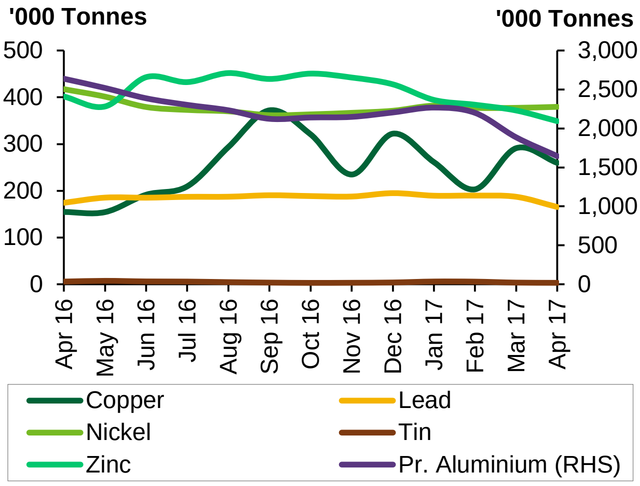
In the group of **precious metals**, gold prices increased by 2.9% on average, on lower real interest rate expectations in the US following some deceleration of the economy in 1Q17.

Graph 2 - 1: Major commodity price indices



Source: World Bank, Commodity price data.

Graph 2 - 2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In April, the **Henry Hub natural gas index** advanced. The average price was up by 21¢, or 7.2%, to $3.08 per million British thermal units (mmbtu) after trading at an average of $2.87/mmbtu the previous month.

The **EIA** said utilities added 67 billion cubic feet (bcf) of **working gas in underground storage** during the week ending 28 April. This was above the median analysts' expectations of a 61-bcf injection. Total working gas in underground storage stood at 2,256 bcf, which is 13.7% lower than at the same time the previous year but 15.5% higher than the previous five-year average.

Investment flows into commodities

Open interest (OI) increased in April for selected US commodity markets such as agriculture, natural gas, precious metals, copper and livestock, while it declined for crude oil. Meanwhile, in monthly terms, money managers net length positions increased for natural gas, precious metals and livestock, while it decreased for agriculture, crude oil and copper.

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

	Open interest		Net length			
	Mar 17	Apr 17	Mar 17	% OI	Apr 17	% OI
Crude oil	2,199	2,189	264	12	255	12
Natural gas	1,361	1,424	121	9	180	13
Agriculture	5,062	5,305	156	3	-304	-6
Precious metals	632	679	145	23	230	34
Copper	268	275	56	21	47	17
Livestock	634	677	156	25	163	24
Total	**10,155**	**10,549**	**898**	**93**	**571**	**94**

Source: US Commodity Futures Trading Commission.

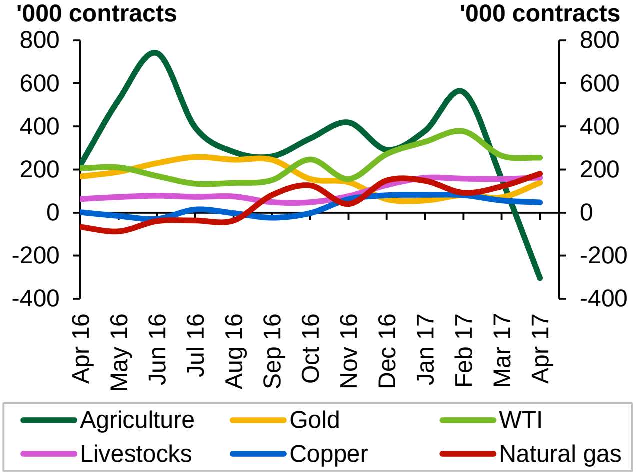
Agriculture's OI increased by 4.8% to 5,305,057 contracts in April. Meanwhile, money managers switched to a combined net short position of 304,159 lots, largely because of increasing net shorts in the soy complex and corn.

Henry Hub's natural gas OI increased by 4.7% m-o-m to 1424,335 contracts in April. Money managers increased their net length by 49% to 180,316 lots due to colder-than-average weather the previous month, and the expectation of strong summer demand.

Copper's OI increased by 2.7% m-o-m to 274,679 contracts in April. Money managers decreased their net long positions by 16% to 47,168 on the slowing pace of manufacturing expansion in the US and China.

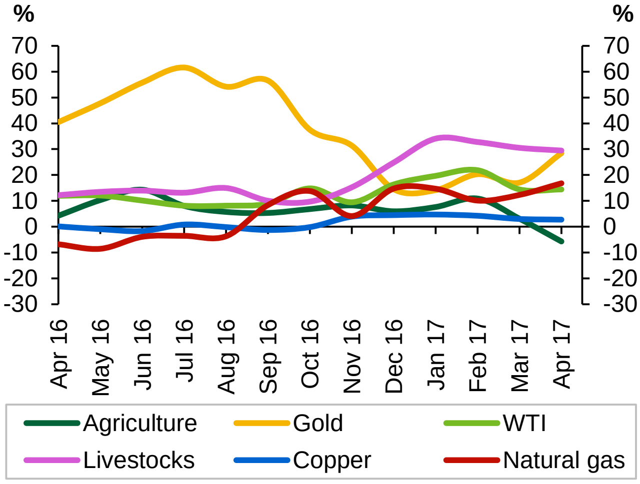
Precious metals' OI increased by 7.3% m-o-m to 678,571 contracts in April. Money managers increased their net long positions by 58.7% to 230,477 lots.

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



Source: US Commodity Futures Trading Commission.

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



Source: US Commodity Futures Trading Commission.

World Economy

The uptick in global economic activity seems to be continuing with ongoing strong growth in the Euro-zone, solid output numbers in China and improvements in commodity exporting economies, also due to the ongoing rebalancing in the oil market. Some weakness appeared in 1Q17 US GDP numbers but it seems to be temporary, based on the latest labour market numbers and other short-term indicators. The Japanese economy's output is still pointing to a higher level of growth in 2017 compared to last year. China has shown strong output numbers in recent months and the government is aiming to reach somewhere around its target growth rate of 6.5%. India is also forecast to continue growing at a high rate and still has room to the upside, depending on near-term developments in domestic consumption, agricultural output and the success of its structural reforms. Brazil and Russia are forecast to rebound to growth, after two years of recession.

Some of these improving developments have already been reflected in the global economic growth forecast, which remains unchanged at 3.3% in 2017 after growth of 3.0% in 2016. In the OECD economies, US growth is forecast to stand at 2.2% in 2017 after growth of 1.6% in 2016. Following the weaker than expected 1Q17 GDP, growth is forecast to rebound in the remainder of the year. Still, the timeline and the depth of envisaged reforms by the new US administration remain uncertain, but this could lift US growth further. In Japan, rising exports and recent stimulus measures have led to expectations of GDP growth of 1.2% in 2017 compared to 1.0% in 2016. However, an extremely tight labour market and continuing low inflation are keeping growth there from reaching higher levels. In the Euro-zone, the growth dynamic continues to be positive and 1Q17 output was stronger than expected, leading to an upward revision in the 2017 GDP growth forecast to 1.7%, the same level of growth as in 2016. However, ongoing high sovereign debt levels in some Euro-zone economies, several weak banking sector institutions and political uncertainties are all issues that need to be closely monitored.

In the emerging economies, China and India continue to expand at a considerable rate. In China, after a stronger than expected 1Q17 GDP number, 2017 growth was revised up to 6.5% compared to 6.7% in 2016. Meanwhile, India's growth remains strong and is forecast at 7.0% in 2017 after growth of 7.5% in 2016, unchanged from the previous month. Domestic consumption, investment and governmental support all remain key drivers in these two economies, and they are expected to continue to support growth in 2017. Growth in both Brazil and Russia is forecast to recover in 2017. Brazil is forecast to grow by 0.5% in 2017 after a considerable decline of 3.6% in 2016, while Russia is expected to see growth of 1.2% after a decline of 0.2% in 2016. Both economies are anticipated to benefit from improving commodity markets and a recovery in domestic demand.

Numerous uncertainties for global economic growth remain. Policy issues carry considerable weight, as do monetary policy decisions, which remain particularly important in the near-term. Moreover, global debt levels remain high in some key economies, an issue that will probably require further attention if interest rates continue to rise gradually and the US dollar keeps strengthening. Finally, sustained stability in commodity prices are viewed as necessary for ongoing improvement in global growth.

Table 3 - 1: Economic growth rate and revision, 2016-2017*, %

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2016	**3.0**	**1.8**	**1.6**	**1.0**	**1.7**	**1.8**	**6.7**	**7.5**	**-3.6**	**-0.2**
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	**3.3**	**1.9**	**2.2**	**1.2**	**1.7**	**1.5**	**6.5**	**7.0**	**0.5**	**1.2**
Change from previous month	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

OECD

OECD Americas

US

In the first of three estimates provided by the US Bureau of Economic Analysis, 1Q17 **US GDP** growth was seen at only 0.7% q-o-q on a seasonally adjusted annualised rate (SAAR). This was not only lower than expected but also marked the lowest level of GDP growth in three years. While this seems to be a temporary slowdown, the low number also underscores the fact that it may be challenging for the new US administration to lift GDP growth rates to a level of 3% or more – since even with the various envisaged stimulus measures the gap to be closed seems wide. The low growth number was considerably impacted by the slow-down in private household consumption, while the rise in energy-sector related investments had a somewhat positive and counterbalancing effect. After 3% growth in the previous three quarters, private consumption expanded by only 0.3% q-o-q SAAR in the 1Q17. Given that this constitutes more than two thirds of GDP, the impact was certainly large. Positively, exports expanded by more than 3% q-o-q SAAR, despite the relative strength of the US dollar. Private Investments into "structures", the GDP accounting subsection that includes investments into the oil sector – grew by 22% q-o-q SAAR, after having declined significantly for more than two years. This also helped to mitigate the 1Q17 slow-down, as it added more than 0.5pp – or more than two thirds – to total GDP growth. Since the labour market has continued to improve in April and consumer sentiment has risen over the past months, this slow-down in activity is expected to be temporary. With further data, it will be interesting to see why this slow-down in consumption appeared in the 1Q17. It is, however, likely that some uncertainty among consumers after the election may have led to this development and, hence, a rebound may be expected, particularly as consumer sentiment numbers are still supportive. While constituting only a minor part of total consumption, the consumption of gasoline and other energy related goods saw a sharp decline of 8% in 1Q17, which was remarkable. This also corresponds to weak US oil product demand numbers in the first three months of the year. Importantly, the decline in motor vehicle sales added a large negative impact of 0.5 pp to 1Q17 GDP growth.

Despite this weakness at the beginning of the year, it seems the **Fed** will continue to gradually lift its interest rate level. While the 1Q17 weakness will certainly need monitoring, early indicators point to a rebound in 2Q17 and with the latest labour market numbers strong again, consumer sentiment is holding up well. In addition, exports have recovered despite the relative US dollar strength. The depth and the duration of upcoming economic reforms planned by the new US administration may also influence decision making at the Fed. The most important near-term stimulus measures the administration wants to implement are tax cuts and increased infrastructure spending, but it remains unclear how and at what pace a political consensus may be found around these measures. Certainly any increase in spending, combined with a lower tax burden for companies and households, could lift both growth and inflation – which could, in turn, lead the Fed to raise interest rates more quickly than currently anticipated.

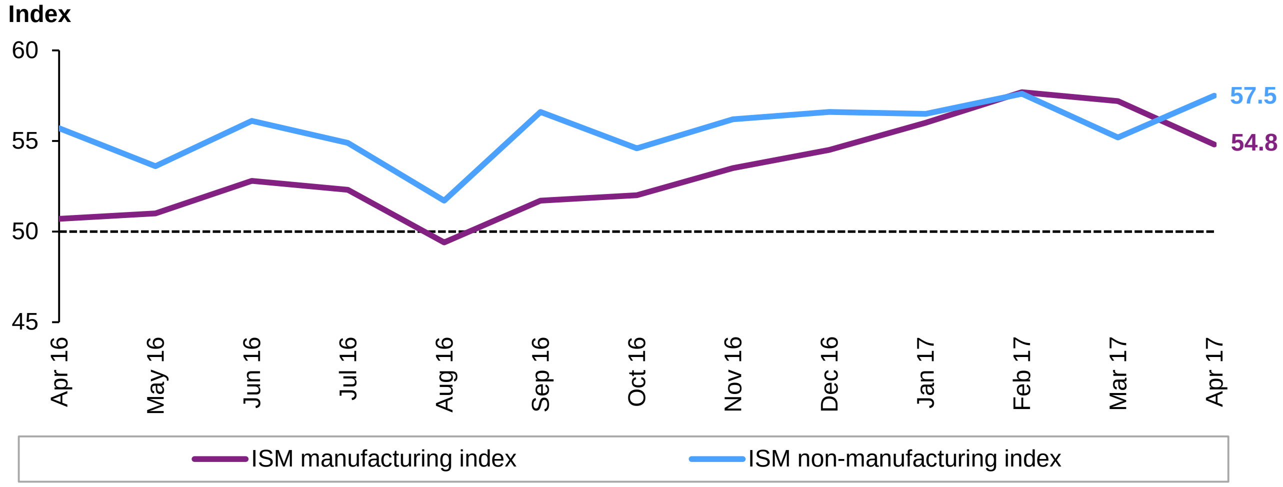
Inflation as a key element of the Fed's upcoming interest rate decisions remains around the central bank's envisaged inflation rate of around 2%. This is not only visible in total inflation but also in the core inflation level (which excludes food and energy). Total inflation stood at 2.4% in March and core inflation was also up by 2.0%, which is in line with the Fed's inflation target level of around 2.0%.

Also, the **labour market's** positive momentum continued to be seen in the latest April numbers. The unemployment rate fell back to 4.4% in April, the lowest since 2007. Non-farm payroll additions recovered as well, rising by 211,000, after a downward revision in March of only 79,000. Average hourly earnings increased by a solid 2.3% y-o-y to reach $21.96/hour. Ongoing support was also provided by the mining and logging sector – which includes oil-related employment – which added 10,000 jobs in April. Long-term unemployment also reached a new low of only 22.6% of total unemployment, the lowest level since the end of 2008, while the participation rate declined slightly to 62.9% from 63% in March.

On the domestic side, **industrial production** increased in March by 1.5% y-o-y after a rise of 0.3% y-o-y in February. It was again supported by a better situation in the energy sector. Mining – which includes oil sector-related output – rose by 3.0% y-o-y in March, the strongest performance of this sub-group since the beginning of 2015. Manufacturing, another important sub-group of industrial production, rose by 1.0% y-o-y in March. Domestic demand, in turn, was supported by the latest rising retail sales numbers. After retail sales growth in February stood at only 1.1% y-o-y, it rose by 4.6% y-o-y in March. The general positive trend in domestic consumption was also visible in the Conference Board's Consumer Confidence Index, which declined slightly but remained at a high level of 120.3 in April after 124.9 in March. This also provides some indication that economic conditions have been improving and may continue to do so.

April's **Purchasing Manager's Index** (PMI) for the manufacturing sector as provided by the Institute of Supply Management (ISM) also indicated some support in the underlying economy, albeit at a slower pace. The manufacturing PMI fell back to 54.8 in April from 57.2 in March. This is the lowest level this year and, since this trend is softening, it will require attention in the near-term. On a positive note, the important index for the services sector, which constitutes more than 70% of the US economy, rose to 57.5 in April, compared to 55.2 in March.

Graph 3 - 1: Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

The uptick in the yearly growth average is already anticipated in the current forecast numbers, thus the **GDP growth** forecast remains unchanged at 2.2% for 2017, after achieving growth of 1.6% in 2016. While currently the upside to the 2017 GDP growth forecast seems to be limited, more and better insights into the fiscal stimulus plans of the new US administration, as well further information on the planned tax reform, will provide a more sound overview of the US economy – in order to provide a more detailed assessment of the situation.

Canada

The economy of Canada continues to improve. **Industrial production** increased by 2.7% y-o-y in February, compared to 2.5% in January and 1.7% y-o-y in December. This positive momentum was supported by rising exports, which have been boosted by improvements in the oil-sector and the improving US market, Canada's most important trading partner. **Exports** rose by 12.9% y-o-y in March, up from 4.3% y-o-y in February. Retail trade also continued to expand at a healthy level of 3.1% y-o-y in February, albeit slightly lower than in January, when growth stood at 5.1% y-o-y. The **PMI** for manufacturing improved, rising to a significantly higher level of 55.8 in April, up again from an already considerable level of 55.5 in March and 54.7 in February. Taking the positive momentum into consideration, the **GDP growth** forecast for 2017 was revised up to 1.9% from 1.8%.

OECD Asia Pacific

Japan

The Japanese economy continues to provide **positive indicators** that confirm the current forecast of slightly higher growth in 2017, when compared to last year, as both the economy and prices are firming, albeit at a low level. As structural reforms and other important government-led stimulus measures have been undertaken as part of the government's current economic agenda (labelled "Abenomics"), reforms have started to pay off slowly. But numerous challenges remain apparent. The extremely tight labour market, for example, is an outcome of some economic improvements but, at the same time, it limits growth potential. In addition, productivity gains have only been gradual in the economy, which is currently running a manufacturing utilisation rate of around 100%. So while current economic growth should be considered a success, only medium- to long-term improvements will be able to raise the current growth level further. Inflation is still low and may be supported by rising commodity prices, particularly oil. The tightness in available resources may support rising prices, along with an increase in wages, in the future. Domestic demand has also started to improve in March. After low levels of growth, this is a weak sign that rising wages may lead to more activity on the consumer side. Finally, the weakness of the yen has been an important driver for exports as well. It is forecast that some of the positive developments from international trade will also filter through to domestic demand and support economic growth.

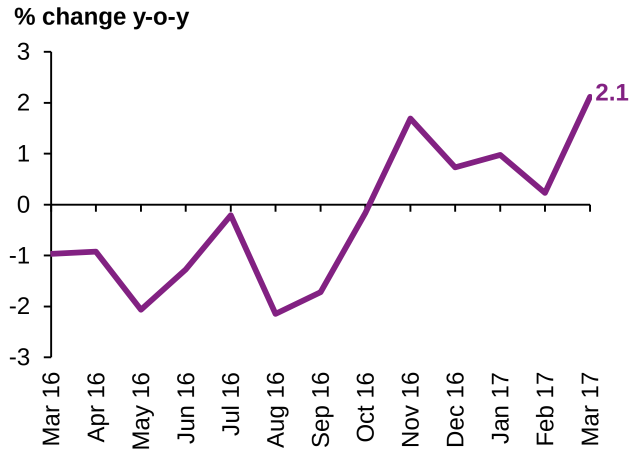
Inflation rose only slightly in March, increasing by 0.2% y-o-y, the same low level as in February. Despite tight labour markets, rising wages are only now slowly turning into rising consumption and rising prices. Core inflation (which excludes food and energy) even declined by 0.3% y-o-y, after a decline of 0.1% y-o-y already in February. However, with the combination of a tight labour market, rising income levels and possible continuation of strengthening commodity prices, this trend should turn. So far, underlying deflationary – or, at least, low-inflationary – forces remain persistent. An important factor is also falling house-prices, dropping by 0.2% y-o-y in March.

The country's rising income pattern is also receiving support from the very low **unemployment rate**, which in March stood at only 2.8% for a second consecutive month. Real income has continued to rise modestly with pay increases in March at 0.4% y-o-y, following a rise of 0.5% y-o-y in February. The ratio of open jobs to applicants rose 0.02 points to 1.45. This is the highest level since the end of 1990. While the Bank of Japan (BoJ) target of achieving inflation of around 2% remains in the distance, it has continued with its monetary stimulus measures, highlighting that it is still too early to move away from such measures as the current economic environment needs further monetary support. The BoJ has kept its overnight interest rates at a minus 0.1% cap and the 10-year bond yields at about zero percent. Furthermore, it has decided to continue purchasing government bonds at a pace of ¥80 trillion a year. More support for 'Abenomics' may also come from the fact that the two BoJ members who dissented from this latest decision will be replaced by the Prime Minister when they retire this summer, in yet another move to ensure the decision-making body of the BoJ supports government-led policy.

Japanese exports in March rose by 12.0% y-o-y, after already showing strong growth of 11.3% y-o-y in February. This dynamic has been supported by a fall in the value of the yen and improvements in OECD economies. The export of industrial goods and capital equipment mostly supported this positive trend in trade. Also, **industrial production** continued its recovery, rising for the eighth consecutive month, up by 3.3% y-o-y in March after 6.7% y-o-y in February. This was also supported again by a solid trend in manufacturing, which rose by 3.3% y-o-y in March. However, manufacturing orders point at some slow-down as they fell by 0.9% y-o-y in February, the latest available data point, after rising 8.6% y-o-y in January and 10.7% y-o-y in December.

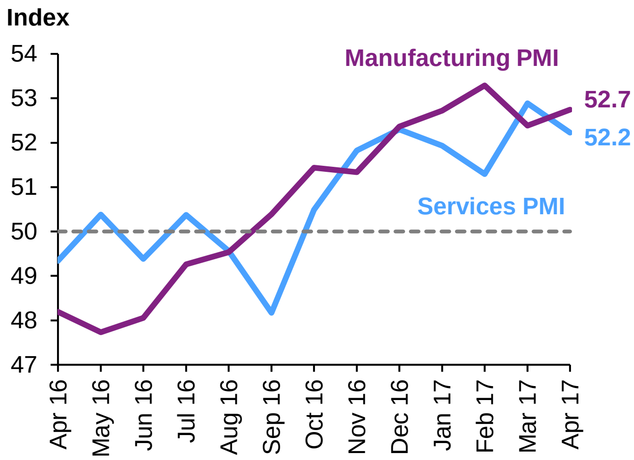
Some improvement has also been reflected in **domestic demand** levels. Retail trade rose by 2.1% y-o-y in March after increases of only 0.2% y-o-y in February and 1.0% y-o-y in January. This is an important rebound after an annual decline of 0.6% in 2016.

Graph 3 - 2: Japanese retail trade



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

Graph 3 - 3: Japanese PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

The latest **PMI** numbers provided by IHS Markit confirmed some improvements in manufacturing. The PMI for manufacturing rose to 52.7 in April compared to 52.4 in March. The services sector PMI remained strong but retraced slightly to 52.2 in April from 52.9 in March.

The most recent developments confirm the solid underlying growth dynamic in the Japanese economy. Numerous challenges persist and it remains to be seen to what extent current improvements will hold in the global economy and whether the ongoing stimulus measures by the government and the BoJ will be able to lift growth further. Having already taken some improvement in the Japanese economy into consideration, the 2017 **GDP growth** forecast remains at 1.2% compared to 1.0% in 2016.

South Korea

While South Korea so far continues to show solid growth rates, domestic political developments combined with rising uncertainties in the region may dampen economic growth in the coming months. Moreover, economic policies in particular will need to be reviewed after most recent elections. **Exports** were especially a driving force for the economy's continued solid growth. They rose again significantly in April, increasing by 23.2% y-o-y after 8.8% y-o-y in March and 9.5% y-o-y in February. **Industrial production** rose by 4.0% y-o-y in March after 3.1% y-o-y in February. However, the latest **PMI** number for the manufacturing sector in April indicates an ongoing contraction in the sector, with the index remaining below the growth-indicating level of 50 for a ninth consecutive month, despite it having improved to 49.4 after 48.4 in March. Given the near-term uncertainties, the **GDP growth** forecast for 2017 was revised down to 2.4% from 2.6% after growth of 2.8% in 2016.

OECD Europe

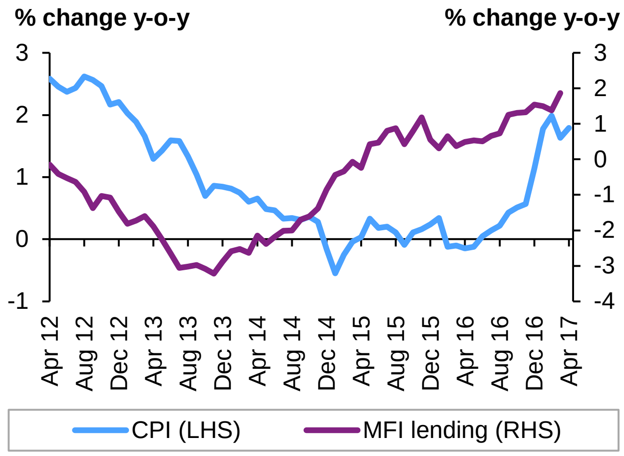
Euro-zone

While political developments – such as the latest rounds of Brexit talks between the UK and the EU, French presidential elections and upcoming German elections – remain at the forefront as factors influencing economic developments, the latest release of 1Q17 GDP figures showed that the recovery in the Euro-zone remains significantly positive and robust. It is clearly overtaking the growth levels in the US economy but also the UK economy. **1Q17 GDP** stood at a 0.5% q-o-q seasonally adjusted rate of growth, even better than the 4Q16 GDP growth level of 0.4% q-o-q. As political uncertainties continue and sovereign debt issues – particularly in Greece – remain, the economic situation will need monitoring. But it is obvious that the improving trend has firmed. Growth continues to be supported by healthy domestic demand, exports are still benefitting from a relatively weak euro and the labour market – still with some room to the upside – is improving. On a positive note, inflation is also higher than last year but still low enough to keep the European Central Bank (ECB) from reducing its monetary stimulus. In addition, sovereign debt spreads have improved and, hence, the situation in the banking sector has also improved. Business sentiment has lately improved as well as the European Commission's April economic sentiment index rose by 1.6 points to 109.6 in April, its highest level since September 2007. This positive sentiment has also impacted the euro which rose to its highest level in six months at the beginning of May at almost $1.10/€.

Furthermore, the **unemployment rate** in March remained at an eight-year low for the second consecutive month at 9.5%. Since it remains at an elevated level, it still offers some room to the upside, providing further growth potential to the economy. This is also the eighth consecutive month below 10%, showing a relatively consistent trend. Wages remain low as well but should be expected to pick up at a later stage in this recovery. Wages increased by 1.6% y-o-y in 4Q16, which was the highest level in 2016 compared to pre-crisis levels of 2% and more. The gently improving labour market is also a positive driver for inflation and a signal of an improving economic environment, with inflation levels have risen in the past months. Inflation stood at 1.9% again in April, rising from a March level of 1.5% y-o-y. This was influenced by rising energy prices, a change which is expected to be only temporary. However, core inflation – that is, the **consumer price index** (CPI), excluding energy, tobacco and food – also rose sharply to 1.2% y-o-y, compared to 0.7% y-o-y in March.

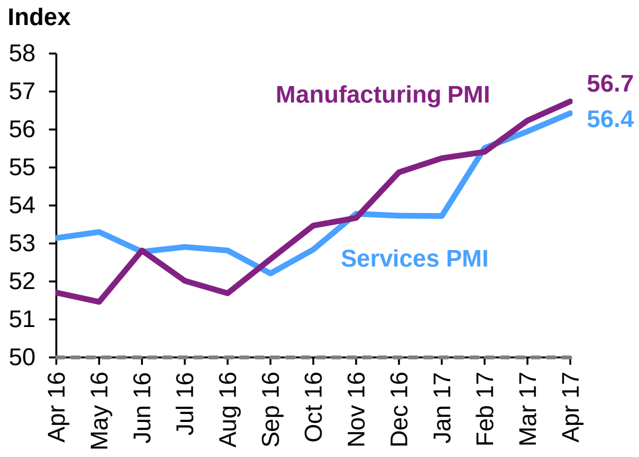
Such inflation-related developments, in combination with a trend of underlying improvements, will remain an area that the **ECB** will consider closely in its upcoming monetary policy decision-making meetings. So far, senior policymakers in the ECB have highlighted that it may be too early to change the course of accommodative monetary policy now, and that is likely that the ECB will keep its main policy rate at 0% and the deposit facility rate at -0.40% in the coming months. Officials also said recently that the bond buying programme will continue until at least the end of 2017. After the ECB's latest rate-setting meeting at the end of April, its president said that the cyclical recovery of the Euro-zone economy has become increasingly solid and that the downside risks have diminished further. Furthermore, it was highlighted that underlying inflation pressures continue to remain subdued and have yet to show a convincing upward trend. Support from monetary stimulus – not only in terms of inflation but also in terms of credit supply – has continued. In March, the credit supply increased by 1.8%, rising from 1.4% y-o-y in February. This was the highest increase since the end of 2011. Also, banking sector related weakness seems to have abated to some extent within this improving environment.

Graph 3 - 4: Euro-zone CPI and lending activity



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

Graph 3 - 5: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

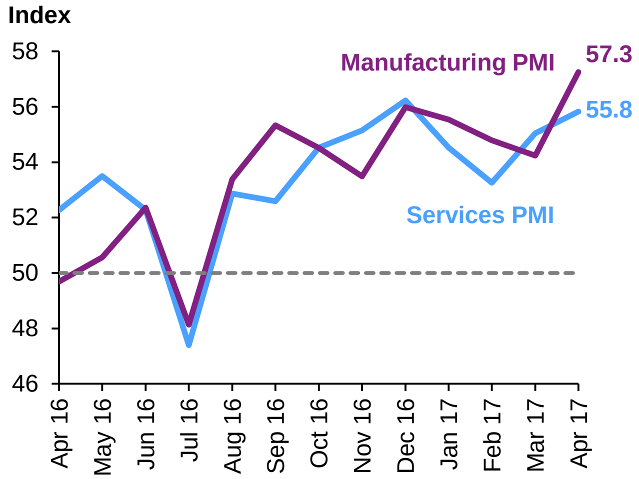
Industrial production grew by 1.2% y-o-y in February, after no growth in January. **Retail sales** growth in value terms was again an important support factor for Euro-zone growth, increasing by 4.1% y-o-y in March, after an already considerable level of 3.6% y-o-y in February. This signals ongoing improvements in the underlying economy, though continued support may still come from improvements in the labour market, particularly from the wages side at a later stage. The latest **PMI indicators** point to a continuation of Euro-zone improvements as well. The manufacturing PMI rose to its highest level since initiation of the index, reaching 56.7 in April. Also, the important PMI for the services sector, which constitutes the largest sector in the Euro-zone, increased to 56.4 in April from 55.9 in March, also the highest level since the start of the index.

The 2017 **GDP growth** forecast for the Euro-zone was lifted to 1.7% from 1.6% in the previous month. This is now the same level of growth as in 2016, with some further room to the upside. Political developments will need continuous monitoring, but with the French election now over, with a pro-European candidate having been elected as president, some of the uncertainty has decreased. Still, the vagueness regarding Brexit procedures and the upcoming German elections remain important factors. These factors need to be seen in combination with the potential of again rising inflation and, consequently, a potential reduction in monetary stimulus towards the end of the year.

UK

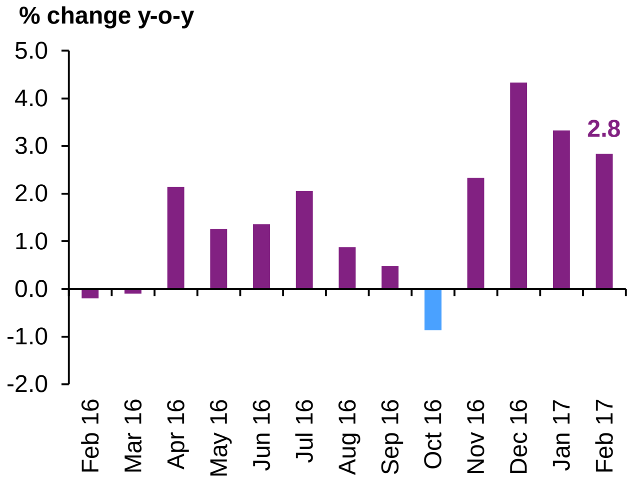
With the start of Brexit negotiations over recent weeks, it has become clear that the process of the UK leaving the EU will be intensive and probably challenging for all concerned. The EU has provided an 'exit bill' of 100 billion euros, which the UK has strongly opposed. Furthermore, questions over the status of Scotland in particular but also Northern Ireland have become apparent again as both members of the UK have voted to remain in the EU. In the meantime, economic indicators have softened, with 1Q17 growth now falling to 0.3% q-o-q at a seasonally adjusted rate after 0.7% q-o-q in 4Q16.

Graph 3 - 6: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

Graph 3 - 7: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

While these early signs of a slowdown have emerged, the UK economy has remained relatively robust. **Exports** have largely benefited from a weakening pound and, hence, have benefitted from an improving competitive position. Exports again increased by 16.5% y-o-y in February. Also, the **PMI** for manufacturing rose again and now stands at a considerable level of 57.3 in April after 54.2 in March. This is the highest level this year. Positively – and probably even more important for economic growth in the UK – the services sector PMI rose to 55.8 in April, higher than the 55.0 seen in March. **Domestic consumption** rose considerably again as well in March, rising by 5.2% y-o-y, only slightly below the February number of 6.4% y-o-y. Industrial production rose by 2.8% y-o-y in February, only slightly below the 3.3% y-o-y seen in January. The underlying assumption of a severe negative impact on the UK economy stemming from Brexit has not changed. But it seems that the fallout will be spread over a longer time horizon and may even be counterbalanced by governmental support, at least to some extent. Taking the still better than expected economic dynamic into consideration, the 2017 **GDP growth** forecast has been increased to 1.5% from 1.4%, but it is still lower than the 1.8% growth of 2016.

Non-OECD

BRICs

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2016-2017*

	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Brazil	-3.6	0.5	8.7	4.3	-23.5	-27.4	-6.4	-7.7	69.9	76.7
Russia	-0.2	1.2	7.0	4.4	22.2	45.7	-3.5	-2.9	9.8	12.4
India	7.5	7.0	4.9	4.6	-11.9	-20.6	-3.5	-3.2	51.9	51.1
China	6.7	6.5	2.1	2.2	195.1	165.9	-3.9	-4.0	15.9	18.6

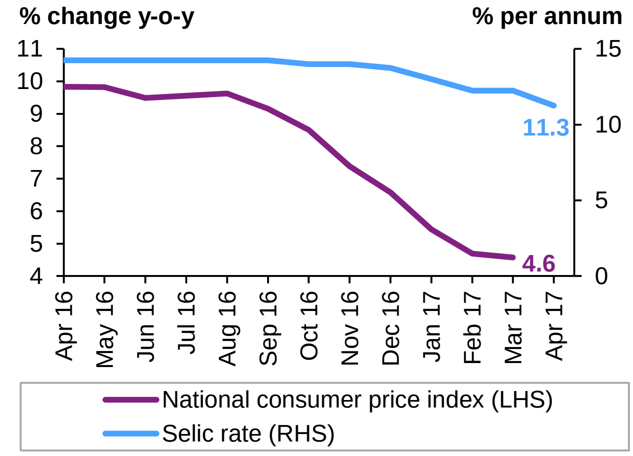
*Note: * 2017 = Forecast.*
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

The **trade surplus** of Brazil increased by 43% y-o-y in April reaching $6.96 billion. Imports increased by $10.7 billion, while exports posted $17.68 billion increase due to the large increase in the export of basic products. Iron ore exports had the biggest increase, rising by 87.5%, followed by crude oil and copper. Exports of manufactured and semi-manufactured goods also increased. Total exports to China increased by 46.8% y-o-y during January–April 2017.

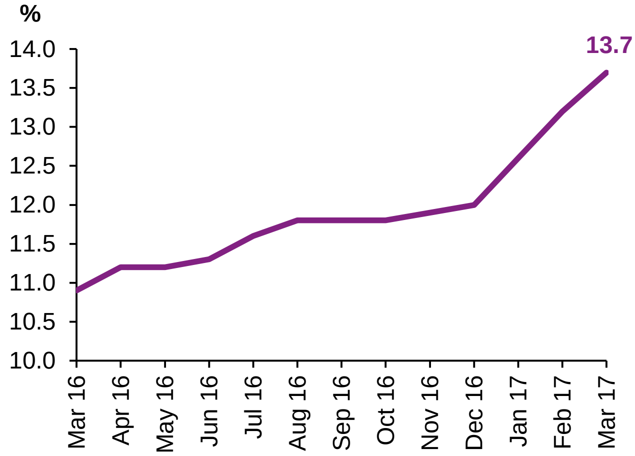
The Brazilian **real** depreciated by 0.27% m-o-m vs. the US dollar in April. Consumer price **inflation** eased from 4.7% y-o-y in February to 4.6% in March, the lowest reading since September 2010. This downward inflationary path left some room for the central bank to continue reducing its benchmark **interest rate** to 11.25% in April from March's 12.25%. The **unemployment rate** for the fifth month in a row in March posting 13.7%.

Graph 3 - 8: Brazilian inflation vs. Interest rate



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

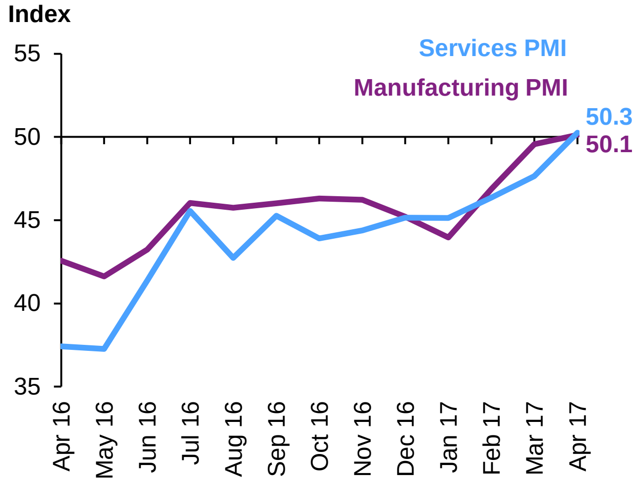
Graph 3 - 9: Brazilian unemployment rate



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

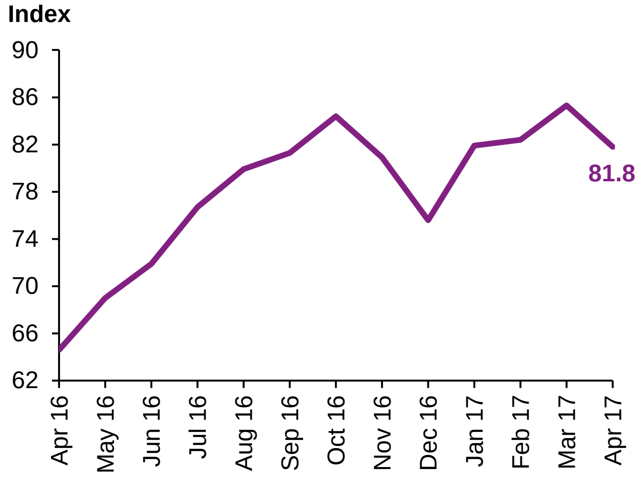
Brazil's **Markit Manufacturing PMI** stood in the expansion territory in April for the first time since January 2015. The index posted 50.1 in April, up from 49.6 in March. The survey showed that production increased for the second month in a row. Manufacturers increased their purchasing activities for the first time since January 2015. New orders also showed continued growth, while employment continued to fall for the 26th consecutive month, although at its slowest pace. After 25 consecutive months of contraction, business conditions in Brazil's services sector finally returned to the growth territory in April, according to **Markit Brazil Services PMI**. The index rose to 50.3 in April, up from 47.7 in March. The survey highlighted solid growth in new orders received by service providers, increasing at its quickest pace since February 2015. The inflation rate eased to lower levels, thus reducing the positive marginal effect on consumer sentiment and bringing the issue of high unemployment to the forefront. The **consumer confidence index** fell in April to 81.8 from 85.3 in March.

Graph 3 - 10: Brazilian manufacturing and services PMIs



Sources: IHS Markit and Haver Analytics.

Graph 3 - 11: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

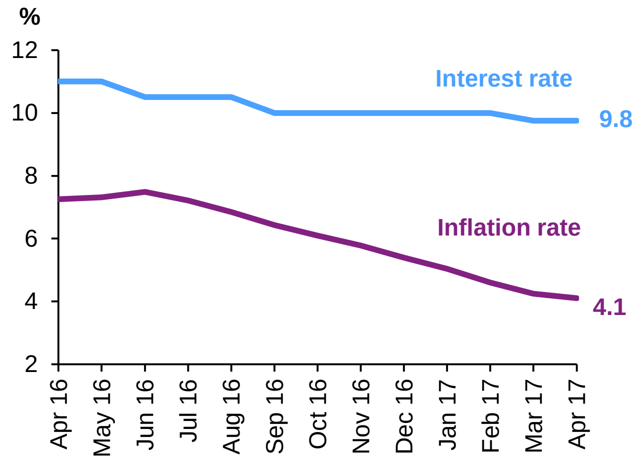
Brazil's GDP is currently anticipated to show cyclical but minor growth of around 0.5% y-o-y in 2017. Positive signals from both the manufacturing and services sector started to accumulate for the third month in a row, supporting a return-to-growth view.

Russia

The **trade surplus** of Russia increased in February by more than 40% y-o-y, rising from $7.2 billion in February 2016 to $10.17 billion in February 2017. While imports increased by $2.7 billion, or 28% y-o-y, exports rose $5.6 to reach $25.7 billion in February or 28% y-o-y.

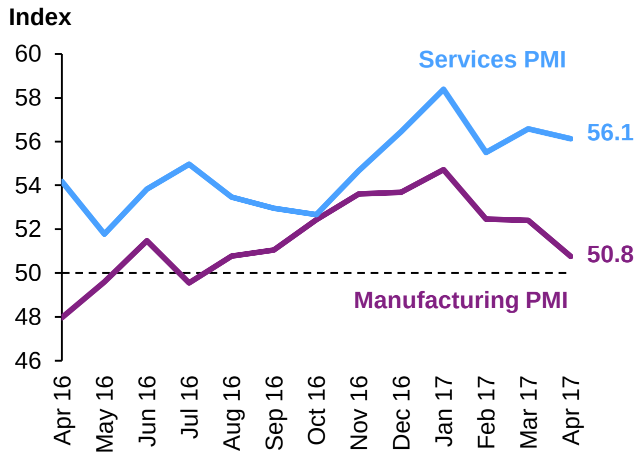
Russia's **GDP** has returned to growth territory in 4Q16 after seven consecutive quarters of contraction, supported by an increase in gross capital formation. GDP grew 0.3% y-o-y in 4Q16. In April, the ruble appreciated vs. the US dollar, with the ruble gaining 2.9% m-o-m vs. the dollar and accumulating a 13% gain since last December. A downward inflationary trend continued in April, posting a consumer price **inflation of** 4.1% y-o-y, the lowest since June 2012. Although the inflation rate is close to target level the set by the central bank, the monetary authority did not ease its benchmark **interest rate** in April, which remained at 9.75%.

Graph 3 - 12: Russian inflation vs. Interest rate



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

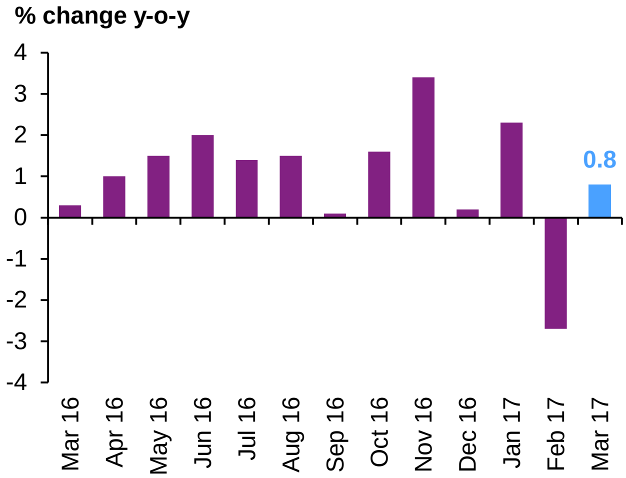
Graph 3 - 13: Russian PMIs



Sources: IHS Markit and Haver Analytics.

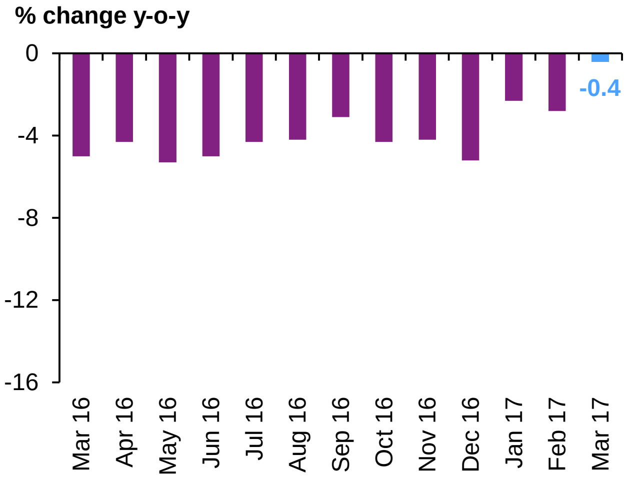
Operating conditions in the country's manufacturing sector continued to improve in April for the ninth consecutive month, according to Russia's **Markit Manufacturing PMI**. The index stood at 50.8 in April, down from 52.4 a month earlier. Amid less optimistic business confidence, the index survey showed a slower pace of growth in production and new business. Employment in the manufacturing sector dropped by the quickest pace seen since March 2016 and for the second consecutive month. **Industrial production** increased by 0.8% y-o-y in March. The Markit Russia Services Business Activity Index posted 56.1 in April, slightly lower than March's 56.6, indicating continued growth but at somewhat slower pace. **Retail sales** dropped in March by 0.4% y-o-y, the lowest rate in the long streak of contraction started in January 2015.

Graph 3 - 14: Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 15: Russian retail sales



Sources: Federal State Statistics Service and Haver Analytics.

The economy of Russia seems to be on a gradual path towards a modest recovery in 2017, following two years of recession. **GDP growth** is projected to be 1.2% y-o-y in 2017.

India

India's real GDP growth slowed to 7.0% y-o-y in 4Q16 (not seasonally adjusted) from an upwardly revised 7.4% in 3Q16, which matches expectations and model estimation results. (On a seasonally adjusted basis, elaborated by Haver Analytics, real GDP growth is seen at 7.3% y-o-y in 4Q16 compared to 7.0% in 3Q16.) In contrast to other sources, the Secretariat did not consider India's GDP growth on a seasonally adjusted basis as a benchmark. Thus, all expenditure categories have shown significant improvements, with private and government consumption both registering double-digit annual growth rates (10.1% and 19.9%, respectively) and investment expanding for the first time since 4Q15.

Indeed, the growth slowdown was largely driven by discrepancies, with a little support from net exports. The growth of real gross value added sustained well in the 4Q. At 6.6% y-o-y, it was largely unchanged from the previous quarter, while growth in the services sector decelerated to 6.8% from an average of 8.6% in the first three quarters of 2016. Manufacturing growth rose to 8.3% from 6.9% in the 3Q and agriculture grew at the fastest pace recorded in more than four years, in part owing to a good monsoon period in 2016.

The immediate economic impact of demonetisation seems to be very significant, in line with trends witnessed in the 'bottom-up' indicators. It is possible that the first set of growth estimates has not captured this impact adequately and may eventually be revised lower. In addition, demonetisation is likely to widen India's tax base, enabling the government to continue focusing on increasing infrastructure spending, even while adhering to fiscal consolidation. It seems the following factors will support India's economy in 2017 and 2018:

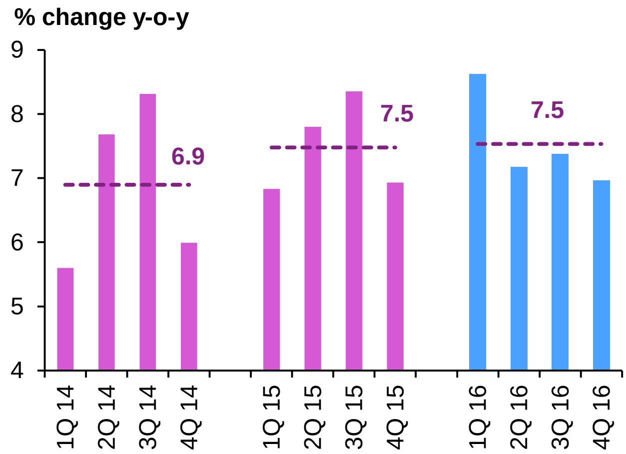
- Pick-up in consumption
- Higher infrastructure spending
- Private investment
- Cautious outlook for exports

Recent data suggests that both urban and rural consumption have turned a corner, although rural demand continues to lag the recovery in urban areas. Auto sales, a widely followed indicator of India's consumption demand, were up 5% q-o-q in the 1Q17, after contracting 18.3% in 4Q16.

The Reserve Bank of India (**RBI**) shifted to a 'neutral' stance in February and reiterated its focus to bring inflation closer to 4% on a sustained basis, the mid-point of its inflation target range. In line with this, there is a high possibility that CPI inflation will rise above 5% in 2H17, though no further interest rate cuts are expected. Indeed, the RBI may hike the repo rate towards the end of the year, if inflation and growth pick up.

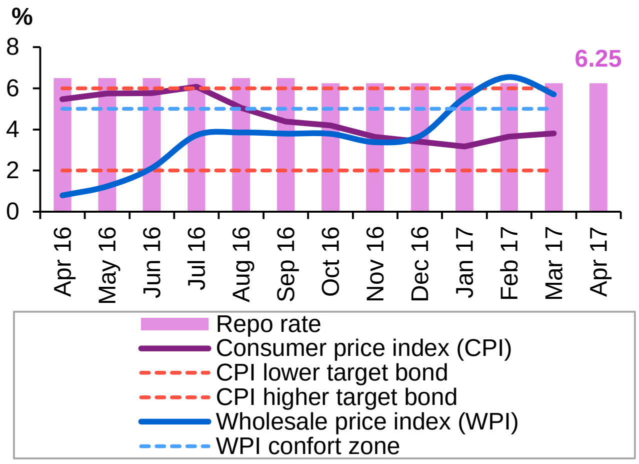
The **CPI** in India increased 3.81% y-o-y in March 2017, following a 3.65% rise in February. This was below market expectations of 3.98%. Food inflation slowed to 1.93% from 2.01%. India's **wholesale price index** (WPI) eased to 5.7% y-o-y in March following three months of acceleration. But with food inflation slowly inching up and with consumer prices also on the rise, the March softening in the WPI will not change the RBI's policy stance. Food prices will increasingly be at risk in the coming months, particularly if projections of a possible below-average summer monsoon season from a forming El Niño weather pattern materialises. However, the India Meteorological Department (IMD) forecasts a "normal" June–September monsoon season with rainfalls expected to be around 96% of their 50-year average (the IMD classifies rainfalls between 96% and 104% as normal.) Fuel prices will likely continue to recover from their 2016 lows, adding upward pressure to headline inflation.

Graph 3 - 16: Indian GDP growth



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

Graph 3 - 17: Indian inflation vs. Repo rate

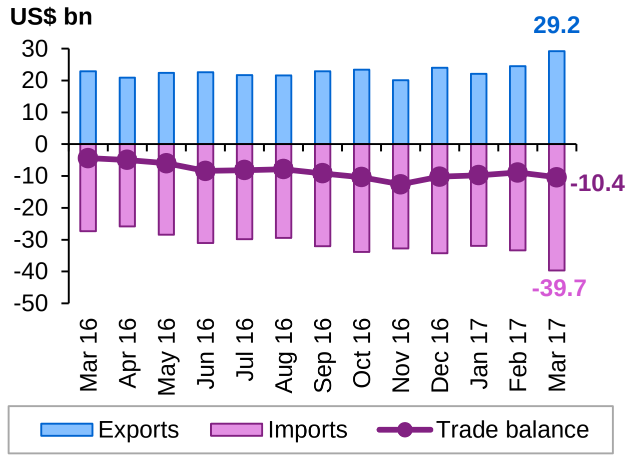


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Merchandise exports accelerated by 27.6% y-o-y in March, amid strong exports of iron ore, petroleum and engineering goods. Yet imports also expanded strongly by 45.3% y-o-y, driving the trade deficit to $10.4 billion. Merchandise exports stood at $29.2 billion in March, up 27.6% from a year ago, marking the highest level since March 2014 in US dollar-denominated terms. The recovery in oil prices pushed petroleum product exports 69.1% higher than in the previous year. The shipments on engineering goods also expanded strongly, up 46.7% y-o-y. Meanwhile, iron ore exports more than quadrupled from March 2016 to reach $245 million.

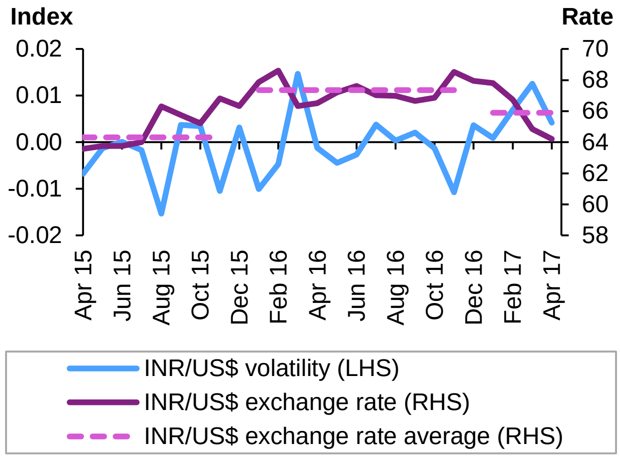
Merchandise imports stood at $39.7 billion, up 45.3% y-o-y. Imports of crude oil and petroleum products more than doubled from March 2016 to $9.7 billion. Imports of gold also grew sharply to $4.2 billion, over three times the amount of gold imported in March 2016. The merchandise trade deficit widened to a four-month high of $10.4 billion in March from $8.9 billion in February. Despite a sharp acceleration in petroleum and iron ore shipments, the pick-up in exports is fairly broad-based, indicating stronger global demand in addition to a recovery in commodity prices. Given a strong pick-up in gold imports following the government's demonetisation announcement, as well as rising oil prices, it seems imports growth continue to outpace exports in 2017, contributing to a larger trade and current account deficit, which is expected to widen above 1.0% of GDP in 2017 from 0.6% of GDP in 2016.

Graph 3 - 18: Indian trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

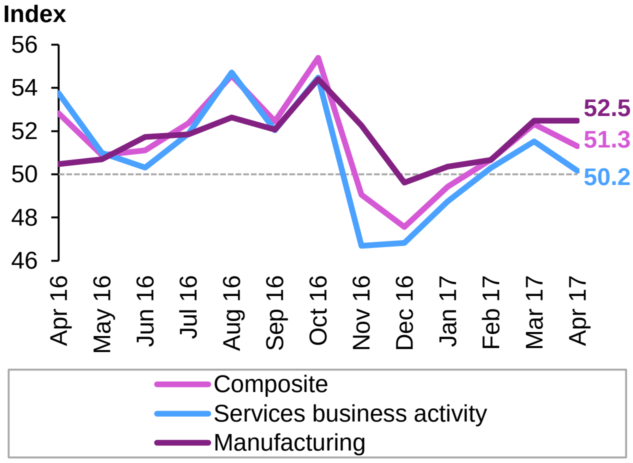
Graph 3 - 19: INR and US$ exchange rate



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

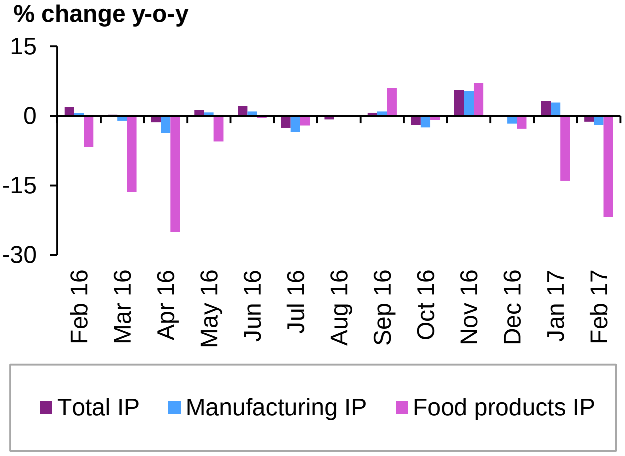
The **Nikkei manufacturing PMI** suggests a muted impact of demonetisation on industrial activity. However, industrial production has varied in recent months and the growth momentum remains weak. There is also no sign of a turnaround in private investment, which has been a drag on growth since late 2015. According to published data, manufacturing conditions in India improved for the fourth straight month in April. Slower increases in output, stocks of purchases and employment were offset by stronger growth of new orders and lengthening delivery times.

Graph 3 - 20: Indian PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 21: Indian industrial breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

India's **GDP growth** expectation for 2017 kept unchanged at 7.0%.

China

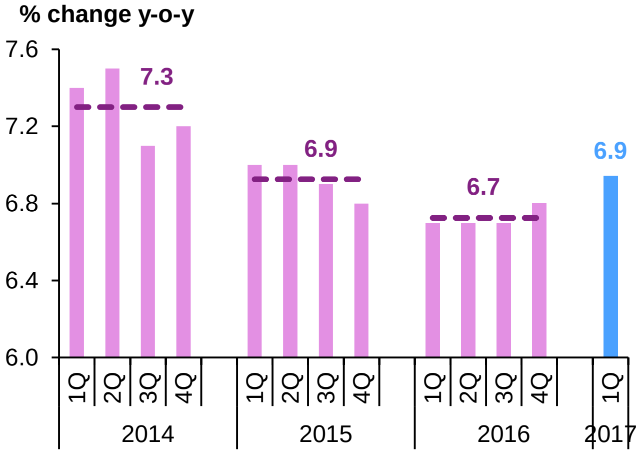
China's **GDP growth** accelerated to 6.9% y-o-y in 1Q17 from 6.8% in 4Q16. Economic growth accelerated in January–March, helped by a stronger manufacturing performance. The y-o-y rate of expansion was the most rapid since 3Q15. Owing to price inflation, the pick-up in nominal terms was even more notable, with GDP growth accelerating to 11.8% from 9.6% in 4Q16.

The secondary (industrial) sector's value added rose by 6.5% y-o-y, the strongest outcome since the same quarter of 2015. Manufacturing has been buoyed by firmer global demand for merchandise exports, which have increased in value by 14.8% in the 1Q. The mining and steel sectors have also been performing strongly, owing to surprisingly resilient investment in property development and supply shortages that have driven production increases.

By contrast, the tertiary (services) sector output softened to 7.7% y-o-y in January–March, dropping from 8.3% in 4Q16. Real disposable income growth among urban residents slowed to 6.3% in January–March, which was notably below the pace of real GDP expansion. Spending on property may have also crowded out room for expenditure on non-essential services. Primary (agriculture) sector output rose by 3% in 1Q, up from 2.9% in 4Q16. China's new financing growth decelerated in February as the government stressed risk management. In terms of monetary policies, money supply growth slowed to 11.1%, down from 11.3% in the previous two months. Officials are targeting 12% money supply growth for 2017, although it is worth noting that in 2016 they targeted 13% money supply growth but only achieved 11.3%.

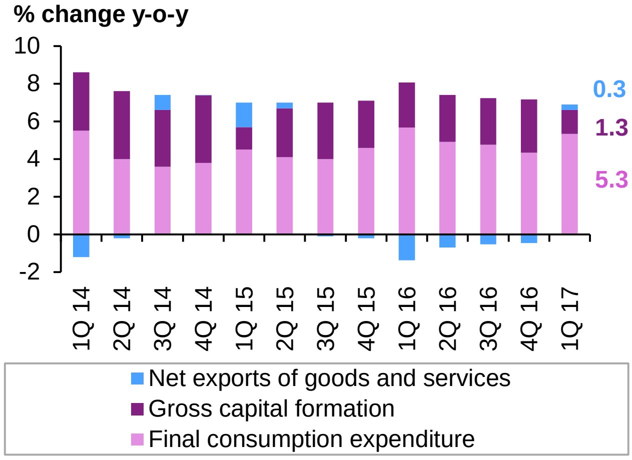
As mentioned in the initial data release on 17 April, most of the industrial acceleration came from slower contractions or minor rebounds in heavy manufacturing. Given the still-weak volume growth, this is likely the result of supply consolidation policies that have increased prices and margins – and which have thus increased the scope of potential value-added per unit of output. The housing market is expected to decelerate and then contract over the next year, which will bring headwinds for related industries when it does. April's data release further confirms the view that the 1Q rebound is unsustainable.

Graph 3 - 22: Chinese GDP growth



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

Graph 3 - 23: Chinese GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

The Chinese government set a goal to cut the tax burden on enterprises by approximately CNY350 billion in its March 2017 work report. This was further emphasised by Premier Li, who stated that the country will strive to reduce taxes and charges by CNY1 trillion in 2017. China's efforts to ease the tax burden on enterprises seem to be paying off. According to the National Bureau of Statistics, China's GDP grew 6.9% during 1Q17, entirely driven by the industrial sector. Meanwhile, industrial profits growth surged to 31.5% during the first two months, a six-year high on account of the rising profit margin and declining costs. Further tax cuts will support industrial profit in scientific and innovative enterprises, and will help with China's supply-side reforms and its efforts to restructure the economy away from heavy industry. However, its contribution to the headline industrial production may be limited, given its relatively small share compared with that of heavy industry.

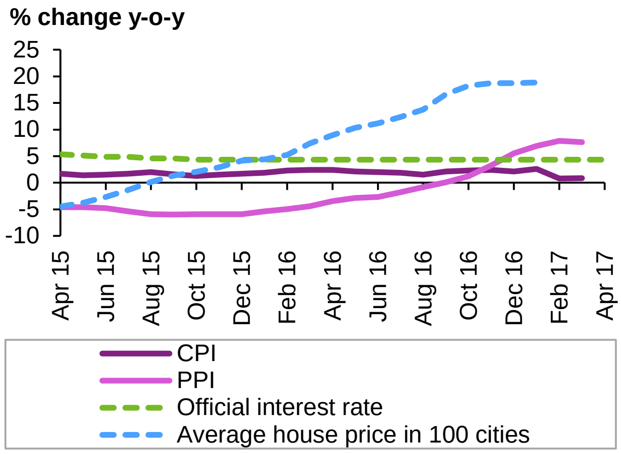
China's **CPI** improved slightly y-o-y to 0.9% in March from 0.8% in February. The People's Bank of China (PBoC) attributed the weak CPI to lower food prices, which fell 2.4ppin March owing to higher-than-average temperatures in March. Non-food prices growth edged up 0.1 pp from February, with clothing, health care and education prices rising significantly. Meanwhile, the services CPI rose to 2.7%, compared with the 0.1% contraction of consumer goods. The CPI slowed from 2H16, which will set a declining base for 2017 growth. China targeted a 3% CPI growth for 2017.

China's **producer price index** (PPI) moderated y-o-y to 7.6% in March, the first deceleration in 18 months. Slower growth in major sectors – including petroleum and natural gas extraction, ferrous metals processing, petroleum processing, non-ferrous metals smelting and processing, and chemicals – was the main contributor to the headline deceleration.

China reported a **trade** surplus of $23.9 billion in March of 2017 compared to a $25.2 billion surplus a year earlier and above market expectations of a $10 billion surplus. **Exports** increased by 16.4% y-o-y, following a 1.3% fall in February, while markets expected 3.2% growth. **Imports** rose 20.3%, after jumping 38.1% in the prior month and were above the consensus estimate of an 18% rise.

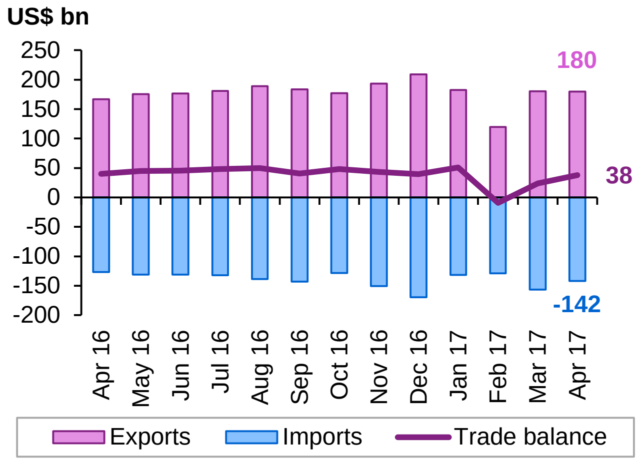
In February 2017, China posted a trade deficit of $9.15 billion. Exports from China increased by 16.4% y-o-y to $180.6 billion in March 2017, following a 1.3% decrease in February, while markets expected a 3.2% growth. Considering the first three months of 2017, exports went up 8.2% from the same period a year earlier with sales increasing to Hong Kong (0.9%), India (14.2%), Japan (4.8%), South Korea (17.4%), Taiwan (10%), ASEAN countries (11.4%), EU countries (7.4%), South Africa (16.5%), Brazil (35.8%), Russia (22.4%), Australia (8.7%) and New Zealand (6.5%). The US was the main export partner, with sales rising 10%. In yuan-denominated terms, exports went up 22.3%. Imports to China increased 20.3% from a year earlier to $156.68 billion in March 2017, compared to growth of 38.1% in the prior month and an above-consensus rise of 18%. The EU was the main import partner, with imports rising 15.5%, followed by ASEAN countries (27.1%).

Graph 3 - 24: Chinese CPI and PPI



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

Graph 3 - 25: Chinese trade balance

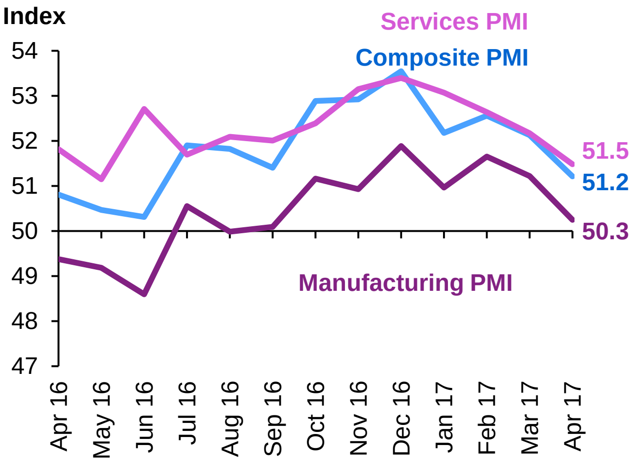


Sources: China Customs and Haver Analytics.

The latest data indicated that **Chinese manufacturers** started the 2Q17 with a further slowdown in production and new business growth. The downward pressure on manufacturing gradually emerged in April, with all indicators weakening. The Chinese economy may be starting to embrace a downward trend in the near-term as prices of industrial products decline and active re-stocking comes to an end. Employment across the sector meanwhile declined at its fastest pace since the start of the year and input buying rose only slightly. At the same time, optimism towards the 12-month outlook was the weakest seen in 2017 so far. Cost pressures continued to ease from the peaks seen at the end of last year and contributed to only a modest rise in prices. The PMI was down 0.9 points to 50.3 in April 2017, the lowest point since September. China's official manufacturing PMI fell to 51.2, a 6-month low, according to data published by the National Bureau of Statistics.

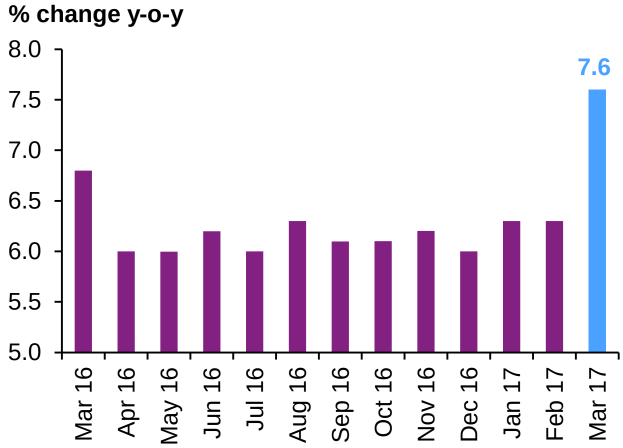
China's official **non-manufacturing PMI** fell 1.1 points to 54.0 in April, a 6-month low. The most significant retreats were observed among new orders, new export orders and with regard to expectations for future activity, all of which grew at a slower pace. While overall activity grew less rapidly, price growth and employment conditions improved relative to one month earlier.

Graph 3 - 26: Chinese PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3 - 27: Chinese industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

China's **GDP growth** expectation, due to some positive potential such as strong exports as well as GDP growth in 1Q17 were revised up to 6.5% from 6.3%.

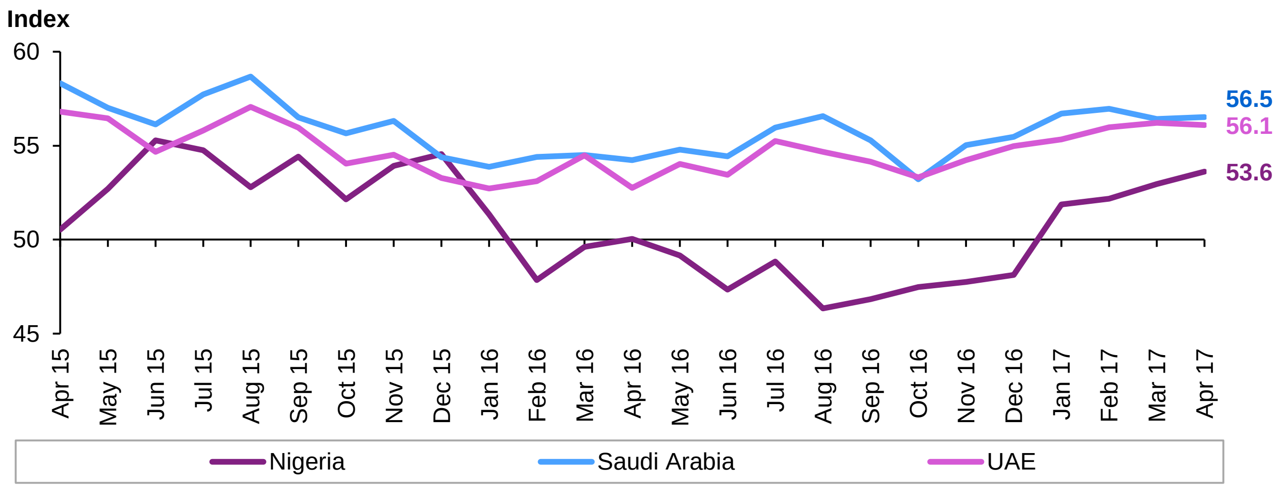
OPEC Member Countries

Inflation in **Saudi Arabia** posted a negative reading in March, similar to the first two months of the year, as a result of the increasing baseline effect in some public goods and energy prices in 2016. Inflation stood at negative 0.4% y-o-y in March. So far, after a sharp jump in 2016, slowing inflation holds positive prospects for higher purchasing power, leading to improvements in spending and investment. The country's private sector continued reporting improvements in its operating conditions as suggested by the Emirates NBD Saudi Arabia PMI. The index rose to 56.5 in April due to strong growth in output and new business.

In the **United Arab Emirates**, the non-oil private sector reported continued improvements in the health of the sector in April. The Emirates NBD UAE PMI on April registered 56.1, down slightly from 56.2 in the previous month. The index survey showed strong increase in growth of output and new business. Manufacturers also increased their stock of purchases to a survey record high. Employment in the sector also rose in April for the twelfth month in a row.

In **Nigeria**, the Stanbic IBTC Bank Nigeria PMI rose in April to its highest level in 16 months at 53.6, up from 53.0 in March. This improvement was due to a sharp acceleration in new business and output. The survey also demonstrated some easing in input and output price inflation. It also revealed a strong increase in exports by private sector firms for the first time in 16 months in April.

Graph 3 - 28: PMIs of Nigeria, Saudi Arabia and UAE



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

Other Asia

In **Indonesia**, inflation in April registered its highest reading since March 2016 at 4.2% y-o-y. It is likely that the increase was due to the rise in the categories of fuel, electricity and water, and transportation, communication and financial services. The first category posted a 9.4% y-o-y rise in March 2017 compared to 0.25% y-o-y in March 2016, while the later had a 5.1% y-o-y increase in April 2017 vs. a negative 1.5% y-o-y drop in April 2016.

In the **Philippines**, the solid growth of its manufacturing sector persisted in April, according to Nikkei Philippines Manufacturing PMI. This optimism prompted manufacturers to increase employment and purchases. The index stood at 53.3 in April, down slightly from 53.8 a month earlier. The slight drop reflects a lesser rate of expansion in production, new business and job creation. The domestic market was reported to be the main factor behind manufacturing growth as demand for exports had just moderate growth in April.

Africa

In **Egypt**, the Egyptian pound depreciated 2.1% m-o-m vs. the US dollar in April, following March's depreciation of 4.4%. Inflation continued to increase by a very high rate in March, rising by 32.5% y-o-y as a result of the sharp currency depreciation seen since November 2016. Business conditions in the country's non-oil private sector remained in the contraction territory in April. The PMI reading stood at 47.4 in April, up from 45.9 in March. The survey confirmed the persistent decline in output and new orders but also showed a rise in exports for the first time in approximately two years.

In **South Africa**, the rand lost 4.1% m-o-m of its value vs. the US dollar in April, signalling the highest level of depreciation since May 2016. The reserve bank of South Africa kept its policy rate unchanged at 7.0% in April, while inflation eased slightly to a 6.1% y-o-y in March, down from 4.5% in February. Business conditions in the private sector posted a minor improvement last month as activities slowed close to the neutral PMI line. The Standard Bank South Africa PMI fell to 50.3 in April, down from March's 50.7.

Latin America

In **Argentina**, the central bank's monetary policy target rate remained unchanged in March at 24.75%. Meanwhile, the CPI increased 2.4% m-o-m in March, up from a largely similar rate in the previous month. The bank's inflation target is 5.0%. The rate of increase in retail sales slowed in February to 16.3% y-o-y, down from the rate of more than 20% recorded since April 2013.

In **Chile**, the central bank reduced its benchmark interest rate by 25 basis points to 2.75% in April, signalling the lowest interest rate since October 2010. Inflation remained within the central bank's target boundaries of 2.0% and 4.0%. In addition, inflation posted a 2.7% increase in February and March. As economic activities remain muted and inflation is projected to stay within the target limits, the reduction was needed to lend support to economic growth before the middle of the year.

Transition region

A solid expansion in production and the fastest growth in new business in 35 months, together with muted input inflation, have reinforced the manufacturing sector in the **Czech Republic** in April, according to the Markit Czech Republic Manufacturing PMI. The index registered 57.5 in April, which was similar to March's reading. The index showed a sharp acceleration in export orders, which were seen at their quickest pace since the beginning of 2015. The Czech currency appreciated slightly vs. the euro in April, rising by 0.7% m-o-m after being completely stable in the previous two months. Inflation stood at 2.6% y-o-y in March, its highest reading since November 2012.

Oil prices, US dollar and inflation

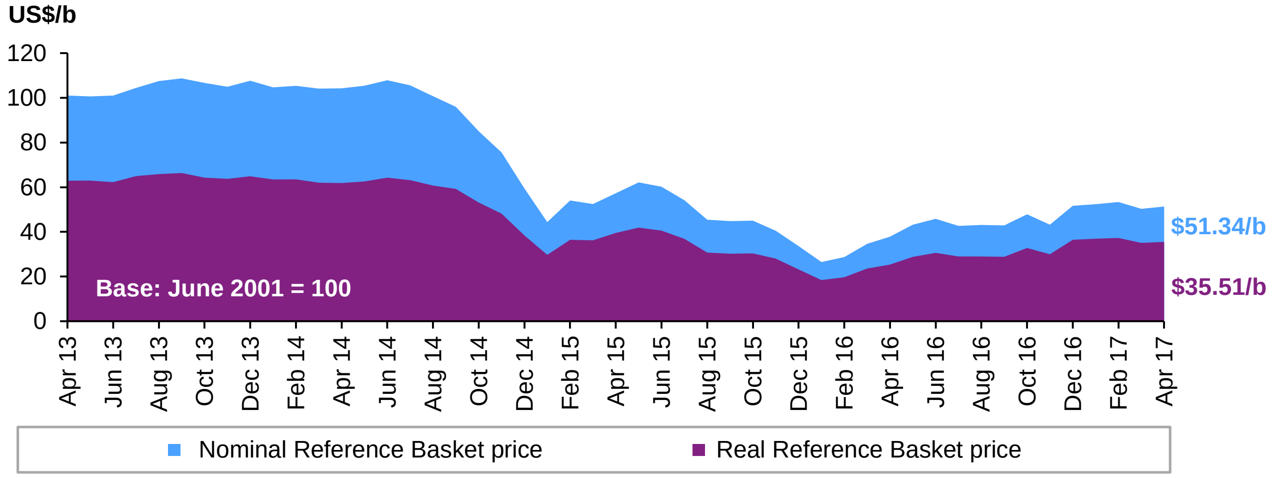
The **US dollar** generally declined in April, against both major and emerging market currencies, especially in the first half of the month following data showing some deceleration in the US economy in 1Q17. This translated into a downward adjustment to market expectations for the path of interest rate increases by the US Fed. On average, the dollar declined by 2.6% against the Japanese yen, but in the second half of the month it reversed some of the losses following receding geopolitical concerns. The dollar lost 0.3% on average against the euro but, after the results of the first round of the French presidential elections the pace of decline increased. Meanwhile, the dollar was relatively flat on average against the Swiss franc, but it declined against the pound sterling by an average of 2.4% – especially after the UK Prime Minister called for an early election.

The US dollar declined by 0.1% m-o-m on average against the Chinese yuan in April. It decreased by 2.1% m-o-m against the Indian rupee and is down by 5.0% since the beginning of the year. The dollar advanced by 0.3% m-o-m against the Brazilian real and declined by 2.9% m-o-m against the Russian ruble. Against both currencies, the dollar is down by 6.4% and 9.3%, respectively, since the beginning of the year.

Against NAFTA trading partners' currencies, the US dollar lost 3.3% on average against the Mexican peso and has declined by 8.6% since the beginning of the year. Meanwhile, the US dollar gained 0.3% against its Canadian counterpart.

In **nominal terms**, the price of the **OPEC Reference Basket (ORB)** increased by $1.02, or 2.0%, from $50.32/b in March to $51.34/b in April. In real terms, after accounting for inflation and currency fluctuations, the ORB increased to $35.51/b from $35.16/b (base June 2001=100). Over the same period, the US dollar declined by 0.8% against the import-weighted modified Geneva I + US dollar basket[1], while inflation advanced 0.2%.

Graph 3 - 29: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price[1]



Source: OPEC Secretariat.

[1] *The 'modified Geneva I + US$ basket' includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.*

World Oil Demand

World oil demand for 2016 was revised up by around 65 tb/d to reflect the most recent data with the most notable change being in OECD Europe. Total world oil demand growth for 2016 stood at 1.44 mb/d, and total oil consumption averaged 95.12 mb/d. In 2017, world oil demand is anticipated to grow in line with the previous report despite some positive and negative revisions in 1Q17. Oil demand growth is projected to rise by around 1.27 mb/d, with total oil consumption reaching 96.38 mb/d.

World oil demand in 2016 and 2017

Table 4 - 1: World oil demand in 2016, mb/d

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	24.59	24.49	24.67	25.01	24.77	24.73	0.14	0.57
of which US	*19.84*	*19.78*	*20.00*	*20.21*	*20.05*	*20.01*	*0.17*	*0.84*
Europe	13.75	13.67	13.98	14.49	14.07	14.05	0.30	2.22
Asia Pacific	8.04	8.55	7.64	7.79	8.31	8.07	0.04	0.44
Total OECD	**46.38**	**46.71**	**46.29**	**47.29**	**47.14**	**46.86**	**0.48**	**1.04**
Other Asia	12.28	12.75	12.93	12.64	13.09	12.85	0.57	4.64
of which India	*4.05*	*4.54*	*4.29*	*4.13*	*4.58*	*4.39*	*0.34*	*8.30*
Latin America	6.56	6.25	6.49	6.76	6.37	6.47	-0.09	-1.35
Middle East	7.97	7.98	7.79	8.37	7.74	7.97	0.00	-0.04
Africa	3.99	4.12	4.09	4.03	4.14	4.10	0.10	2.59
Total DCs	**30.81**	**31.11**	**31.31**	**31.80**	**31.34**	**31.39**	**0.58**	**1.89**
FSU	4.62	4.49	4.37	4.73	5.05	4.66	0.04	0.88
Other Europe	0.67	0.68	0.65	0.68	0.77	0.70	0.02	3.52
China	11.19	11.12	11.51	11.49	11.89	11.51	0.31	2.79
Total "Other regions"	**16.49**	**16.30**	**16.53**	**16.91**	**17.71**	**16.86**	**0.38**	**2.28**
Total world	**93.68**	**94.12**	**94.13**	**96.00**	**96.19**	**95.12**	**1.44**	**1.53**
Previous estimate	93.68	94.07	94.05	95.94	96.12	95.05	1.38	1.47
Revision	0.00	0.05	0.08	0.05	0.08	0.06	0.06	0.07

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

OECD

Based on the latest available data, oil demand growth in the OECD region was revised slightly lower by around 12 tb/d in 2017, with all revisions taking place in 1Q17. The lower-than-expected data in OECD Americas due to slower gasoline demand necessitated a downward revision (+0.1 mb/d in 1Q17); this was partially counterbalanced by an upward revision (+50 tb/d in 1Q17) in OECD Europe as weather conditions turned out to be better than initially expected.

To reflect the most up-to-date data, OECD oil demand growth in 2016 was adjusted higher by 20 tb/d with the bulk of the positive changes attributed to the better-than-initially-expected oil demand growth in OECD Europe. Oil demand data in OECD Europe for 2016 outperformed initial projections, despite high taxation for oil and the high baseline of comparison of 2016. The low oil price environment and improving economic conditions across the region, with positive vehicle sales and colder weather conditions in 2016 were the major factors behind this upward adjustment. As a result, an upward adjustment of 58 tb/d was carried out. OECD Americas was adjusted lower (-45 tb/d in 2016), while OECD Asia Pacific was marginally

(+7 tb/d). It is worth highlighting that the bulk of the positive upward adjustment for the OECD regions were seen in 4Q16 (+70 tb/d).

Table 4 - 2: World oil demand in 2017*, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16 Growth	%
Americas	24.73	24.61	24.83	25.26	24.93	24.91	0.17	0.70
of which US	*20.01*	*19.81*	*20.09*	*20.42*	*20.19*	*20.13*	*0.13*	*0.63*
Europe	14.05	13.80	14.06	14.56	14.13	14.14	0.08	0.60
Asia Pacific	8.07	8.52	7.62	7.76	8.29	8.05	-0.02	-0.30
Total OECD	**46.86**	**46.93**	**46.50**	**47.58**	**47.35**	**47.09**	**0.23**	**0.49**
Other Asia	12.85	12.97	13.30	13.00	13.47	13.18	0.33	2.57
of which India	*4.39*	*4.53*	*4.37*	*4.32*	*4.81*	*4.51*	*0.12*	*2.74*
Latin America	6.47	6.30	6.54	6.82	6.46	6.53	0.06	0.95
Middle East	7.97	8.11	7.91	8.45	7.85	8.08	0.11	1.36
Africa	4.10	4.23	4.19	4.14	4.26	4.20	0.11	2.64
Total DCs	**31.39**	**31.60**	**31.93**	**32.41**	**32.04**	**32.00**	**0.61**	**1.94**
FSU	4.66	4.57	4.43	4.80	5.12	4.73	0.07	1.51
Other Europe	0.70	0.71	0.67	0.70	0.79	0.72	0.02	3.15
China	11.51	11.63	11.80	11.78	12.17	11.84	0.34	2.93
Total "Other regions"	**16.86**	**16.90**	**16.90**	**17.28**	**18.08**	**17.29**	**0.43**	**2.54**
Total world	**95.12**	**95.44**	**95.33**	**97.27**	**97.47**	**96.38**	**1.27**	**1.33**
Previous estimate	95.05	95.39	95.25	97.22	97.40	96.32	1.27	1.33
Revision	0.06	0.05	0.08	0.05	0.08	0.06	0.00	0.00

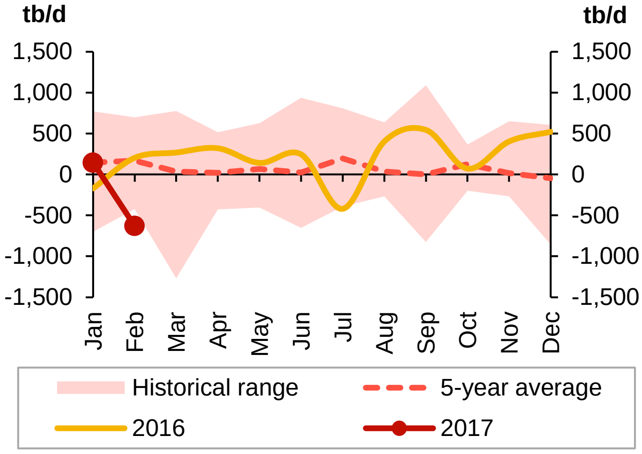
*Note: * 2017 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

OECD Americas

US

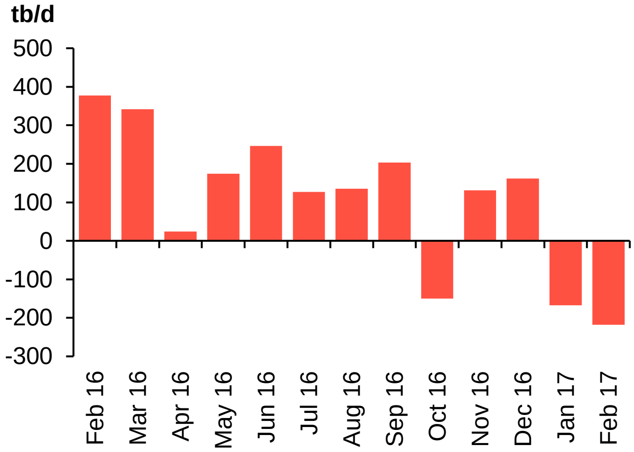
The most recent monthly **US oil demand** data for February 2017 provided no surprises compared to previously available preliminary weekly data, which already implied a bearish picture.

Graph 4 - 1: Yearly oil demand growth in OECD Americas



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

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



Source: US Energy Information Administration.

Oil demand in February fell by approximately 0.5 mb/d or 2.4% as compared to the same month last year, due to various factors and in line with the slowing growth in the US economy in the 1Q. The bulk of oil demand losses were attributed to gasoline, whose requirements fell by 0.2 mb/d y-o-y, mainly as a result of the extremely high baseline registered in the same month last year. February 2016 experienced remarkable 0.6 mb/d growth, y-o-y, in gasoline demand, the highest monthly growth since May 1978. Distillate demand also fell, mainly as a result of unusually warm temperatures, both as compared to the historical norm, as well as y-o-y. Jet fuel requirements remained flat y-o-y, while residual fuel demand increased sharply and partly offset the overall losses.

Preliminary March and April 2017 data based on weekly figures show a return to an upward trend with industrial and, to some extent, road transportation fuels, notably distillates and motor gasoline, accounting for the bulk of these increases. While 2017 US oil demand remains strongly dependent on the development of the US economy, the risks continue to be rather skewed to the upside compared to last month's *MOMR*, with the low oil price environment being a significantly influential variable. Trends in vehicle sales are in line with expected upward potentials, particularly the healthy growth of sport utility vehicles (SUVs) and pickup sales in 2016. Nevertheless, there are also some downside risks that may cap oil demand growth, such as fuel substitution and vehicle efficiencies.

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

			Change 2017/16	
	Feb 17	Feb 16	tb/d	%
Propane/propylene	1,321	1,490	-169	-11.3
Gasoline	8,988	9,206	-218	-2.4
Diesel oil	3,905	3,959	-54	-1.4
Jet/kerosene	1,525	1,525	0	0.0
Fuel oil	270	200	70	35.0
Other products	3,179	3,300	-121	-3.7
US 50	**19,188**	**19,680**	**-492**	**-2.5**
US territories	**291**	**277**	**15**	**5.3**
Total	**19,479**	**19,957**	**-477**	**-2.4**

Sources: US Energy Information Adminstration and OPEC Secretariat.

Canada

The latest data for February 2017 showed overall declines in **Canada's oil demand**, particularly for LPG and naphtha, partially as a result of fuel substitution. The overall declines have, however, been substantially offset by solid growth in demand for gasoline, jet/kerosene and diesel oil, in line with increasing industrial activities, colder temperature, vehicle sales, which were on an upward trend during the first two months of 2017.

The projection for 2017 Canadian oil demand remains unchanged, pointing towards an increase y-o-y.

Mexico

In **Mexico**, March 2017 was another declining month for oil demand and was characterised by falling needs for LPG and gasoline, which have been partly offset by rising demand for the remaining petroleum product categories. Increases in demand for residual fuel oil, diesel oil and jet kerosene were particularly solid; for the LPG requirements decline, fuel substitution was the principal underlying factor, while the general economy stood behind bearish demand for gasoline.

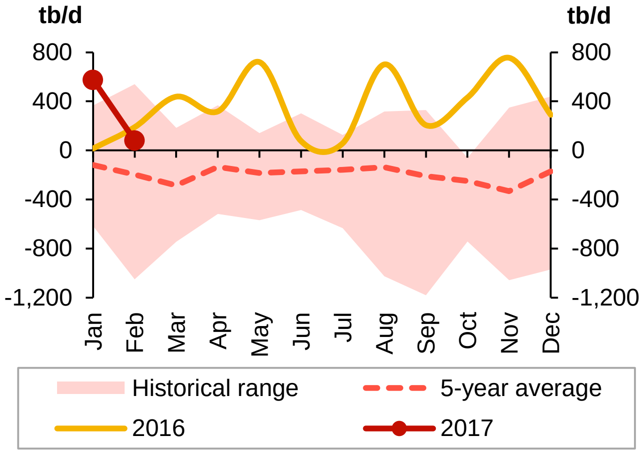
In 2016, **OECD Americas oil demand** grew by 0.14 mb/d compared to 2015. In 2017, OECD Americas oil demand is projected to grow by 0.17 mb/d compared to 2016.

OECD Europe

European oil demand remained resilient during 1Q17 with implied growth of 0.13 mb/d, following solid demand in the previous years. The main reasons behind these latest positive developments are the improving economy in large parts of the continent, colder weather during 1Q17 and to some extent the low oil price environment. The road transportation sector accounts for the bulk of growth in oil usage and relates mostly to diesel oil, also being supported by continuing robust vehicle sales. The aviation sector also grew strongly in the region, lifting demand for aviation fuels, notably jet/kerosene.

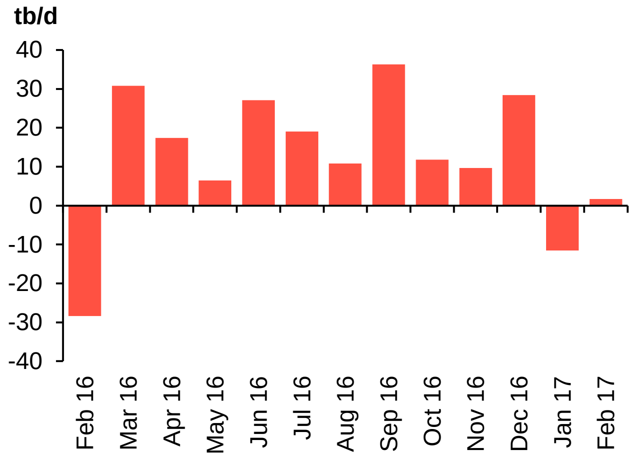
Preliminary March 2017 **Big 4** total oil demand data indicates, however, a decrease of around 0.07 mb/d y-o-y, with requirements for all main petroleum categories declining, except jet/kerosene. Within the Big 4, 2017 March oil demand grew only in Italy, as the UK, Germany and France showed falling oil demand, y-o-y.

Graph 4 - 3: Yearly oil demand growth in OECD Europe



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

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



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

The factor that could further amplify European oil demand in 2017 is the improving economy, which consequently would lift specific oil demand-related sectors, such as the industrial and transportation sectors. The latter of which relates closely to the region's auto market, which has remained positive for almost three years. The general expectations for the region's oil demand during 2017 have been revised upwards since last month's projections with additional consideration for the risks pointing to the downside.

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

			Change	
	Mar 17	Mar 16	tb/d	%
LPG	502	511	-8	-1.7
Naphtha	709	711	-2	-0.3
Gasoline	1,053	1,061	-8	-0.7
Jet/kerosene	742	729	13	1.8
Diesel oil	3,326	3,371	-46	-1.4
Fuel oil	266	273	-7	-2.7
Other products	589	599	-10	-1.7
Total	**7,187**	**7,256**	**-69**	**-1.0**

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

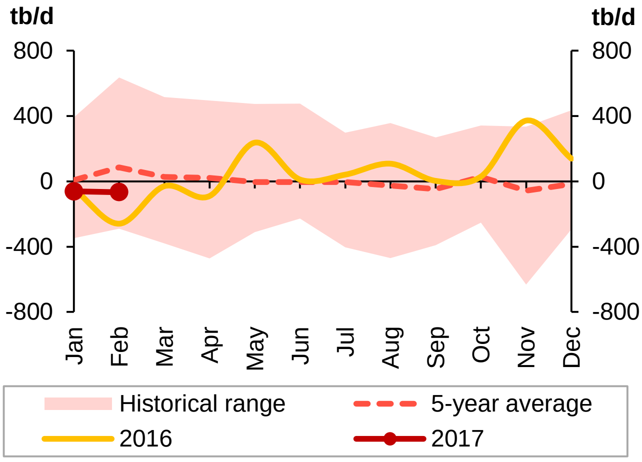
In 2016, **European oil demand** grew by 0.30 mb/d, while oil demand in 2017 is projected to increase by a lesser extent, by 0.08 mb/d.

OECD Asia Pacific

Japan

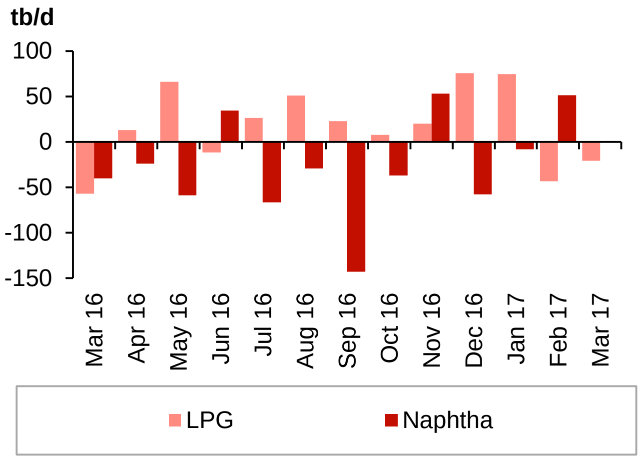
Japan's oil demand preliminary March 2017 figures, based on data from the Japanese Ministry of Economy, Trade and Industry (METI), decreased 3.8% y-o-y, with falling requirements in all the main product categories with the only exception being naphtha and jet/kerosene. Demand for the latter petroleum product category remained flat y-o-y. Oil requirements in crude and fuel oil for electricity generation continued to fall as a result of warmer weather in combination with fuel substitution with other energy commodities. Declining March 2017 oil demand was very much in line with the overall oil demand picture in 1Q17 and the developments in the country's economy.

Graph 4 - 5: Yearly oil demand growth in OECD Asia Pacific



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

Graph 4 - 6: Japanese LPG and naphtha demand, y-o-y change



Sources: Ministry of Economy Trade and Industry of Japan, Joint Organizations Data Initiave and OPEC Secretariat.

The outlook risks for 2017 remain skewed to the downside as a result of less optimistic economic forecasts and the likelihood that some additional nuclear plants in the country will restart their operations.

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

			Change	
	Mar 17	Mar 16	tb/d	%
LPG	498	519	-21	-4.0
Naphtha	794	771	24	3.1
Gasoline	880	906	-26	-2.9
Jet/kerosene	515	512	3	0.0
Diesel oil	588	613	-25	-4.0
Fuel oil	448	547	-99	-18.1
Other products	73	67	6	8.2
Direct crude burning	64	77	-13	-16.9
Total	**3,861**	**4,012**	**-151**	**-3.8**

Source: Ministry of Economy Trade and Industry of Japan.

South Korea

In **South Korea**, February 2017 oil demand came up growing however, it was similar to January 2017 and substantially lower than the growth observed in 2016, which was only 0.02 mb/d, y-o-y. Flourishing petrochemical activities, which called for strongly increasing LPG requirements, were accompanied by big demand for petroleum products in the industrial and transportation sectors, notably diesel and jet/kerosene, but have been partly offset by declining residual fuel oil requirements. The risk for the 2017 South Korean oil demand outlook remains skewed to the upside compared to last month's projections.

In 2016, **OECD Asia Pacific** oil demand grew slightly by 0.04 mb/d for the first time since 2012. This trend will, however, switch to the downside in 2017, expecting y-o-y declines by 0.02 mb/d.

Non-OECD

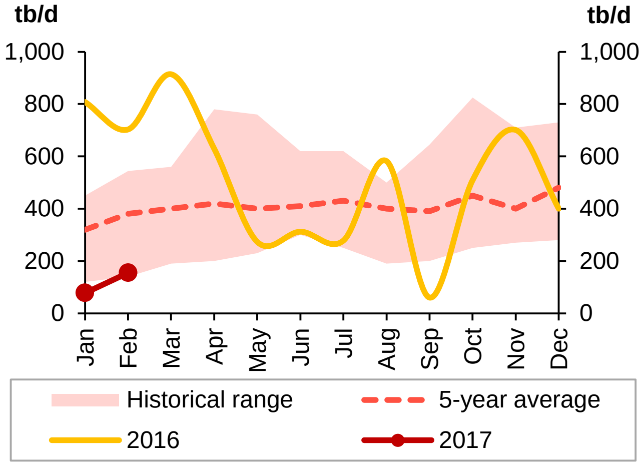
Based on the latest available data, oil demand growth in **non-OECD regions** was revised slightly higher by around 12 tb/d in 2017, mainly in China (25 tb/d) partially offsetting the downward revision in Other Asia (-12 tb/d), with all of the revisions falling in 1Q17. The better-than-expected demand for transportation fuels in China, along with the uptick in petrochemical feedstock usage, prompted the upward revision (0.10 mb/d in 1Q17). This was partially counterbalanced by the downward revisions in Other Asia (-50 tb/d in 1Q17) due to the slower oil demand growth in India on the back of the demonetisation policy. Reflecting the most up-to-date data, oil demand growth in Non-OECD was adjusted higher by 45 tb/d for 2016 with the bulk of the positive changes attributed to better-than-initially-expected oil demand growth in Other Asia (+32 tb/d in 2016). The better-than-expected performances of India, Philippines, Singapore and Thailand, amongst most of the countries monitored in the regions, have positively contributed to these upward revisions in 2016 oil demand growth data.

Other Asia

India

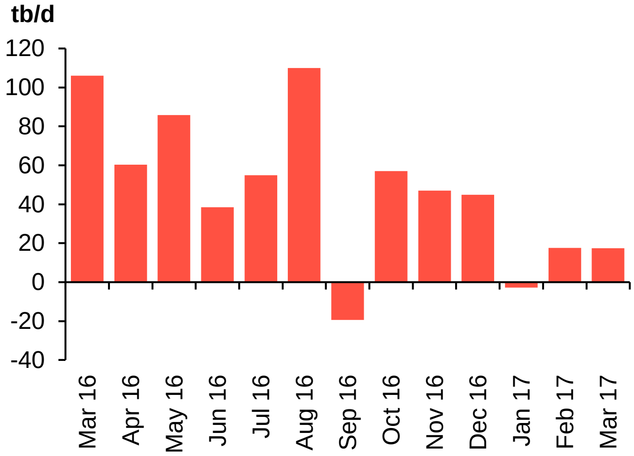
Indian oil consumption exhibited slower-than-anticipated momentum in 1Q17 with March 2017 data illustrating declining oil demand requirements, marking the third consecutive decline. However, the magnitude of the decline eased from the sharp drops seen in the first two months of 2017. Oil demand in March declined by around 30 tb/d, improving from the average decline levels of January and February of around 0.17 mb/d, while total oil consumption in March reached 4.53 mb/d. Despite the overall decline, the product demand growth performance was mostly positive, with the exception of jet/kerosene and fuel oil, which dropped by 8% and 23%, y-o-y, respectively.

Graph 4 - 7: Yearly oil demand growth in Other Asia



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

Graph 4 - 8: Indian gasoline demand, y-o-y change



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

Demand for LPG and gasoline were in the positive territory in terms of growth, while diesel oil was chiefly flat. LPG continues to be encouraged by the residential sector as LPG supply expansion projects to households remained the driving supporter for LPG requirements in India. However, growth was moderated from the level seen in previous months as the baseline started to negatively impact growth levels. LPG rose by 13 tb/d, or just below the 2% y-o-y. In contrast, jet/kerosene continued to lose ground to LPG as a major household fuel in India, declining for the seventh consecutive month, and it is not expected to show any significant increase in the near future. Gasoline increased by 17 tb/d, or slightly less than 3% y-o-y, encouraged by lower retail prices as well as the continuation of healthy two-wheeler sales, which consume gasoline as fuel. According to the Society of Indian Automobile Manufacturers (SIAM), passenger vehicle sales grew by more than 10% to reach 282,500 units in March, up from 256,900 units in the same month of last year. Additionally, two-wheeler sales also increased marginally, adding around 0.3% y-o-y. However, motorcycle sales dipped by around 3.3% to reach 915,200 units. Diesel oil registered a modest rise in March, the first increase in 2017, up by 0.3% y-o-y. Support stemmed from the construction sector as the performance improved after the sharp hit from the demonetisation policy, at the end of 2016. Fuel oil demand growth also decreased in March 2017, recording the third consecutive decline. This decline was a result of lower-than-anticipated consumption in the power sector as well as the higher baseline of comparison. Demand for the product declined by around 73 tb/d y-o-y.

Table 4 - 6: Indian oil demand by main products, tb/d

			Change	
	Mar 17	Mar 16	tb/d	%
LPG	733	719	13	1.9
Gasoline	619	601	17	2.9
Jet/kerosene	278	303	-24	-8.0
Diesel oil	1,644	1,642	2	0.1
Fuel oil	240	313	-73	-23.3
Other products	1,017	981	35	3.6
Total	**4,530**	**4,559**	**-29**	**-0.6**

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

Indonesia

In **Indonesia**, the latest available February 2017 data highlighted an overall increase of around 15 tb/d, or 1% y-o-y. Demand for transportation fuels were on the rise during month and provided support to increasing oil requirements in Indonesia. Jet /kerosene and gasoline both increased, adding around 17% and 3% y-o-y, respectively.

Going forward, risks for Other Asia's oil demand in 2017 remain balanced as a result of improving economic activities of the biggest oil consumer in the region, India, and the general steady economic performance of some countries in the region.

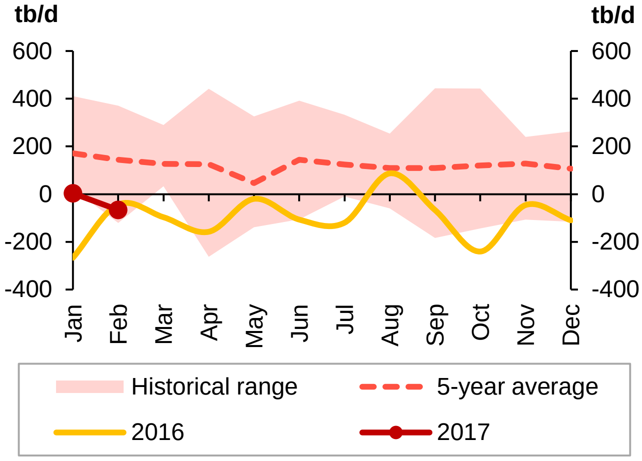
Other Asia's oil demand increased by 0.57 mb/d in 2016 and by 0.33 mb/d in 2017.

Latin America

Brazil

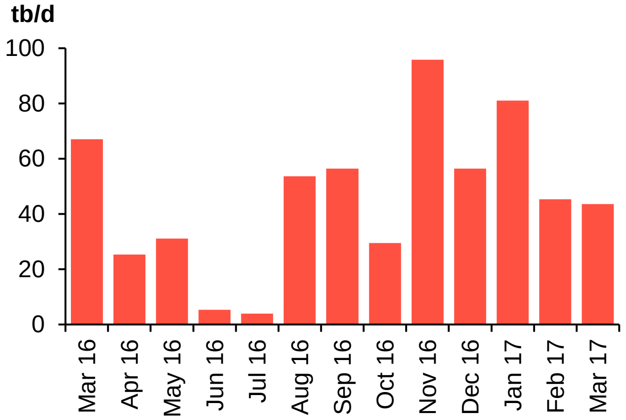
Brazil's oil demand grew during March 2017, rising by 2% compared to the same period in 2016. The increase was led by LPG, gasoline and diesel oil, which rose by around 6.0%, 5.7% and 2.1%, respectively.

Graph 4 - 9: Yearly oil demand growth in Latin America



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

Graph 4 - 10: Brazilian gasoline demand, y-o-y change



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

Demand for gasoline was stimulated by cheaper gasoline retail prices relative to ethanol, shifting drivers' preferences to consume gasoline. Diesel oil demand growth also increased by around 20 tb/d on the back of improvements in the manufacturing PMI of the country, which, despite remaining in contraction, registered the highest reading of 49.6, up from February's 46.9. Additionally, the lower baseline of comparison also played a role in signalling the gains recorded during the month of March. On the other hand, jet/kerosene and fuel oil demand eased, falling by around 2% each. This could be a result of slower business confidence in the aviation sector and positive developments in hydropower generation, limiting fuel oil consumption in the country.

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

			Change	
	Mar 17	Mar 16	tb/d	%
LPG	240	226	14	6.0
Gasoline	802	759	44	5.7
Jet/kerosene	114	116	-2	-1.8
Diesel oil	984	964	20	2.1
Fuel oil	58	59	-1	-2.1
Alcohol	204	230	-26	-11.1
Total	**2,402**	**2,354**	**49**	**2.1**

*Note: * Inland deliveries.*

Sources: Agência Nacional do Petróleo, Gás Natural e Biocombustíveis of Brazil.

Argentina

Oil consumption in Argentina was flat during the month of February 2017, despite sharp positive and negative gains in the product categories. While jet/kerosene and LPG recorded sharp gains of 13% and 7%, respectively, fuel oil and diesel oil declined by 39% and 1% y-o-y, respectively.

Going forward, risks for 2017 oil demand growth in Latin America are leaning to the upside, mainly due to expectations for improved economic conditions in Brazil. On the other hand, negative notions could result from slower-than-expected development of the overall economy in the region, as well as unexpected weather conditions, which could limit the potential for oil demand growth.

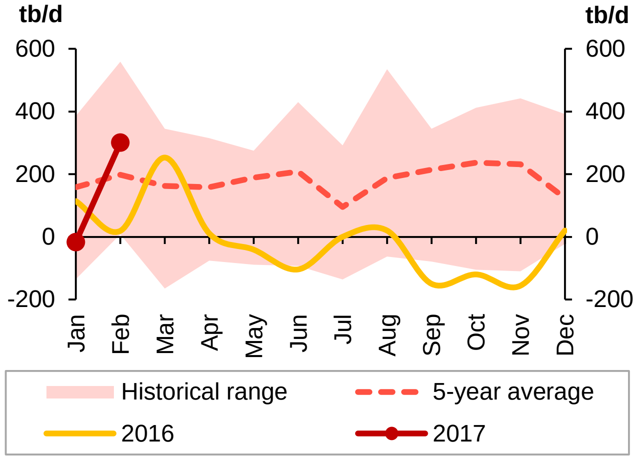
Latin American oil demand declined by 90 tb/d in 2016. During 2017, oil demand growth is forecast to rise by 60 tb/d from the levels seen in 2014.

Middle East

Saudi Arabia

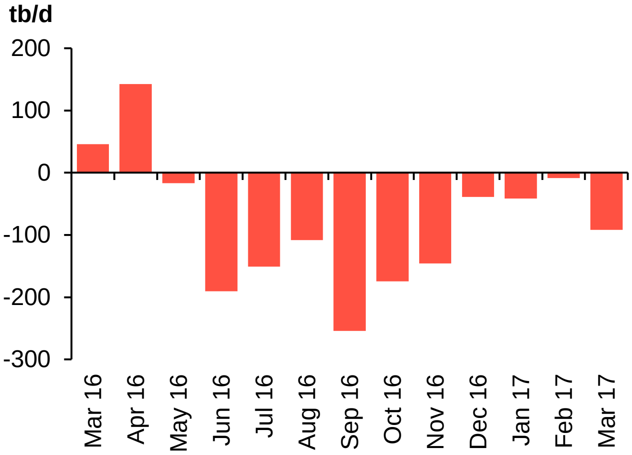
In **Saudi Arabia**, March 2017 oil demand returned to a declining trend as oil demand dropped sharply by 0.24 tb/d or 10% y-o-y, with total oil demand reaching around 2.13 mb/d. On a cumulative basis from January to March, oil demand growth in Saudi Arabia was also in the negative with a decline of 0.12 tb/d, or around 6% y-o-y. Mixed performances were exhibited amongst the product categories, products linked to the power generation sector – namely crude oil for direct burning and fuel oil – fell sharply in the negative, while other fuels were in positive territory, including transportation fuels. Substitution with natural gas, particularly after the commencement of Wasit gas plant, has caused a sharp drop in direct burning of crude, by more than 92 tb/d, which equates to close to 23% y-o-y, pressuring the overall consumption figures of the country. Total demand for direct crude for burning was at 0.31 mb/d in March. Fuel oil recorded a similar trend as the product declined by around 22% y-o-y due to less power generation consumption during colder weather when air conditioning is less needed. Furthermore, diesel oil also declined, dropping by around 15% y-o-y, as a result of less consumption in the transportation and industrial sectors. On the other hand, LPG, gasoline and jet/kerosene increased during the month by around 11%, 7% and 9% y-o-y, respectively.

Graph 4 - 11: Yearly oil demand growth in Middle East



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

Graph 4 - 12: Saudi Arabian direct crude burning, y-o-y change



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

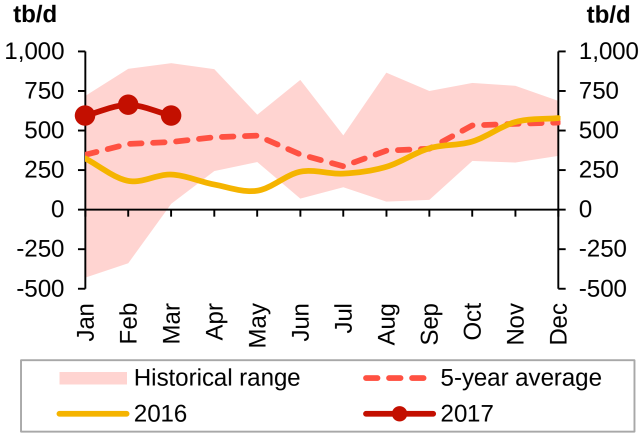
Going forward, oil demand growth in the Middle East faces a number of challenges, the largest being linked to substitution with natural gas as well as partial subsidy removal in Saudi Arabia, along with governmental programmes geared towards expanding the alternative fuels base. On the other hand, developments in economic activities in various countries in the region should lend support to oil demand growth in 2017.

For 2016, **Middle East oil demand** was rather flat, while oil demand in 2017 is projected to increase by 0.11 mb/d.

China

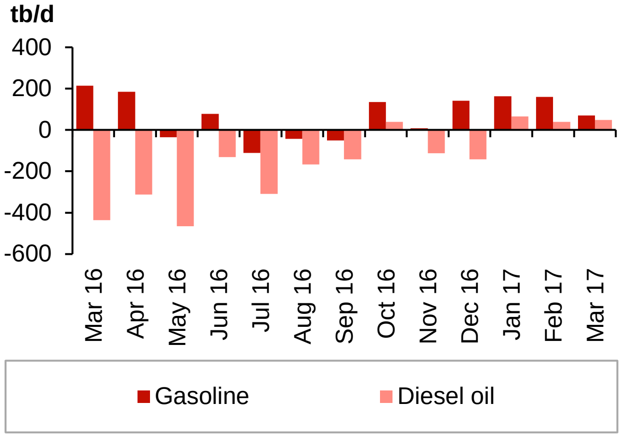
In **China**, based on preliminary data, y-o-y growth in oil consumption remained firm at around 0.5 mb/d in March 2017, posting the third consecutive solid growth since the start of 2017. The bulk of this growth continues to be focused on the transportation and petrochemical sectors.

Graph 4 - 13: Chinese apparent oil demand, y-o-y change



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

Graph 4 - 14: Chinese diesel oil and gasoline demand, y-o-y change



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

Jet fuel demand surged in March, rising by around 0.17 mb/d or more than 6% y-o-y. Jet fuel demand was buoyed by air passenger traffic during the Qing Ming holiday, in addition to the increase in per capita income levels, allowing for a rise in domestic tourism. Furthermore, gasoline showed positive growth, with demand increasing by more than 70 tb/d compared to the same period in 2016. This level of growth is sharply lower than the average of the first two months of 2017 when oil gasoline demand growth hit around 0.16 mb/d y-o-y. The preliminary cause of this moderation in gasoline consumption is decreased driving during the driving ban in northern China at the beginning of the month, which consequently improved slightly towards the end of March as the Qing Ming holidays supported the increase in driving activities.

According to the China Association of Automobile Manufacturers (CAAM), sales of passenger cars reached 2.1 million units in March, increasing by 1.7% y-o-y. For 1Q17, the sale of passenger cars was around 5.9 million units or 4.6% higher, y-o-y. As for passenger cars by type, SUVs still demonstrated solid growth with sales up by around 21% y-o-y. Multipurpose vehicle (MPV) sales witnessed a decline of around 17% y-o-y. In the petrochemical sector, LPG consumption, specifically propane, rose by around 12% in March, compared to the same month in 2016, implying healthy demand in the petrochemical sector.

Although diesel consumption was slower at the beginning of March as the government announced driving and industrial bans and prohibited transportation of hazardous materials, demand for diesel picked up in the second half of March, encouraged by an increase in agricultural activities.

Going forward, the consumption outlook in China for the remainder of 2017 continued to be balanced. Downside risks are linked to slower industrial activities as well as a speed-up in policies encouraging reductions in transportation fuels. On the other hand, the expansion in the petrochemical sector, especially in PDH plants and expansion projects in the refinery sectors, provide upside potential for China's oil demand growth.

For 2016, **China's oil demand** grew by 0.31 mb/d, while oil demand in 2017 is projected to increase by 0.34 mb/d.

World Oil Supply

Preliminary data indicates that world oil supply fell by 0.41 mb/d in April to average 95.81 mb/d. However, global oil production was 831 tb/d higher than a year ago and increased by 363 tb/d y-o-y in 1Q17.

Non-OPEC oil supply in 2016 was revised down by 18 tb/d due to a downward revision of Russian oil supply in 4Q16 to average 57.30 mb/d – indicating a y-o-y decline of 0.71 mb/d. In contrast, oil supply in 2017 was revised up by 0.36 mb/d to average 58.25 mb/d – representing y-o-y growth of 0.95 mb/d − following changes in all quarters, mostly in the US, and based on US actual production data from February and new forecasts for crude oil output.

In 2017, US growth forecast was revised up again, rising by 0.28 mb/d, to average 0.82 mb/d. Similarly, but to a lesser extent, Canada, Brazil and Kazakhstan were revised up, while the growth forecasts for Mexico, China, Azerbaijan, Indonesia, Oman and Colombia were in decline.

OPEC NGLs and non-conventional oil production in 2016 revised down by 34 tb/d to average 6.05 mb/d, indicates a growth of 0.11 mb/d y-o-y, while for 2017, the growth forecast revised up by 40 tb/d to 0.17 mb/d to average 6.22 mb/d.

In April, OPEC production decreased by 18 tb/d, according to secondary sources, to average 31.73 mb/d.

Non-OPEC supply in 2016 and 2017

Table 5 - 1: Non-OPEC oil supply in 2016, mb/d

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	21.07	21.00	20.08	20.49	20.82	20.60	-0.47	-2.23
of which US	*14.04*	*13.81*	*13.68*	*13.42*	*13.58*	*13.62*	*-0.42*	*-2.99*
Europe	3.77	3.92	3.74	3.64	3.92	3.80	0.03	0.83
Asia Pacific	0.46	0.44	0.42	0.45	0.41	0.43	-0.03	-7.48
Total OECD	**25.30**	**25.36**	**24.23**	**24.58**	**25.14**	**24.83**	**-0.47**	**-1.87**
Other Asia	3.70	3.78	3.70	3.69	3.72	3.72	0.02	0.49
Latin America	5.20	4.96	5.07	5.19	5.21	5.11	-0.10	-1.86
Middle East	1.27	1.27	1.28	1.29	1.29	1.28	0.01	0.78
Africa	2.13	2.10	2.05	2.11	2.14	2.10	-0.03	-1.52
Total DCs	**12.31**	**12.11**	**12.10**	**12.29**	**12.35**	**12.21**	**-0.10**	**-0.82**
FSU	13.69	13.95	13.73	13.67	14.09	13.86	0.17	1.22
of which Russia	*10.85*	*11.07*	*10.98*	*11.03*	*11.25*	*11.08*	*0.24*	*2.18*
Other Europe	0.14	0.13	0.13	0.13	0.13	0.13	0.00	-3.51
China	4.39	4.23	4.12	4.00	3.98	4.08	-0.31	-6.97
Total "Other regions"	**18.22**	**18.32**	**17.98**	**17.80**	**18.20**	**18.07**	**-0.14**	**-0.79**
Total non-OPEC production	**55.83**	**55.79**	**54.31**	**54.66**	**55.70**	**55.11**	**-0.72**	**-1.29**
Processing gains	2.17	2.19	2.19	2.19	2.19	2.19	0.01	0.60
Total non-OPEC supply	**58.00**	**57.97**	**56.49**	**56.85**	**57.88**	**57.30**	**-0.71**	**-1.22**
Previous estimate	58.00	57.97	56.49	56.85	57.95	57.32	-0.69	-1.19
Revision	0.00	0.00	0.00	0.00	-0.07	-0.02	-0.02	-0.03

Source: OPEC Secretariat.

Non-OPEC oil supply in 2016 is estimated to have averaged 57.30 mb/d, representing a decline of 0.71 mb/d over the previous year, and a downward revision of 0.02 mb/d from the last assessment. Within the quarters, non-OPEC oil supply encountered historical downward revisions in 4Q16 by 72 tb/d, only in Russia.

Non-OPEC supply in 2016 saw strong declines in OECD Americas (0.47 mb/d), China (0.31 mb/d), and Developing Countries (0.10 mb/d). Growth was seen in the FSU (0.17 mb/d), driven by robust output from Russia. The estimated oil supply in OECD Americas in 2016 show a decline of 0.47 mb/d compared with a growth of 0.93 mb/d in 2015. The decline was related mostly to the US onshore crude oil output which affected by low oil prices, while the outages of Canadian oil sands production due to wildfire in Alberta and annual natural decline in Mexico which were not due to the price. Chinese crude oil production saw another big decline in 2016 due to reduced onshore performance, mature fields and low investment from the main domestic companies. Moreover, In Latin America, total oil supply was disappointing in 2016 due to the lack of new project implementation in Brazil as well as a higher annual decline in Colombia. In regards to exploration and production (E&P), oil companies continued to cut their spending following the drop in oil prices, resulting in oil discoveries declining to their lowest level in more than 70 years at 2.4 billion barrels in 2016.

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

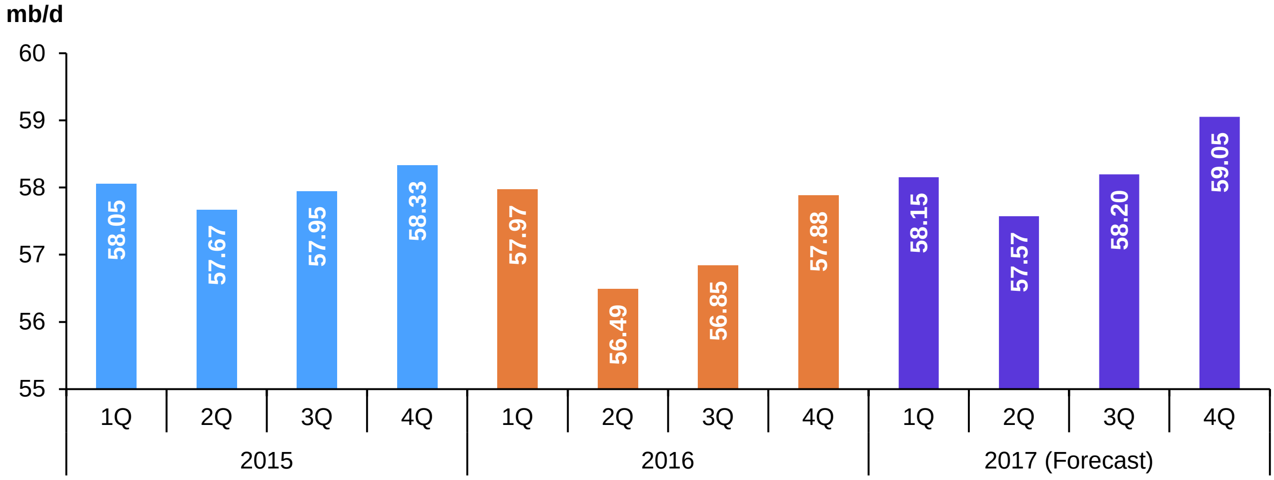
							Change 2017/16	
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
Americas	20.60	21.03	21.08	21.65	22.08	21.46	0.87	4.21
of which US	*13.62*	*13.90*	*14.28*	*14.63*	*14.96*	*14.45*	*0.82*	*6.05*
Europe	3.80	3.96	3.74	3.56	3.84	3.77	-0.03	-0.84
Asia Pacific	0.43	0.38	0.43	0.42	0.39	0.40	-0.02	-5.34
Total OECD	**24.83**	**25.37**	**25.26**	**25.62**	**26.31**	**25.64**	**0.81**	**3.27**
Other Asia	3.72	3.74	3.69	3.66	3.64	3.68	-0.04	-1.08
Latin America	5.11	5.21	5.22	5.25	5.34	5.25	0.15	2.88
Middle East	1.28	1.24	1.22	1.23	1.23	1.23	-0.05	-4.14
Africa	2.10	2.11	2.12	2.19	2.20	2.16	0.05	2.58
Total DCs	**12.21**	**12.30**	**12.25**	**12.33**	**12.40**	**12.32**	**0.11**	**0.89**
FSU	13.86	14.16	13.81	14.01	14.10	14.02	0.16	1.15
of which Russia	*11.08*	*11.28*	*10.97*	*11.18*	*11.21*	*11.16*	*0.07*	*0.67*
Other Europe	0.13	0.13	0.14	0.14	0.15	0.14	0.01	6.68
China	4.08	4.00	3.92	3.90	3.91	3.93	-0.15	-3.70
Total "Other regions"	**18.07**	**18.29**	**17.87**	**18.05**	**18.15**	**18.09**	**0.02**	**0.09**
Total non-OPEC production	**55.11**	**55.96**	**55.38**	**56.00**	**56.86**	**56.05**	**0.94**	**1.70**
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01	0.50
Total non-OPEC supply	**57.30**	**58.15**	**57.57**	**58.20**	**59.05**	**58.25**	**0.95**	**1.66**
Previous estimate	57.32	57.72	57.43	57.83	58.58	57.89	0.58	1.00
Revision	-0.02	0.43	0.15	0.37	0.47	0.36	0.37	0.65

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

For **2017**, **non-OPEC oil supply** is now projected to grow by 0.95 mb/d, up by 373 tb/d from the previous *MOMR*, to average 58.25 mb/d. This is due to higher expectations for US growth – revised up by 285 tb/d – along with higher growth in Canada, Norway, Brazil, Russia, Kazakhstan and China. Preliminary non-OPEC oil supply in April dropped by 440 tb/d m-o-m due to lower production from OECD, Russia and China.

Non-OPEC supply quarterly distribution in 2017 shows consecutive q-o-q increases, except in 2Q17, which is due to the usual non-OPEC seasonal pattern for maintenance. Oil supply in 2H17 is forecast to increase by 0.77 mb/d over 1H17.

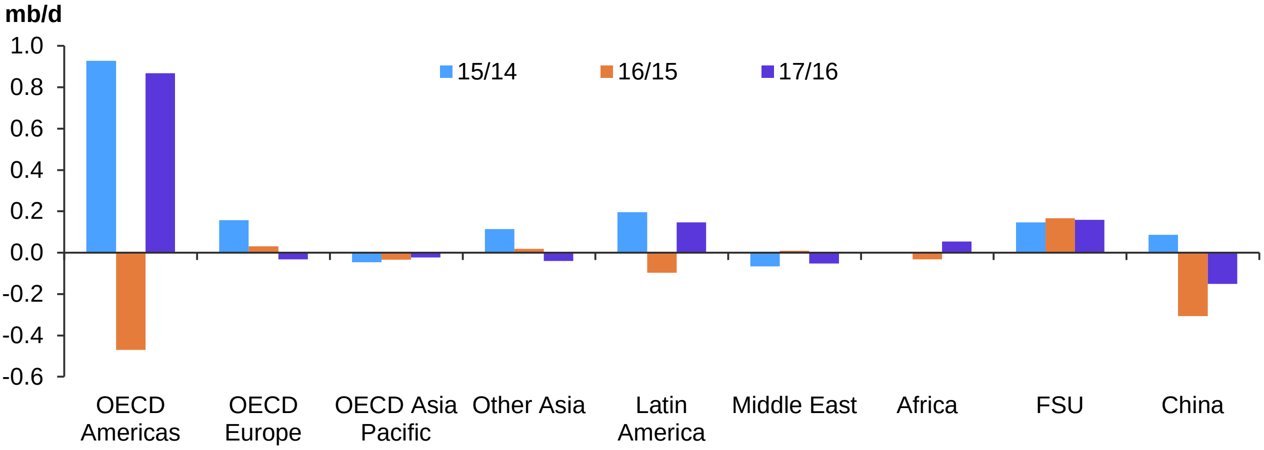
Graph 5 - 1: Non-OPEC quarterly oil supply



Source: OPEC Secretariat.

Regarding regional non-OPEC supply changes, ***Graph 5 - 2*** shows that the main rebound in annual growth will be in OECD Americas, and to some extent, DCs, particularly Latin America and Africa. In ***Graph 5 - 3***, non-OPEC supply quarterly changes are seen in different quarters in 2017.

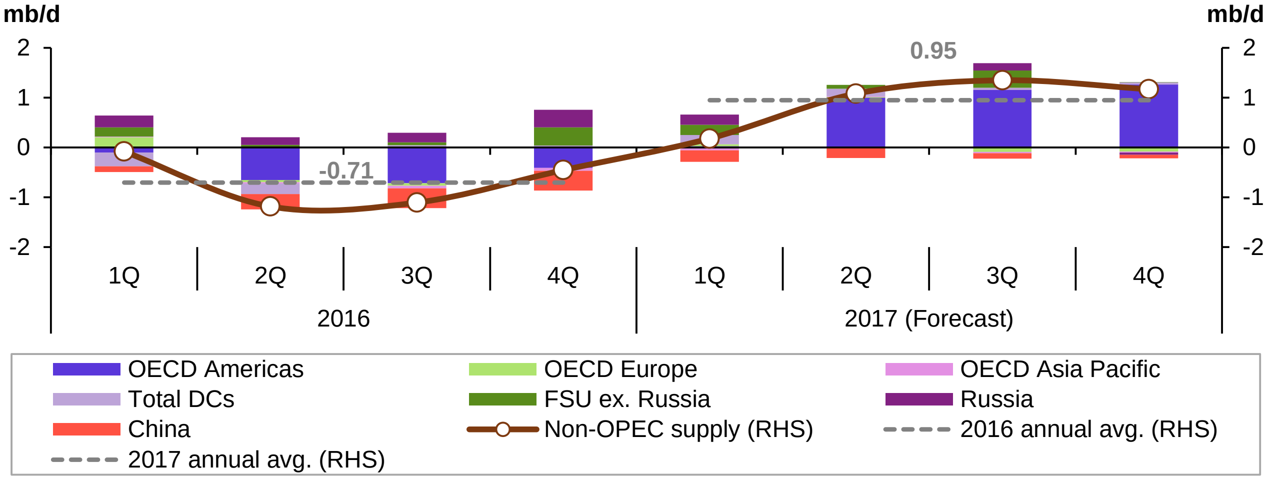
Graph 5 - 2: Regional non-OPEC supply growth, y-o-y change



Note: 2017 = Forecast.
Source: OPEC Secretariat.

On a country-by-country basis, the main contributors to growth in 2017 are expected to be: the US with 0.82 mb/d, Canada with 0.22 mb/d, Brazil with 0.21 mb/d, Kazakhstan with 0.15 mb/d, Africa Other (mainly Ghana) with 0.05 mb/d, Russia with 0.07 mb/d and Congo with 0.03 mb/d. On the flip slide, declines are envisaged in Mexico with 0.17 mb/d, China with 0.15 mb/d, Azerbaijan with 0.06 mb/d and Indonesia with 0.05 mb/d as well as Oman and Colombia, which are anticipated to each decline by 0.04 mb/d.

Graph 5 - 3: Non-OPEC quarterly supply change, 2016-2017, y-o-y change



Source: OPEC Secretariat.

Table 5 - 3: Non-OPEC supply forecast comparison in 2016 and 2017*, mb/d

Region	2016	Change 2016/15	2017	Change 2017/16
OECD Americas	20.60	-0.47	21.46	0.87
OECD Europe	3.80	0.03	3.77	-0.03
OECD Asia Pacific	0.43	-0.03	0.40	-0.02
Total OECD	**24.83**	**-0.47**	**25.64**	**0.81**
Other Asia	3.72	0.02	3.68	-0.04
Latin America	5.11	-0.10	5.25	0.15
Middle East	1.28	0.01	1.23	-0.05
Africa	2.10	-0.03	2.16	0.05
Total DCs	**12.21**	**-0.10**	**12.32**	**0.11**
FSU	13.86	0.17	14.02	0.16
Other Europe	0.13	0.00	0.14	0.01
China	4.08	-0.31	3.93	-0.15
Non-OPEC production	55.11	-0.72	56.05	0.94
Processing gains	2.19	0.01	2.20	0.01
Non-OPEC supply	**57.30**	**-0.71**	**58.25**	**0.95**

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

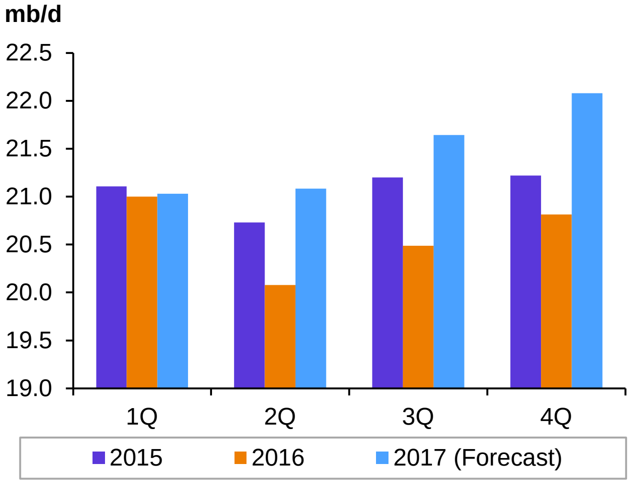
OECD

Total **OECD** liquids supply in 2016 is estimated to contract by 0.47 mb/d to average 24.83 mb/d. In 2017, OECD supply is forecast to average 25.64 mb/d, representing growth of 0.81 mb/d, following an upward revision of 0.31 mb/d.

OECD Americas

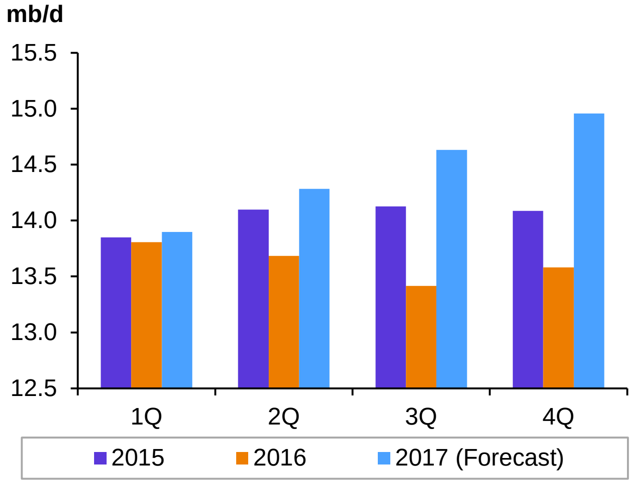
OECD Americas' oil supply in 2016 is estimated to average 20.60 mb/d. This represents a decline of 0.47 mb/d y–o-y. In 2016, oil output fell in the US and Mexico, but it grew in Canada. In 2017, oil supply is expected to grow by 0.87 mb/d to average 21.46 mb/d in the region. This is an upward revision of 294 tb/d and mostly due to higher expected US onshore crude output. Canada is also expected to see robust growth of 0.22 mb/d in 2017, while a decline of 0.17 mb/d is anticipated in Mexico.

Graph 5 - 4: OECD Americas quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 5: US quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

US

US crude oil production averaged 9.03 mb/d in February 2017, and increase of 0.19 mb/d over the previous month, of which 119 tb/d is attributed to oil output growth in the state of Texas, mainly from the Permian Basin, and, to a lesser extent, growth from the Bakken formation in North Dakota as well as in Oklahoma and New Mexico. Oil production declined in GoM and Alaska by 22 tb/d and 3 tb/d, respectively. US NGL output in February increased by 239 tb/d m-o-m to 3.60 mb/d. Other liquids output, mainly biofuels, increased by around 100 tb/d in February m-o-m. Overall, US liquids production increased by more than half a million barrels – the highest growth ever recorded, at 523 tb/d, since January 2013 – to average 13.94 mb/d in February. This was also higher by 125 tb/d y-o-y. It can be expected that any move towards higher prices will likely lead to a resurgence in US tight oil production from the major shale regions.

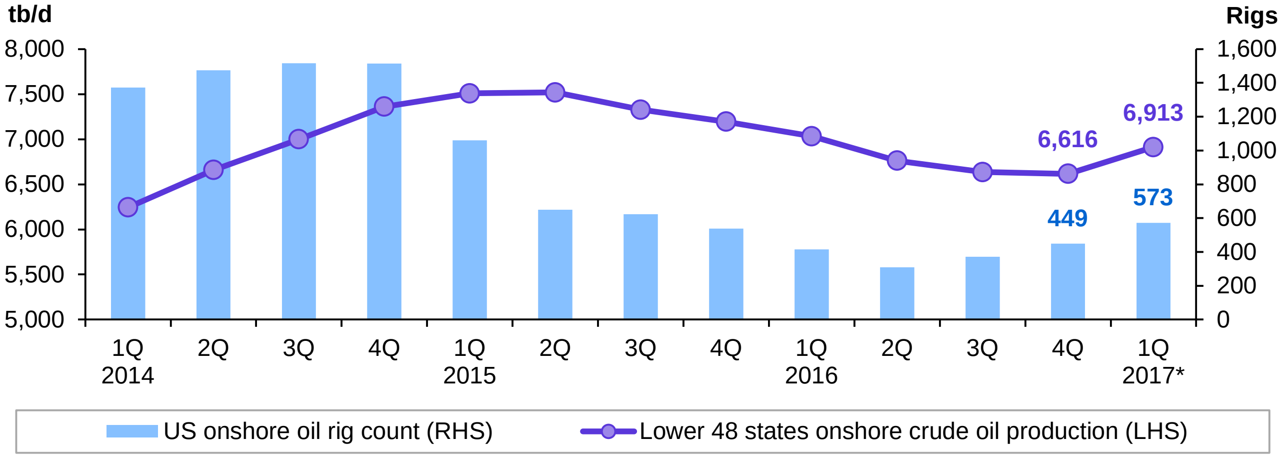
US onshore crude oil output excluding Alaska declined from a peak of 7.52 mb/d in 2Q15 to 6.62 mb/d in 4Q16. Preliminary production data for 1Q17 indicates growth of 100 tb/d q-o-q. Production has since seen an increase of 177 tb/d from October until the end of February 2017 based on monthly data and was up by 255 tb/d over December 2016 based on monthly data for February.

In terms of **US tight oil production**, output declined by 0.59 mb/d from a peak of 4.65 mb/d in March 2015 to average 4.06 mb/d in November 2016. However, with the pick-up in drilling activity, as well as increasing cash flow in the tight oil industry, US tight crude output is expected to rise quickly and increase by 614 tb/d for the year of 2017.

In the GoM, it is estimated that around 1.61 mb/d of crude oil and condensate was produced in 2016, indicating growth of 92 tb/d y-o-y. In 2017, crude oil production is expected to see further growth of 68 tb/d over 2016 to reach at least at 1.68 mb/d. This will come mainly from Thunder Horse Etension project's startup as well as the newly commissioned Julia and Stones oil fields supported for a capacity of 20 tb/d, as well as production ramp-ups such as Jack/St Malo, Na Kika, King, Phoenix, Holstein, Horn Mountain, Delta House, Tubular Bells, Kodiak, Gunflint, Dalmatian, Heidelberg, Lucius, Mars B, Cardamom Deep and Rio Grande, mostly regular crude oil with an API degree greater than 23. Four new small projects – Coelacanth, Odd Job, South Santa Cruz and Barataria – are also expected to start up in 2017.

Capital expenditures by 44 companies who have the most activities in US onshore fields increased by $4.9 billion, or 72%, in 4Q16 compared to 4Q15, according to a financial analysis from EIA. This rise in spending is said to be the largest y-o-y increase for any quarter by this group of companies since at least 1Q12. Higher oil prices are contributing to an increase in upstream earnings for US producers, prompting some companies to increase their investment budgets.

Graph 5 - 6: US lower 48 states onshore crude oil production vs. US onshore oil rig count



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

US total liquids production in 2017 is forecast to grow by 0.82 mb/d y-o-y to average 14.45 mb/d. This forecast has been revised up by 0.28 mb/d this month, compared to last month's *MOMR*, following recent drilling activities in the most prolific tight oil regions, particularly in the Permian and Eagle Ford formations.

In 2017, crude oil production is forecast to grow by 0.56 mb/d after a deduction for annual declines of around 120 tb/d, to average 9.4 mb/d, depending on rig counts, as well as the number of completed wells, following a decline in 2016 of approximately 0.54 mb/d. Declines in onshore conventional crude in 2017 will be somewhat offset by growth of 0.07 mb/d in the GoM, as well as tight crude growth. NGL output is also expected to increase by 0.27 mb/d in 2017 amid an increase in natural gas prices to average 3.75 mb/d. NGL output growth has slowed dramatically in recent months but due to the start-up of a number of new export terminals as well as petrochemical facilities − to stimulate stronger growth of the required feeds such as ethane and LPG. The main component of US oil output – tight oil – is forecast to grow by at least 0.61 mb/d y-o-y to average 4.88 mb/d. The number of drilling rigs and the reactivation of companies' spending are the two most important factors leading to an expected output surge in the coming months.

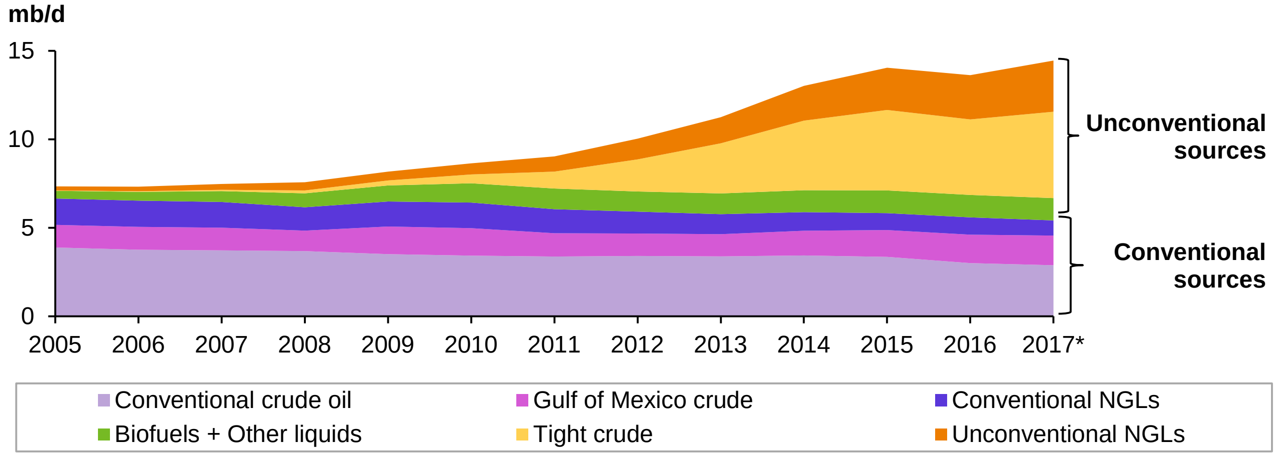
Table 5 - 4: US liquids production breakdown

	2014	2015	Change 2015/14	2016	Change 2016/15	2017	Change 2017/16
Tight crude	3,932	4,545	614	4,266	-279	4,880	614
Gulf of Mexico crude	1,397	1,515	118	1,607	92	1,675	68
Conventional crude oil	3,435	3,355	-80	3,002	-353	2,882	-120
Unconventional NGLs	1,964	2,386	422	2,500	114	2,890	390
Conventional NGLs	1,050	956	-94	978	22	858	-120
Biofuels + Other liquids	1,238	1,283	45	1,268	-15	1,260	-8
US total supply	**13,016**	**14,041**	**1,025**	**13,621**	**-420**	**14,445**	**824**

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

The US liquids production breakdown, y-o-y changes for 2017 based on the latest short-term analysis is shown in ***Table 5 - 4*** as well as ***Graph 5 - 8***.

Graph 5 - 7: US liquids production breakdown

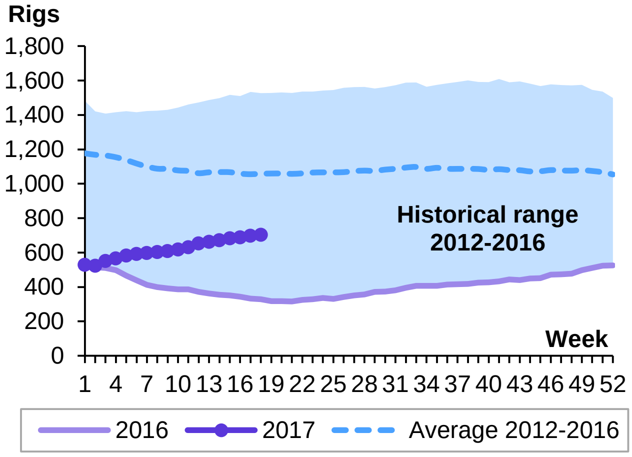


*Note: * 2017= Forecast.*
Sources: Energy Information Administration, Rystad Energy and OPEC Secretariat.

US oil rig count

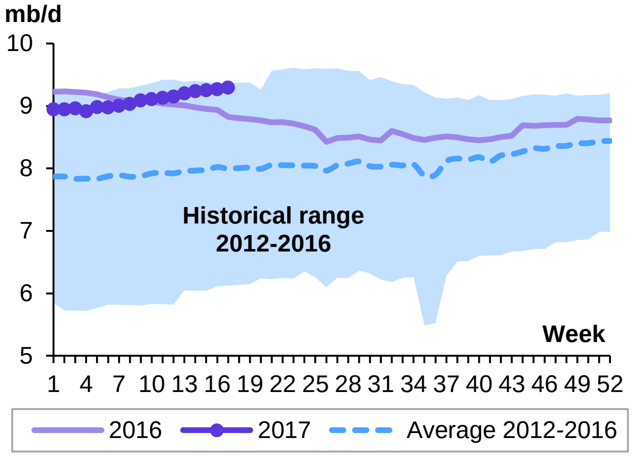
According to *Baker Hughes' weekly report for 5 May 2017*, the total number of US drilling rigs increased by 7 units w-o-w to 877 rigs. This was up by 462 units y-o-y. Within the components, oil rigs increased by 6 units to 703 rigs, while gas rigs rose by 2 units to 173 rigs, w-o-w.

Graph 5 - 8: US weekly oil rig count



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

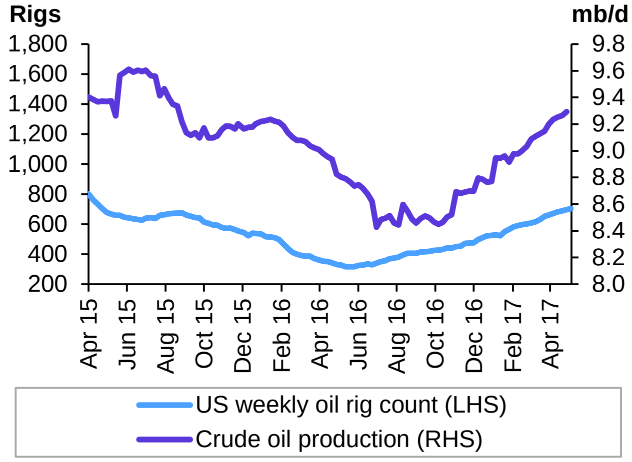
Graph 5 - 9: US weekly crude oil production



Sources: US Energy Information Administration and OPEC Secretariat.

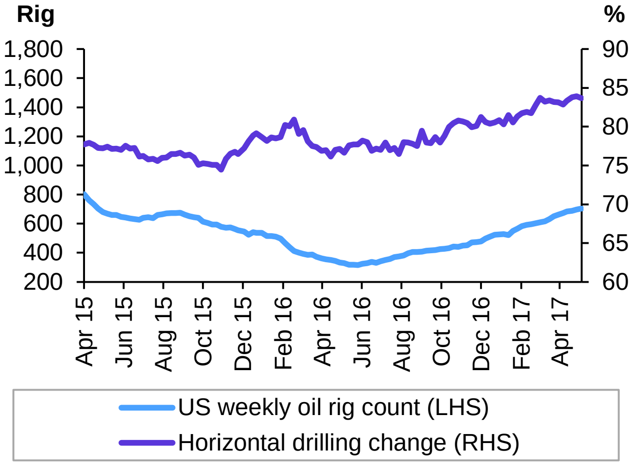
By regions, including the GoM, Texas, Oklahoma, Louisiana, New Mexico, North Dakota and Pennsylvania, the number of active oil rigs stood at 18, 443, 120, 62, 56, 43 and 33 rigs, respectively. The total rig count in the Permian Basin increased to 349 rigs, up by 7 units, w-o-w. There were 43 and 75 oil rigs in the Williston and Eagle Ford Basins, respectively. In terms of well trajectory, the number of horizontal wells increased by more than 130%, y-o-y, from 318 units to 734 rigs. Moreover, rigs for directional and vertical wells increased by 23 units each, y-o-y, to 67 rigs and 76 rigs, respectively.

Graph 5 - 10: US weekly oil rig count vs. Crude oil production



Sources: Baker Hughes and US Energy Information Administration.

Graph 5 - 11: US weekly oil rig count vs. Horizontal drilling change



Source: Baker Hughes.

Overall, the number of oil rigs has risen by 387 units from its lowest point last year in the week ending 27 May 2016.

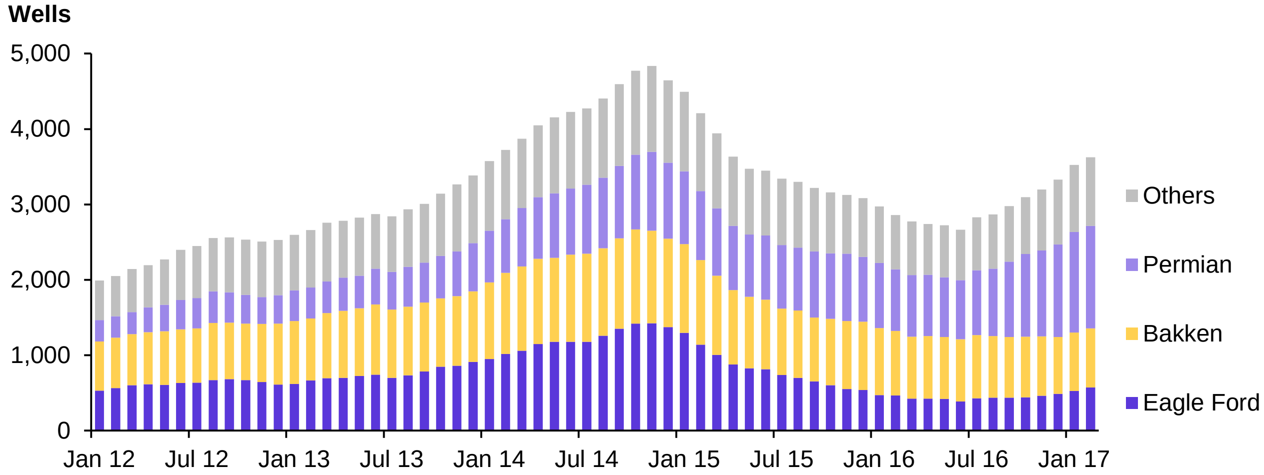
Table 5 - 5: US rotary rig count on 5 May 2017

					Change		
		5 May 17	Month ago	Year ago	M-o-m	Y-o-y	Y-o-y, %
Oil and gas split	**Oil**	703	672	328	31	375	114%
	Gas	173	165	86	8	87	101%
Location	**Onshore**	858	817	391	41	467	119%
	Offshore	19	22	24	-3	-5	-21%
Basin	**Williston**	43	42	25	1	18	72%
	Eagle Ford	83	72	34	11	49	144%
	Permian	349	331	139	18	210	151%
Drilling trajectory	**Directional**	67	71	44	-4	23	52%
	Horizontal	734	695	318	39	416	131%
	Vertical	76	73	53	3	23	43%
US total rig count		**877**	**839**	**415**	**38**	**462**	**111%**

Sources: Baker Hughes and OPEC Secretariat.

Output from the prolific **US shale plays** is not rising as sharply as drilling suggests because producers have left a record number of wells incomplete. They are rushing to complete drilling to fulfil contractual obligations and hold onto land leases, but they not pumping the oil from all of the wells. Drillers have left around 100 wells per month incomplete in the past five months, as drilling activity has risen to its highest in two years.

Graph 5 - 12: US horizontal oil drilled but uncompleted wells (DUCs)

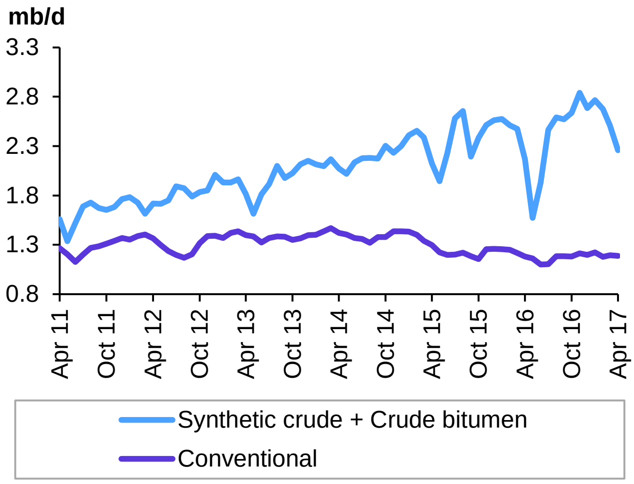


Sources: Rystad Energy and OPEC Secretariat.

Canada

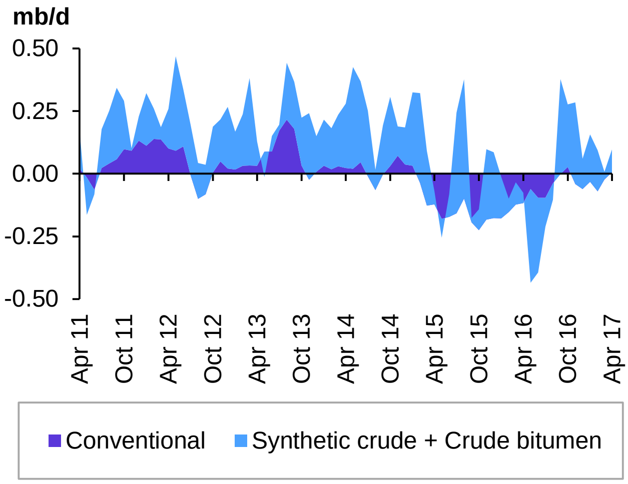
Canada's oil supply in 2016 is estimated at 4.50 mb/d, an increase of 80 tb/d. According to preliminary national source data, Canadian oil output in January increased by 0.18 mb/d m-o-m to settle at 5.00 mb/d, yet the highest record was reached in November 2016 at 5.04 mb/d. Oil sands output – bitumen and synthetic crude – increased by 82 tb/d m-o-m to settle at 2.80 mb/d m-o-m, with conventional oil also increasing by 25 tb/d to 1.22 mb/d. NGL production in January also rose, increasing by 77 tb/d m-o-m, to average 0.98 mb/d, the highest record ever. Nevertheless, oil production in 1Q17 is expected to decrease by 60 tb/d q-o-q to average 4.80 mb/d, following a fire at Syncrude's upgrader in Mildred Lake, which led to the shutdown of the 350 tb/d facility in the middle of March. It is expected the outages will be around 150 tb/d in March and 350 tb/d in April. However, the 2017 forecast, despite applying downward revisions of 10 tb/d in 2Q to 4Q, has been revised up by 6 tb/d due to higher-than-expected output in January compared to the April *MOMR*. This indicates growth of 0.22 mb/d, with overall average production at 4.72 mb/d in 2017.

Graph 5 - 13: Canada production by crude type



Source: OPEC Secretariat.

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



Source: OPEC Secretariat.

Canada's oil rig count

Canada's total rig count reached a seasonal low of 82 rigs in the week ending 5 May 2017 from its peak in 10 February 2017 at 352 rigs. On a monthly basis, the total rig count has fallen to average 108 rigs in April from the previous month.

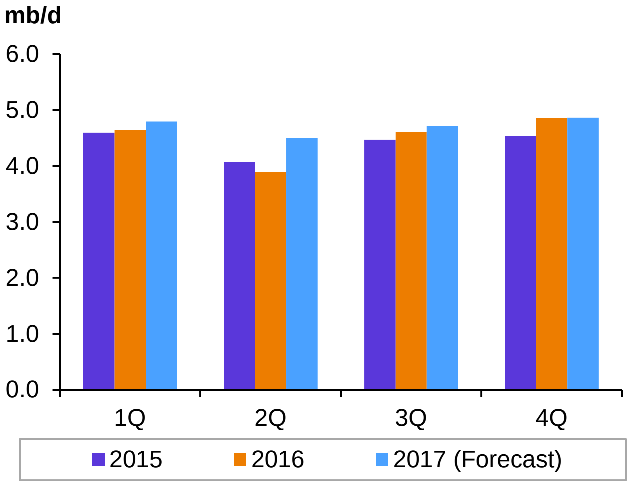
Table 5 - 6: Canadian oil production breakdown, 2016-2017*

Liquids type		Components	2016	2017*	Change 2017/16
Unconventional liquids	Oil sands	Bitumen	1,488	1,638	150
		Synthetic crude	930	1,050	120
		Total oil sands	**2,418**	**2,688**	**270**
	Tight oil	Tight crude & lease condensate	285	319	34
		Unconventional NGLs	203	224	21
		Total tight oil	**488**	**543**	**55**
	Biofuels	Ethanol	28	30	2
		Biodiesel	6	6	0
		Total biofuels	**34**	**36**	**2**
Conventional liquids		Crude oil & condensate	901	841	-60
		NGLs	662	612	-50
		Total conventional	**1,563**	**1,453**	**-110**
Total production			**4,503**	**4,720**	**217**

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

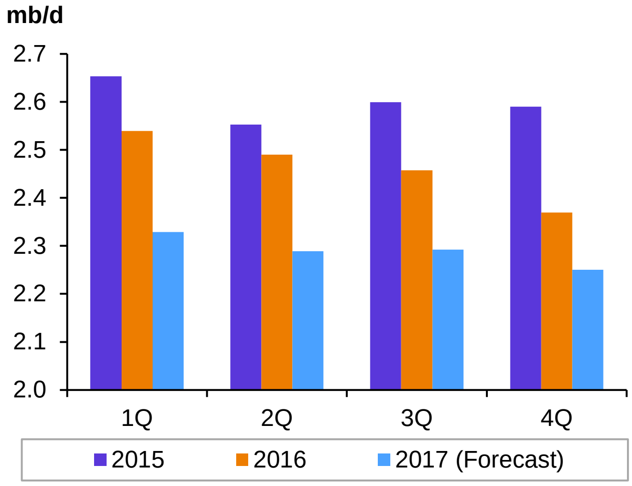
In the same period, the number of oil rigs declined by 124 units m-o-m to average 108 rigs. The number of active rigs in Alberta – the main state for oil sands production – decreased to 65 land rigs. In the same week, the rig count fell and reached an average of 14 rigs and 2 rigs in British Colombia and Saskatchewan, respectively.

Graph 5 - 15: Canada quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 16: Mexico quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Mexico

Mexican liquids production in 2016 declined by 0.13 mb/d to average 2.46 mb/d. Crude oil output in March 2017 was flat at 2.2 mb/d. Therefore the total liquids production, including NGLs, in 1Q17 remains unchanged at an average of 2.33 mb/d. However, this is 0.04 mb/d lower than 4Q16. According to this annual decline rate trend, oil production will fall by 0.17 mb/d to average 2.29 mb/d in 2017.

Preliminary estimates suggest that Mexico was in full conformity during March 2017 with the Declaration of Cooperation at 100 tb/d by the end of 1H17. It is expected that the declines in Mexico that are mostly coming from onshore mature fields that produce light to heavy crude oil and condensate will be partially offset by the extra-heavy oil of the KU-Maloob-Zaap (KMZ) project in offshore Mexico. KMZ produced around 0.33 mb/d in 2016 and is expected to grow by 40 tb/d in 2017.

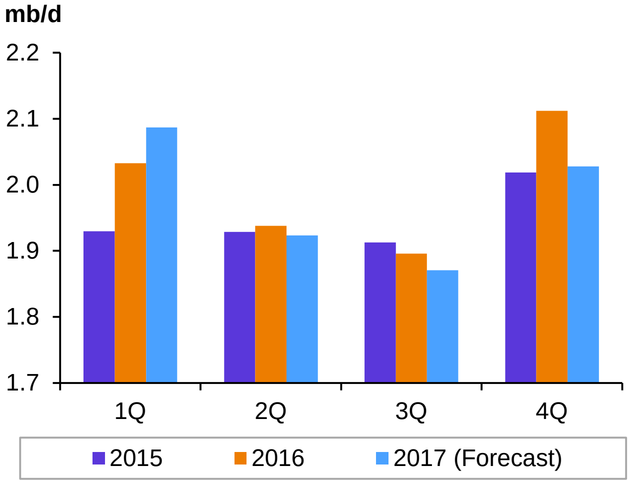
OECD Europe

Total **OECD Europe's oil supply** is estimated to fall by 30 tb/d to average 3.77 mb/d in 2017, following growth of 30 tb/d in 2016. Declines are expected mainly in Norway and the UK.

Norway

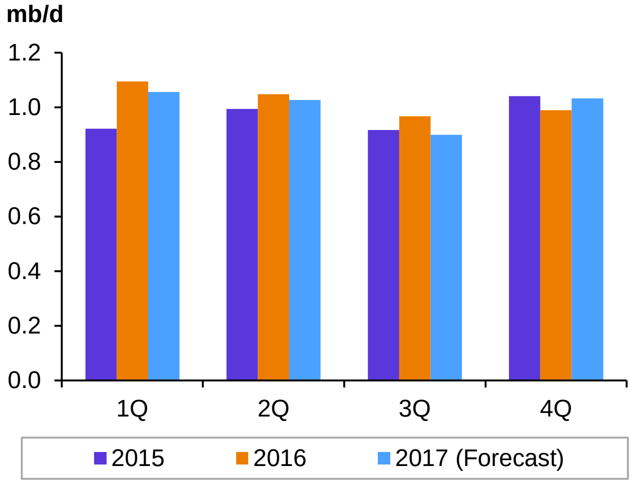
Norway's oil supply is estimated to have increased by 0.05 mb/d over the previous year to average 1.99 mb/d in 2016. Preliminary production figures for 1Q17 indicate average production of about 2.09 mb/d, a decline of 20 tb/d over 4Q16. Preliminary production figures for March 2017 show average daily production of 2.15 mb/d consisting of oil, NGLs and condensate, which shows an increase of 63 tb/d compared to February. Following production outages in the Goliat field due to technical issues in January and for a short period in February, it seems that with drilling of two wells in the nearby Snadd discovery during 2017, production from this field in the coming months would be higher than the capacity of 100 tb/d. Average daily liquids production in March was at 1.73 mb/d for oil, 0.38 mb/d for NGLs and 0.03 mb/d for condensate. Oil production is about 8.0% above the rate recorded in March of last year and about 4.3% above the Norwegian Petroleum Directorate's (NPD) prognosis for March 2017. Oil production is about 1.6% above the forecast so far this year, according to the NPD. Crude oil production in Norway is expected to rise over April and May.

Graph 5 - 17: Norway quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 18: UK quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

UK

The **UK's oil production** is expected to decline by 20 tb/d to average 1.00 mb/d in 2017, following growth of 60 tb/d in 2016. In 2017, oil production in March declined by 10 tb/d m-o-m to average 1.05 mb/d, after a decline of 10 tb/d in February. The UK's production is expected to see continued declines, in large part due to an unscheduled outage at Buzzard, which feeds into the Forties stream, in early April. Oil production in the second quarter is expected to decrease by 30 tb/d q-o-q.

Developing Countries

Total oil production from the group of **Developing Countries (DCs)** declined by 100 tb/d y-o-y to average 12.21 mb/d in 2016. In 2017, DCs' supply is forecast to grow by 110 tb/d to average 12.32 mb/d, revised up by 0.01 mb/d from last month's assessment, following an upward revision of 23 tb/d in 1Q17 mainly from Other Asia region. The key region for growth is expected to be Latin America (0.15 mb/d) – mainly from Brazil – to average 5.25 mb/d and, to a lesser degree, Africa (50 tb/d) – mainly from Congo and Ghana – to stand at 2.16 mb/d. Other Asia's oil supply is anticipated to see a decline of 40 tb/d to average 3.68 mb/d, mainly from Indonesia. There is also an expected decline of 50 tb/d for the Middle East, with output falling to 1.23 mb/d.

Other Asia

Other Asia's oil production increased by 20 tb/d in 2016 to average 3.72 mb/d, mainly from Indonesia. In 2017, oil production is expected to increase slightly by 10 tb/d in India, Thailand and Other Asia, which would offset an expected decline of 50 tb/d in Indonesia. Malaysia's production in the current year was revised up by 10 tb/d due to an upward revision in the first quarter. Average production is expected to remain unchanged from last year at 0.74 mb/d. Oil production from this region is expected to decline by 40 tb/d in 2017 to average 3.68 mb/d, mainly due to low performances in mature Indonesian oil fields.

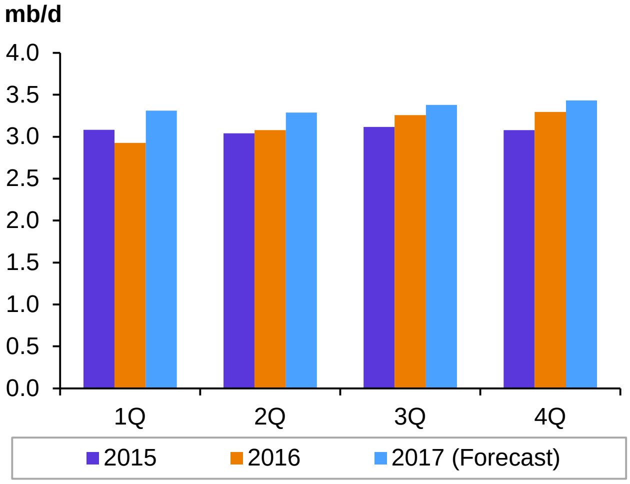
Latin America

Oil supply from Latin America is projected to increase by 0.15 mb/d to average 5.25 mb/d in 2017. Oil production declined in the region by 100 tb/d in 2016. The expected growth of 0.21 mb/d in Brazil is estimated to offset declines of around 60 tb/d in other countries.

Brazil

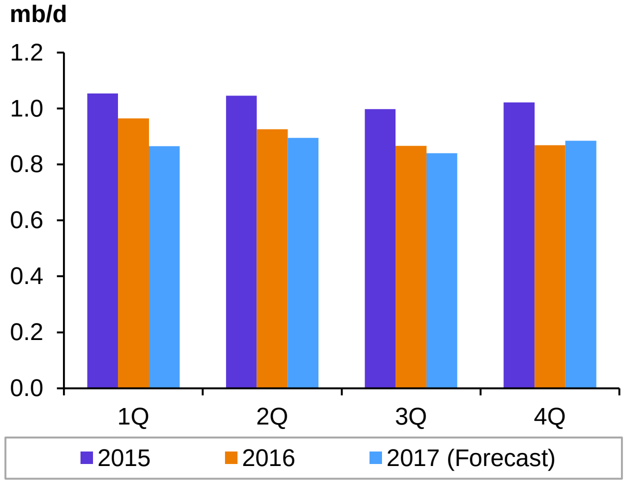
Brazil's liquids supply is estimated to average 3.14 mb/d in 2016, an increase of 0.06 mb/d over the previous year. Crude oil output showed a decline of 11 tb/d m-o-m in February to average 2.68 mb/d. Preliminary crude oil production based on Petrobras' trend also shows a decrease of 75 tb/d m-o-m in March. NGL output in February also declined by 6 tb/d to 108 tb/d. Biofuel output in February increased by 6 tb/d m-o-m to average 551 tb/d. Brazil's liquids production forecast in 2017 has been revised up by 7 tb/d to average 3.35 mb/d, but the yearly growth remains unchanged at 0.21 mb/d.

Graph 5 - 19: Brazil quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 20: Colombia quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Output retreated in 1Q17 as state-led producer Petrobras carried out a series of maintenance shutdowns at the Lula field, which is Brazil's biggest oil and natural gas field. Following shutdowns at the P-40 platform in the Marlim field and the FPSO Cidade de Anchieta in the Parque das Baleias complex in January, a similar shutdown was carried out at the FPSO Cidade de Paraty in February, as well as at the Cidade de Angra dos Reis floating production, storage and offloading vessel (FPSO) for maintenance in March by Petrobras. Similar to 1Q17, Petrobras lost about 5% of its daily production in 1Q16 due to maintenance. Petrobras expects to install three new FPSOs in 2017 and ramp up production from the three floating production units that came onstream last year.

Colombia

In **Colombia**, average oil production declined by 0.12 mb/d y-o-y to average 0.91 mb/d in 2016. The main reason for this high decline rate was reduced investment due to lower oil prices in 2016. Crude oil output in March declined by 60 tb/d to average 0.80 mb/d, while total liquids output declined by 30 tb/d m-o-m to average 0.83 mb/d. Oil production in the first quarter declined by 10 tb/d q-o-q to average 0.86 mb/d. Oil production in Colombia is expected to decline by 40 tb/d over the previous year to average 0.87 mb/d in 2017.

FSU

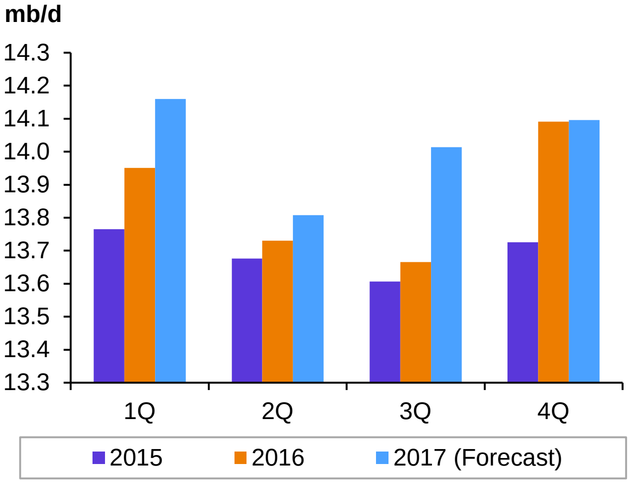
FSU's oil supply grew by 0.17 mb/d in 2016 to average 13.86 mb/d, revised down by 20 tb/d from the previous *MOMR* due to a downward revision of 72 tb/d during 4Q16 in Russia. In 2016, oil production in Russia increased by 0.24 mb/d, while declining in other countries of the region.

The oil production forecast for 2017 was revised up this month by 49 tb/d to now show growth of 0.16 mb/d for a total of 14.02 mb/d. Upward revisions were seen in Russia and, to some extent, in Kazakhstan following an upward revision in 1Q17.

Russia

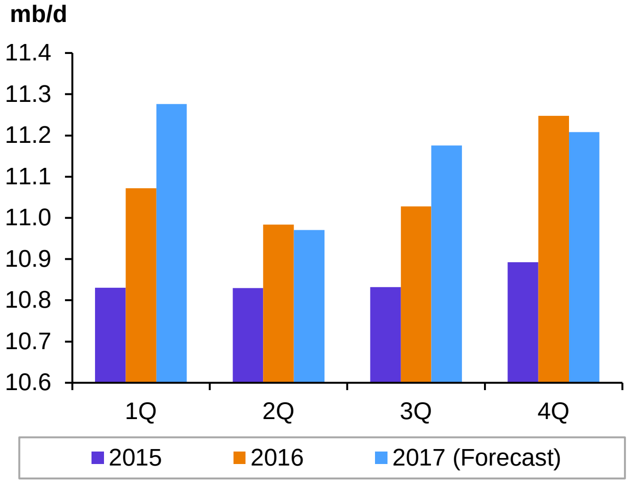
Oil production in **Russia** in April averaged 11.18 mb/d, representing a decline of 100 tb/d compared to average production in 1Q17. In terms of crude oil production, preliminary estimation indicate a similar decline of 100 tb/d, lowering output in April 2017 to 10.39 mb/d. Hence, NGLs production has been stagnant at around 0.79 mb/d in the recent months. The largest drops in output were in small and independent companies, while, for example, oil production was increased at the Novoport and Prirazlomnoye projects operated by Gasprom Neft. However, other major companies such as Rosneft, Lukoil and Bashneft produced less than the October level, as a benchmark for production adjustment, or kept it steady. They managed their production by adding output from greenfields and lowering production at brownfields.

Graph 5 - 21: FSU quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 22: Russia quarterly oil supply, 2015-2017



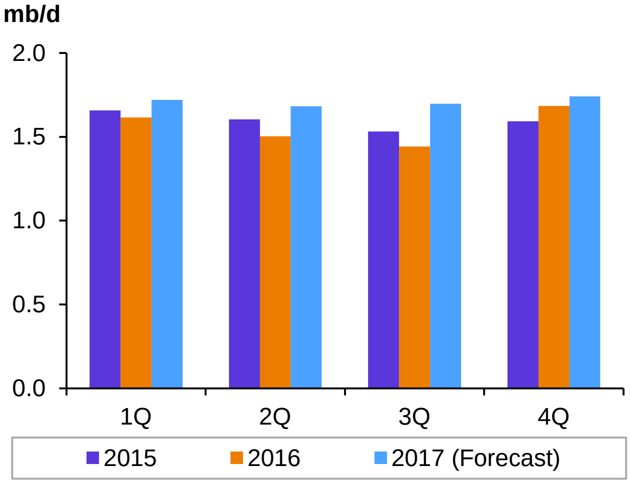
Source: OPEC Secretariat.

Caspian

Azerbaijan's oil supply forecast for 2017 remained unchanged with a contraction of 70 tb/d to average 0.78 mb/d, while oil production in 2016 declined by only 10 tb/d. Azeri oil output in April was reported higher by 32 tb/d m-o-m at 725 tb/d, but output of NGLs was flat at 69 tb/d. Therefore, total liquids output in April increased by 30 tb/d to average 0.79 mb/d. This led to an upward revision in oil supply by 10 tb/d in 2017, reaching 0.78 mb/d, indicating a contraction of 60 tb/d.

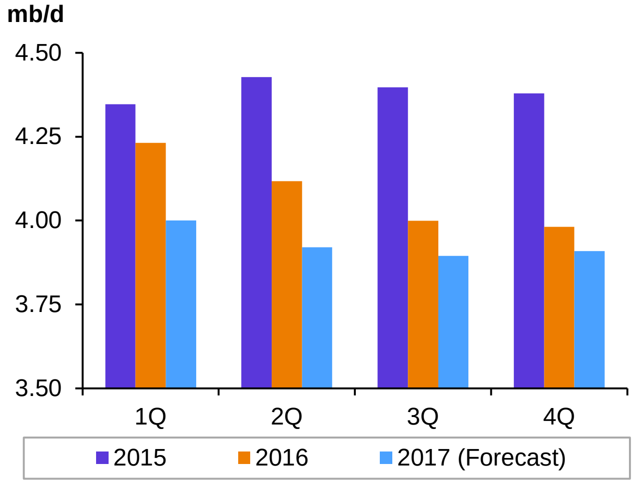
Kazakhstan's oil output averaged 1.72 mb/d in 1Q17, some 40 tb/d higher y-o-y. Preliminary production data in April showed a steady output of 1.76 mb/d compared to March, which 260 tb/d higher y-o-y. The Kashagan ramp-up was steeper than expected in March, reaching 190 tb/d at the end of the month, while output was around 130 tb/d in February, five months after its re-start. However, the government hopes to reduce oil production at other fields in the coming months when the weather becomes warmer. Oil supply in 2016 declined by 40 tb/d y-o-y to average 1.56 mb/d.

Graph 5 - 23: Kazakhstan quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5 - 24: China quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

China

China's supply in 2016 was estimated to contract by 0.31 mb/d over the previous year to average 4.08 mb/d. Crude oil output in March 2017 averaged 3.90 mb/d, lower by 27 tb/d m-o-m and down 188 tb/d y-o-y. China's total liquids production declined by 20 tb/d m-o-m to average 4.01 mb/d in March. The production contraction in 2017 was revised up by 10 tb/d to see a yearly contraction of 150 tb/d y-o-y, down to 3.93 mb/d. Crude oil production is likely to recover gradually due to higher operational activities and more spending in 2017. Among the major Chinese companies, Petrochina is planning to increase spending from $19.8 billion to $22.8 billion in the current year. Despite increasing capex, Petrochina's total production for the whole year on average will decline by 90 tb/d to almost 2 mb/d, according to their forecasts. Contractions in domestic crude oil output are also expected by Sinopec and CNOOC despite more or less higher investments in 2017.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids in 2016 were revised down by 30 tb/d due to weaker GTL output in Qatar in 2H16 to average 6.05 mb/d in 2016, representing growth of 0.11 mb/d over the previous year. In 2017, they are projected to average 6.22 mb/d, represents an upward revision of 40 tb/d and a growth of 0.17 mb/d over the previous year.

Table 5 - 7: OPEC NGLs + non-conventional oils, 2014-2017*, mb/d

	2014	2015	*Change* 15/14	1Q16	2Q16	3Q16	4Q16	2016	*Change* 16/15	2017	*Change* 17/16
Total OPEC	**5.83**	**5.94**	0.11	5.95	6.08	6.15	6.02	**6.05**	0.11	**6.22**	0.17

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, **OPEC crude oil production** decreased by 18 tb/d from the previous month to average 31.73 mb/d in April. Crude oil production declined in UAE, Libya, Iraq and Iran I.R., but increased in Angola and Saudi Arabia.

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

	2015	2016	3Q16	4Q16	1Q17	Feb 17	Mar 17	Apr 17	Apr/Mar
Algeria	1,107	1,090	1,093	1,091	1,055	1,057	1,055	1,047	*-7.5*
Angola	1,755	1,725	1,756	1,623	1,630	1,639	1,595	1,692	*97.1*
Ecuador	543	546	547	542	528	529	525	524	*-0.6*
Gabon	225	220	221	211	199	198	197	206	*8.8*
Iran, I.R.	2,836	3,505	3,643	3,736	3,797	3,819	3,793	3,759	*-34.7*
Iraq	3,961	4,389	4,406	4,601	4,433	4,414	4,412	4,373	*-39.1*
Kuwait	2,764	2,853	2,880	2,874	2,712	2,712	2,702	2,702	*0.3*
Libya	404	390	309	574	656	681	612	550	*-61.6*
Nigeria	1,839	1,557	1,376	1,553	1,512	1,564	1,457	1,508	*50.8*
Qatar	663	656	651	642	608	592	610	618	*7.4*
Saudi Arabia	10,142	10,406	10,596	10,541	9,887	9,952	9,905	9,954	*49.2*
UAE	2,906	2,975	3,045	3,079	2,934	2,933	2,905	2,842	*-62.3*
Venezuela	2,375	2,159	2,103	2,057	1,996	1,998	1,982	1,956	*-26.0*
Total OPEC	**31,519**	**32,472**	**32,627**	**33,124**	**31,944**	**32,086**	**31,750**	**31,732**	***-18.2***

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

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

	2015	2016	3Q16	4Q16	1Q17	Feb 17	Mar 17	Apr 17	Apr/Mar
Algeria	1,157	1,146	1,162	1,168	1,087	1,084	1,085	1,075	*-10.0*
Angola	1,767	1,722	1,736	1,610	1,638	1,649	1,652	1,651	*-1.0*
Ecuador	543	549	551	543	533	535	531	528	*-2.6*
Gabon	..	..	..	..	..	..	..	..	*..*
Iran, I.R.	3,152	3,651	3,653	3,993	3,894	3,870	3,891	3,862	*-29.0*
Iraq	3,504	4,648	4,666	4,802	4,589	4,566	4,568	4,531	*-37.0*
Kuwait	2,859	2,954	2,969	2,915	2,705	2,705	2,700	2,710	*10.0*
Libya	..	..	..	..	..	..	..	..	*..*
Nigeria	1,748	1,427	1,227	1,401	1,388	1,426	1,210	1,484	*273.6*
Qatar	656	652	644	632	595	545	621	619	*-2.3*
Saudi Arabia	10,193	10,460	10,651	10,602	9,882	10,011	9,900	9,946	*46.4*
UAE	2,989	3,088	3,173	3,201	3,010	2,995	2,973	2,988	*15.0*
Venezuela	2,654	2,373	2,326	2,265	2,244	2,248	2,235	2,194	*-40.4*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	***..***

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

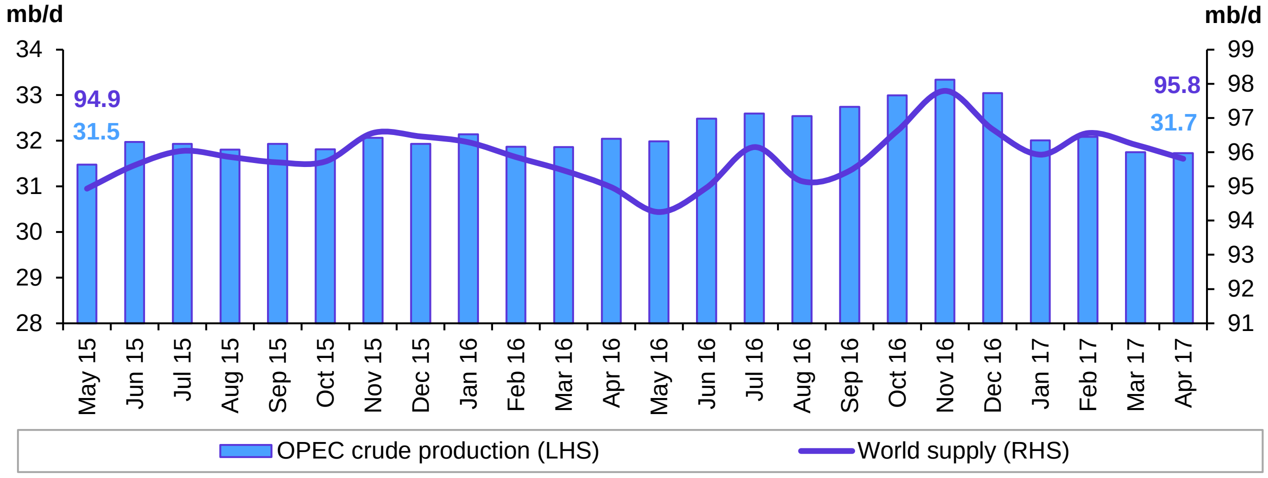
World oil supply

The world oil supply in 2016 averaged 95.82 mb/d, representing an increase of 0.34 mb/d compared to a year ago. The relatively weaker oil prices, lower investment and cuts in IOCs' Capex led to a decline of 0.42 mb/d in non-OPEC output, particularly the US oil production, which was partially balanced by higher OPEC crude oil output of 0.95 mb/d.

Preliminary data indicates that global oil supply decreased by 410 tb/d in April to average 95.81 mb/d, higher by 0.83 mb/d y-o-y. A decrease in non-OPEC supply (including OPEC NGLs) of 0.39 mb/d, together with a decline of 0.02 mb/d from OPEC, further reduced the overall global oil output in April. The share of OPEC crude oil in total global production stood at 33.1% in April, an increase of 0.1% from the month before.

Estimates are based on preliminary data for non-OPEC supply, direct communication for OPEC NGLs and non-conventional liquids, and secondary sources for OPEC crude oil production.

Graph 5 - 25: OPEC and world oil supply



Source: OPEC Secretariat.

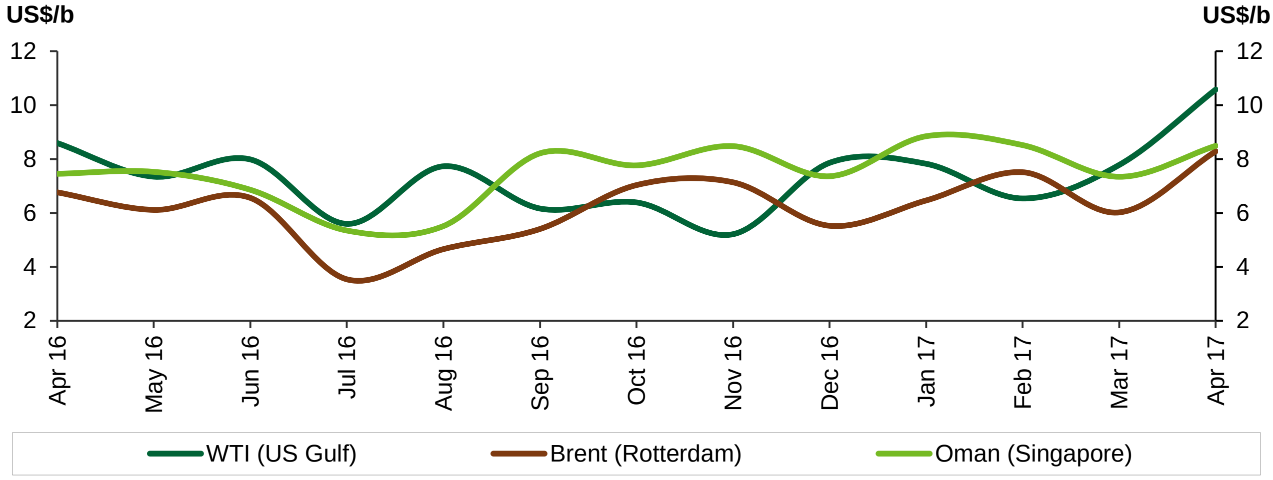
Product Markets and Refinery Operations

Product markets in the Atlantic Basin strengthened during April. This was supported by firmer domestic demand, amid higher export opportunities, which along with lower inflows due to heavy refinery maintenance fuelled a tightening environment. The main support came from gasoline as domestic US gasoline demand recovered in April following a slump in the first quarter, alongside a shift to summer grades and higher exports to Latin America. Meanwhile, Asian margins continued to be healthy on the back of firm regional demand, amid the peak of the region's maintenance season.

Refinery margins

The **US** market saw strong support from the rally in gasoline crack spreads. This was on the back of increasing domestic gasoline demand, which recovered following a slump during 1Q17. Another supporting factor was the higher exports opportunities to Latin American countries. US Gulf Coast (USGC) refinery margins for WTI crude gained almost $3/b compared to the previous month to average $10.60/b in April. This is the highest level seen in the last 20 months.

Graph 6 - 1: Refinery margins



Sources: Argus Media and OPEC Secretariat.

Product markets in **Europe** strengthened during April, supported by stronger regional demand and higher arbitrage export opportunities amid lower inflows into the region that fuelled tightening sentiment. Product crack spreads exhibited gains across the barrel with gasoline showing the best performance. The middle distillates market became more balances due to a reduced economic arbitrage from the US and lower exports from the Baltic, due to this region's heavy maintenance season.

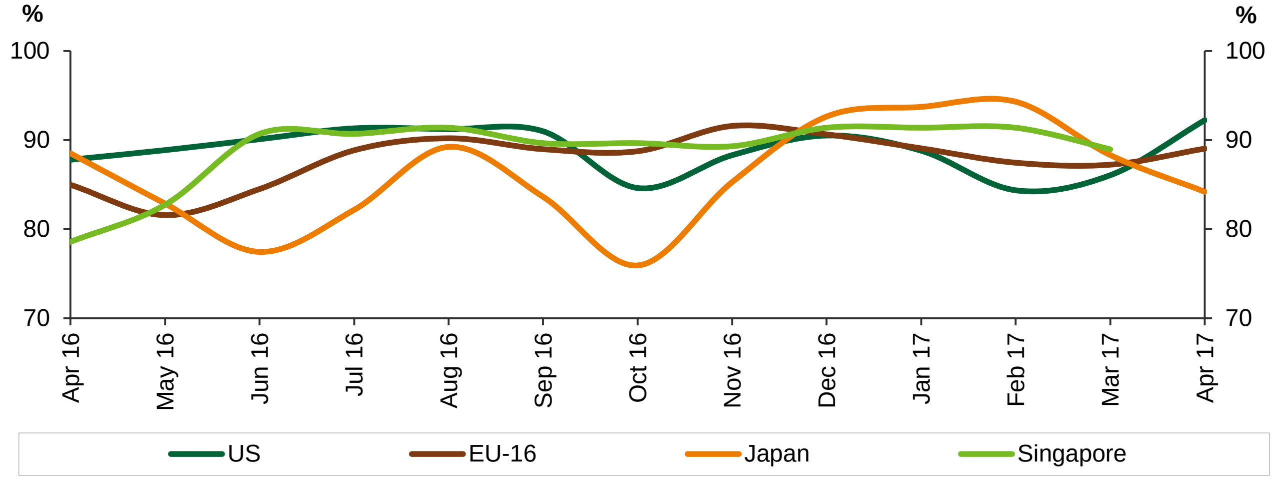
The refinery margin for Brent crude in NWE gained more than $2/b over the previous month's level to average $8.2/b in April.

Asian product markets recovered during April, supported by firm regional demand amid tightening sentiment fuelled by the region's peak maintenance season. This along with lower inflows into the region, allowed the product crack spreads to strengthen across the barrel and refinery margins in Singapore gained more than $1/b versus the previous month's level, to average around $8.50/b in April, a relatively healthy level.

Refinery operations

The refinery utilisation rate in the **US** averaged around 92% during April, corresponding to 17.0 mb/d. This represented an increase of more than 1 mb/d from the previous month's level and was around 960 tb/d higher than the same month a year ago. With the approaching end of the spring maintenance season, refinery runs have been on the rise, hitting the highest level witnessed in recent years, as several refineries came back on line. However, this contributed to gasoline inventories reversing the previous downward trend. They increased by around 2 mb during April after falling in previous months, thus fuelling bearish market sentiment at the end of the month.

Graph 6 - 2: Refinery utilisation rates



Sources: Argus Media and OPEC Secretariat.

European refinery runs averaged around 89% of capacity in April, corresponding to a throughput of 10.6 mb/d. This is some 200 tb/d higher than the previous month and around 600 tb/d higher than the same month a year ago when the sector was impacted by a French strike. Refinery throughputs continued to hold at a high level in Europe, with healthy margins amid strong export opportunities.

In **Asia**, refinery runs in India averaged around 5.0 mb/d during March, similar to the previous month's levels. Meanwhile, Chinese refinery throughputs averaged 11.0 mb/d during April. This is around 200 tb/d lower than in March due to the impact of maintenance. Refinery runs in Singapore averaged around 89% in March, falling around 2 pp versus the previous month due to some refinery maintenance. Japanese throughput averaged 84% of capacity in April, corresponding to 3.2 mb/d.

Product markets

US market

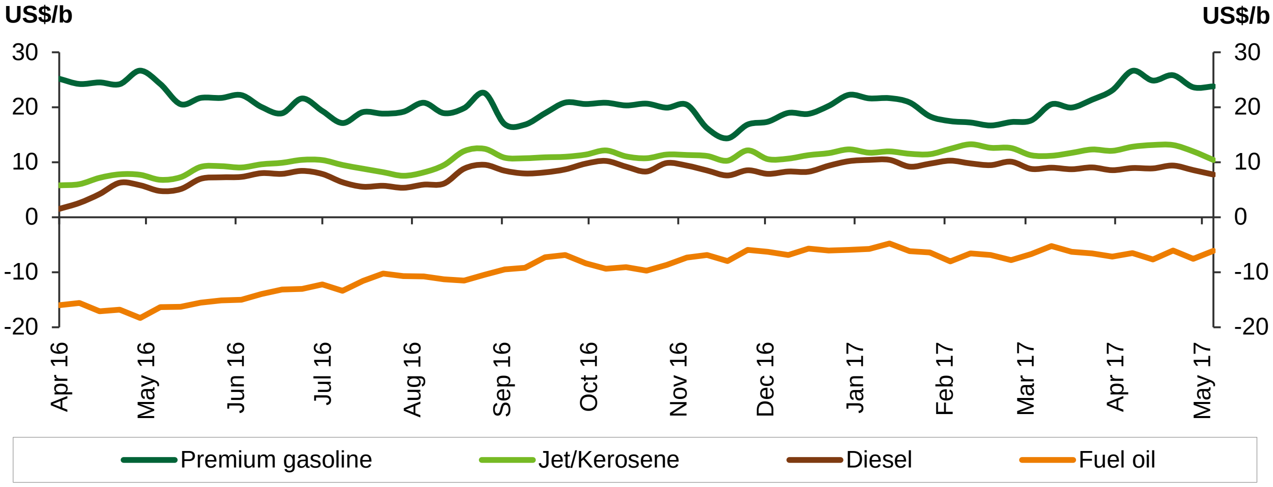
US **gasoline** demand stood at around 9.2 mb/d in April. This is approximately 90 tb/d lower than in March and at a level similar to the same month a year earlier.

Improving domestic gasoline demand, which recovered during April from the slump suffered during the first quarter when it lost around 160 tb/d (y-o-y), lent support to the US gasoline market. Other supporting factors were the shift in mid-April to summer grades and the continuing higher exports to Latin America.

With the approaching end of the spring maintenance season, refinery runs have been on the rise in recent weeks, causing an increase in inventories of around 2 mb during April. This follows falls in previous months, thus fuelling bearish market sentiment toward the end of the month.

The gasoline crack spread continued to strengthen to average around $25/b in April. This is a sharp gain of more than $4/b compared with the previous month. It is expected that with the start of the US driving season the gasoline market will continue to see support.

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



Sources: Argus Media and OPEC Secretariat.

In the middle of the barrel, **gasoil** demand stood at around 4.2 mb/d in April. This is the same level as the previous month and around 360 tb/d higher than in the same month a year earlier.

The gasoil market has been supported by strong domestic demand, which was above last year's March level, with a boost from increasing requirements in the agricultural sector. Additional support came from higher export volumes to Latin American countries, mainly Brazil and Chile.

The arbitrage to Europe was limited, although it improved at the end of April.

The USGC gasoil crack spread averaged around $9/b in April, retaining the previous month's level. Any potential uptick was limited by the pressure coming from the supply side with refinery throughputs on the rise, with many back from maintenance and yields remaining on the high side.

At the bottom of the barrel, **fuel oil** market lost some ground pressured by increasing inflows into the region from Europe, but mainly from Mexico, where availability was on the rise due to some secondary unit outages.

In addition, the fuel oil market was supported by strong VGO buying interest, with several FCC units coming back from maintenance in the USGC.

The USGC HSFO crack spread lost around 50¢ to average minus $5.8/b in April. Further losses were avoided by the tightening seen in Latin America due to refinery maintenance.

European market

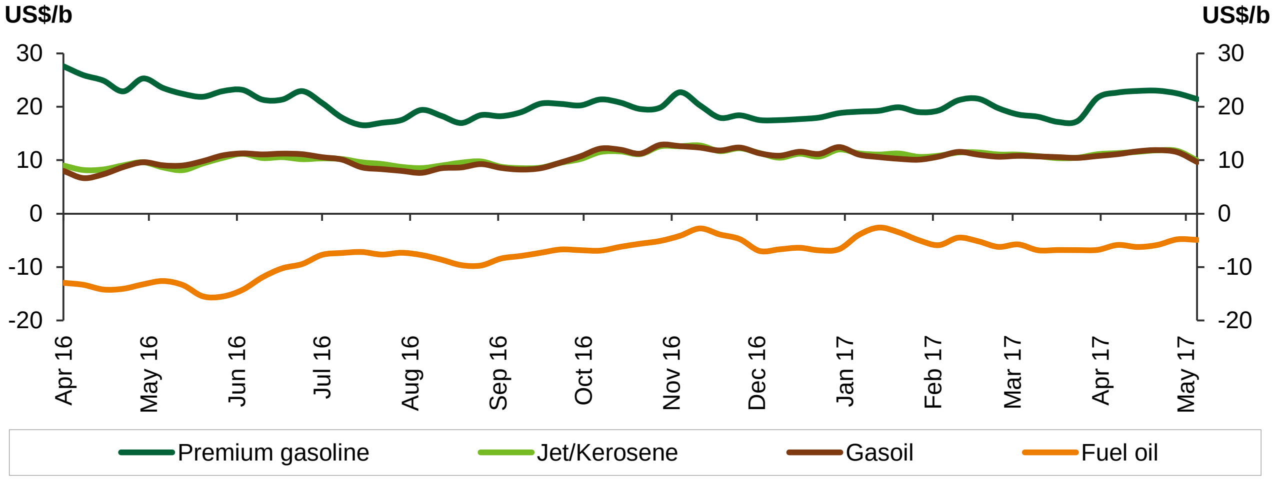
Product markets in Europe strengthened during April supported by firmer domestic demand amid higher export opportunities that alongside lower inflows amid heavy refinery maintenance fuelled a tightening environment.

The **gasoline** market strengthened in Europe during April, amid stronger domestic demand and export opportunities. Higher requirements were witnessed in the Middle East due to refinery issues reported in Kuwait and the UAE, while weak arbitrage to the USEC and West Africa in recent weeks has been offset by increasing imports from North Africa and Latin America.

The gasoline crack spread against Brent gained more than $4 from the previous month's level to average around $23/b during April.

The light distillate naphtha crack remained flat in April. Despite continuous pressure on the market from the typical seasonally lower demand, due to falling LPG prices that made naphtha less competitive as a petrochemical feedstock, support came from export opportunities to Asia following a reopening of the arbitrage.

Graph 6 - 4: Rotterdam crack spread vs. Brent



Sources: Argus Media and OPEC Secretariat.

The European **gasoil** market recovered from the ground lost in March as the market tightened on the back of heavy maintenance and slower inflows into the region amid some outages. In addition, the weakening in heating oil demand, due to warmer spring weather, was compensated by stronger diesel demand with firm requirements being reported from Germany, Poland and Turkey, as well as export opportunities to Latin America, mainly to Argentina.

The market was also supported by lower inflows to the region, due to a reduced economic arbitrage from the US and lower exports from the Baltic, due to lower availability, given agriculture demand and the region's heavy maintenance season.

The gasoil crack spread against Brent crude at Rotterdam gained $1 compared with the previous month's level to average around $11.60/b in April.

At the bottom of the barrel, the **fuel oil** market showed some recovery in April. This was on the back of stronger regional demand with tightening sentiment, fuelled by maintenance in the region amid slower inflows from the Baltic. Other bullish factors supporting the market were the arbitrage opportunities to Asia and the fall seen in the ARA fuel oil inventories.

The North West Europe (NWE) fuel oil crack gained $1/b compared with the previous month to average around minus $5.70/b in April.

Asian market

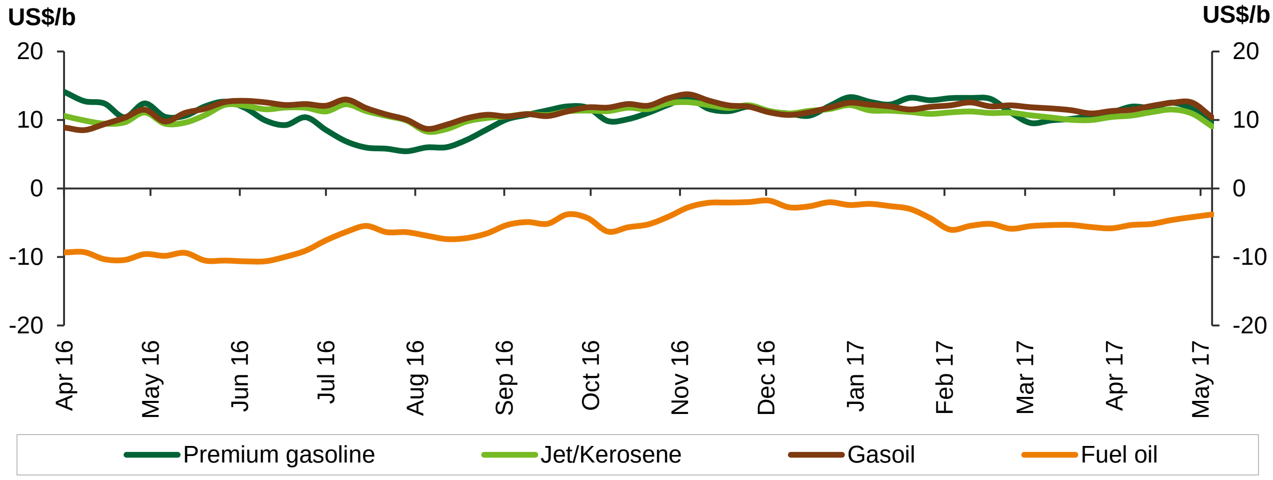
The Asian market strengthened in April, supported by firm regional demand, amid tightening sentiment fuelled by the peak of regional maintenance season. This allowed the product crack spreads to recover across the barrel and the refinery margins to reach a relatively healthy level.

From the perspective of the Asian **gasoline** market, a recovery was witnessed during April on the back of firm regional demand amid tightening sentiment. Meanwhile, the supply pressure eased further with exports slowing from Japan and mainly from China, which was impacted by domestic consumption and quotas administration.

The gasoline crack spread against Oman crude in Singapore averaged around $12/b in April, gaining almost $2/b compared with the March level. Further support may be seen in the coming weeks with expected stronger regional demand, mainly from India and South Korea.

The naphtha market recovered some ground in Asia, and the Singapore naphtha margins gained 50¢ in April. This was on the back of tightening sentiment fuelled by reduced supply from the Middle East, due to outages in some splitter units. However, the uptick was limited by slowing LPG prices, which started to pressure the naphtha market.

Graph 6 - 5: Singapore crack spread vs. Oman



Sources: Argus Media and OPEC Secretariat.

In the middle of the barrel, the **gasoil** crack spread showed some recovery. It was supported by the seasonal tightening in the market, with peak refinery maintenance and stronger regional demand.

Additional support came from some requirements from Qatar, as well as the recovery in domestic Indian demand.

The gasoil crack spread in Singapore against Oman averaged around $12.20/b in April, a gain of almost $1/b compared with the previous month's level. The uptick was capped by increasing inflows into Singapore, due to limited East-to-West arbitrage.

The Asian **fuel oil** market tightened with the onset of refinery maintenance and higher residue cracking capacity in the region. Amid limited West arbitrage the market was also supported by a recovery in bunker demand and volumes heading to the Middle East and Pakistan.

The fuel oil crack spread in Singapore against Oman averaged about minus $4.80/b in April, gaining 70¢ against the previous month's level. The uptick was limited by expectations of increasing inflows in the coming weeks.

Table 6 - 1: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				*Refinery utilization, %*			
	Feb 17	Mar 17	Apr 17	*Change* Apr/Mar	Feb 17	Mar 17	Apr 17	*Change* Apr/Mar
US	15.57	15.88	17.02	1.14	84.36	86.05	92.23	6.18
Euro-16	10.36	10.34	10.55	0.21	87.45	87.23	89.04	1.81
France	1.03	0.99	1.12	0.13	82.53	79.25	89.66	10.42
Germany	1.80	1.78	1.90	0.12	82.22	81.26	86.75	5.48
Italy	1.33	1.33	1.30	-0.03	65.00	65.00	63.64	-1.37
UK	0.99	1.07	1.08	0.01	76.11	82.26	83.18	0.92
Japan	3.57	3.35	3.19	-0.16	94.30	88.31	84.20	-4.12

Sources: Argus Media, EIA, Euroilstock, IEA, METI, OPEC Secretariat and Petroleum Association of Japan.

Table 6 - 2: Refinery crude throughput, mb/d

	2014	2015	2016	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17 **
Total OECD	**36.95**	**38.00**	**37.97**	**37.78**	**37.19**	**38.77**	**37.87**	**37.97**	**38.15**
OECD America*	**19.00**	**19.19**	**19.21**	**19.05**	**19.24**	**19.65**	**18.81**	**19.13**	**19.51**
of which US	15.82	16.11	16.24	15.94	16.27	16.68	16.07	15.95	16.43
OECD Europe	**11.43**	**12.11**	**11.91**	**11.54**	**11.18**	**12.19**	**12.07**	**11.83**	**11.70**
of which:									
France	1.12	1.17	1.14	1.13	0.94	1.19	1.24	1.04	1.03
Germany	1.86	1.91	1.90	1.87	1.81	1.94	1.91	1.81	1.79
Italy	1.20	1.35	1.30	1.22	1.28	1.36	1.32	1.38	1.36
UK	1.14	1.14	1.09	1.01	1.07	1.12	1.09	1.07	1.05
OECD Asia Pacific	**6.51**	**6.70**	**6.85**	**7.19**	**6.78**	**6.93**	**6.99**	**7.01**	**6.93**
of which Japan	3.13	3.14	3.15	3.49	3.17	3.24	3.23	3.49	3.38
Non-OECD	**41.68**	**42.70**	**42.82**	**42.16**	**41.73**	**42.22**	**41.79**	**41.88**	**42.38**
of which:									
China	10.16	11.00	10.77	10.59	10.76	10.59	11.16	11.22	11.24
Middle East	6.90	7.27	7.56	7.42	7.19	7.43	7.20	7.48	7.55
Russia	5.92	5.79	5.71	5.49	5.37	5.67	5.78	5.69	5.75
Latin America	5.07	5.00	4.80	4.72	4.43	4.62	4.71	4.64	4.64
India	4.48	4.56	4.93	5.02	4.86	4.88	4.97	5.01	5.13
Africa	2.30	2.16	2.05	2.17	2.04	2.04	2.15	2.25	2.27
Total world	**78.62**	**80.70**	**80.80**	**79.94**	**78.92**	**80.98**	**79.66**	**79.85**	**80.53**

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

Table 6 - 3: Refined product prices, US$/b

		Mar 17	Apr 17	Change Apr/Mar	Year-to-date 2016	Year-to-date 2017
US Gulf (Cargoes FOB):						
Naphtha*		52.42	52.72	0.30	39.01	54.94
Premium gasoline	*(unleaded 93)*	70.29	76.31	6.02	55.58	72.50
Regular gasoline	*(unleaded 87)*	64.44	70.19	5.75	48.51	66.81
Jet/Kerosene		61.28	63.79	2.51	43.54	63.85
Gasoil	*(0.2% S)*	58.37	60.01	1.64	40.18	61.02
Fuel oil	*(3.0% S)*	43.34	44.63	1.29	22.42	45.40
Rotterdam (Barges FoB):						
Naphtha		50.70	51.54	0.84	36.92	53.03
Premium gasoline	*(unleaded 98)*	70.06	75.36	5.30	56.03	73.73
Jet/Kerosene		62.29	64.21	1.92	44.61	64.61
Gasoil/Diesel	*(10 ppm)*	62.21	64.11	1.90	43.81	64.38
Fuel oil	*(1.0% S)*	44.86	46.95	2.09	23.49	48.04
Fuel oil	*(3.5% S)*	39.94	41.71	1.77	19.49	41.95
Mediterranean (Cargoes FOB):						
Naphtha		49.55	50.67	1.12	35.64	52.22
Premium gasoline**		62.59	68.14	5.55	48.93	66.49
Jet/Kerosene		60.34	62.61	2.27	42.78	62.97
Diesel		63.15	65.42	2.27	45.05	65.66
Fuel oil	*(1.0% S)*	46.24	48.03	1.79	24.10	49.22
Fuel oil	*(3.5% S)*	42.34	43.95	1.61	22.31	44.45
Singapore (Cargoes FOB):						
Naphtha		50.82	52.31	1.49	38.12	53.86
Premium gasoline	*(unleaded 95)*	64.28	67.66	3.38	50.46	67.83
Regular gasoline	*(unleaded 92)*	61.94	64.81	2.87	47.34	65.27
Jet/Kerosene		61.93	63.88	1.95	43.96	64.31
Gasoil/Diesel	*(50 ppm)*	63.09	64.98	1.89	43.28	65.33
Fuel oil	*(180 cst 2.0% S)*	50.74	52.47	1.73	27.98	53.21
Fuel oil	*(380 cst 3.5% S)*	45.64	47.34	1.70	25.57	48.13

*Note: * Barges.*

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

Sources: Argus Media and OPEC Secretariat.

Tanker Market

In April, tanker market sentiment weakened in both its dirty and clean sectors. Average spot freight rates dropped on most reported routes. Dirty tanker freight rates were down 4% from the month before. Despite a stronger market seen in the VLCC sector marking the only exception in the month as its freights edged up on all reported routes reversing two consecutive months of declines. VLCC spot freight rates showed improvements, rising by an average 20% on all reported routes, as a result of enhanced activity in the market and a tightening in tonnage supply. Nevertheless, average dirty spot freight rates decreased, influenced by the declines in Suezmax and Aframax freight rates. Suezmax and Aframax both ended the month down by 8% and 10%, respectively, as tonnage demand for both classes was limited, while tonnage oversupply was dominant. The clean tanker market showed an average decline in freight rates by 6% from the previous month on the back of weak sentiment, which prevailed for all East and West of Suez fixtures.

Spot fixtures

According to preliminary data, **global fixtures** declined by 0.2% in April compared to the previous month. OPEC spot fixtures were down by 0.08 mb/d, 0.7%, or, to average 11.63 mb/d. Fixtures on the Middle East-to-East route averaged 5.31 mb/d in April, down by 0.05 mb/d from one month ago, while those on the Middle East-to-West route averaged 2.73 mb/d. Outside the Middle East, fixtures averaged 3.59 mb/d, showing a decline of 0.11 mb/d. Compared with the same period a year earlier, global fixtures indicated a drop of 0.8% in April.

Table 7 - 1: Spot fixtures, mb/d

	Feb 17	Mar 17	Apr 17	*Change* Apr 17/Mar 17
All areas	**15.99**	**16.90**	**16.87**	**-0.03**
OPEC	11.49	11.71	11.63	-0.08
Middle East/East	5.55	5.37	5.31	-0.05
Middle East/West	2.57	2.65	2.73	0.08
Outside Middle East	3.38	3.69	3.59	-0.11

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

According to preliminary data, **OPEC sailings** declined by 0.4% in April to average 23.87 mb/d, lower by 1.3% from the same month a year earlier. **Middle East sailings** also dropped, down by 0.10 mb/d from a month before.

Arrivals were mixed, registering increases in North America and the Far East by 0.2%, each from a month earlier, while arrivals to Europe and West Asia dropped from the previous month to average 12.55 mb/d and 4.56 mb/d, respectively.

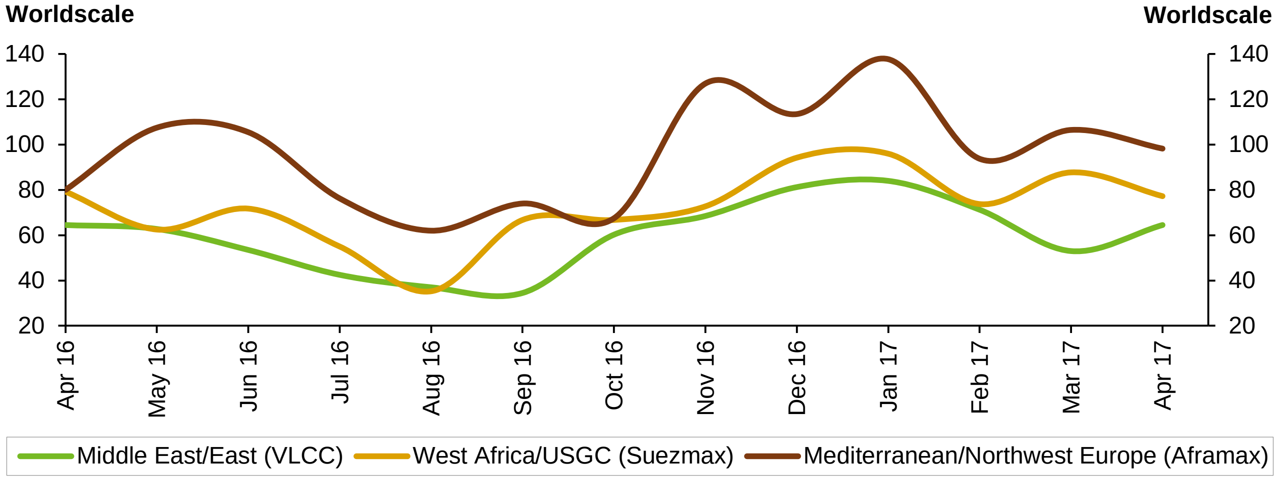
Table 7 - 2: Tanker sailings and arrivals, mb/d

	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17
Sailings				
OPEC	23.96	23.97	23.87	-0.10
Middle East	17.25	17.34	17.23	-0.10
Arrivals				
North America	9.93	9.80	9.81	0.02
Europe	12.13	12.56	12.55	-0.01
Far East	8.64	8.71	8.72	0.01
West Asia	4.70	4.63	4.56	-0.07

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

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



Sources: Argus and Platts.

VLCC

April brought an increase in **VLCC activities**, which halted the declining trend of the previous month. The firming rates trend was detected in several markets but mainly in the Middle East and West Africa. The tonnage carry over from the previous month was at its lowest level since some time. That, combined with enhanced tonnage demand, has reduced vessel supply and underpinned rate sentiment. Ship owners took advantage of the tightening vessel supply and pushed for increasingly higher rates. Therefore, VLCC spot freight rates in April went up for all major trading routes, particularly for first-decade loadings in April, where Middle East-to-East freight rates rose by 22% and the Middle East-to-West route averaged WS34 points, up by 24% m-o-m. The VLCC market in the West was active despite the Easter holidays, showing an annual increase of 21%. West Africa-to-East freight rates followed the same pattern, increasing by 14% to stand at WS68 points, supported partially by loading requirements from Indian charterers. Towards the end of the month, VLCC freight rates had a softer feel, as they were mostly corrected down as the activity level thinned and tonnage availability started to build.

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

	Size 1,000 DWT	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17
Middle East/East	230-280	71	53	65	12
Middle East/West	270-285	37	28	34	7
West Africa/East	260	71	59	68	8

Sources: Argus Media and OPEC Secretariat.

Suezmax

Unlike what was seen in VLCC sector, **Suezmax average spot freight rates** declined by 8% in April, reversing all the gains achieved one month earlier, despite an active market at the beginning of the month. In the Black Sea, freight rates dropped as tonnage availability grew. Average freight rates declined despite of occasional spike in rates seen as the pre-holiday rush materialised. At that point, higher rates were achieved in several loading areas mainly covering the first decade requirements of May. The market maintained its activity following the holidays when spot freight rates moderately strengthened in West Africa, the North Sea and Baltics, while the Suezmax market in the Caribbean and US Gulf (USG) lacked sufficient activity. Consequentially, freight rates for tankers on the West Africa-to-US Gulf Coast (USGC) route declined by 12% to average WS77 points, and on the NWE-to-USGC route, freight rates averaged WS66 points, down by 5% from a month earlier. Freight rates on both routes remained lower by 3% and 4%, respectively, than during the same months in 2016.

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

	Size 1,000 DWT	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17
West Africa/US Gulf Coast	130-135	74	88	77	-11
Northwest Europe/US Gulf Coast	130-135	65	69	66	-3

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax freight rates exhibited declines on all its reported routes in April. **Aframax freight rates in the Mediterranean** showed softer sentiment as tonnage supply appeared to be too large even during delays at European ports. The lack of activity led to a drop in freight rates by 8% from the previous month, on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes, which averaged WS104 points and WS98 points, respectively. Despite the general drop in the Mediterranean rates in April, they remain higher than in the previous year by 20% and 23%, respectively.

In the **Caribbean**, rates saw another drop, mainly due to a lack of firm inquiries and the tonnage position list being over populated, while the loading requirements remained limited, thus giving the charters the option to push for lower rates. Thus, freight rates for Aframax tankers operating on the Caribbean-to-US East Coast (USEC) declined by 7% from the previous month to average WS103 points. **Aframax freight rates in the East** were of no exception, showing a decline from the previous month as spot freight rates registered on Indonesia-to-East routes declined similar to other routes, dropping by 17% m-o-m, to average WS101 points.

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

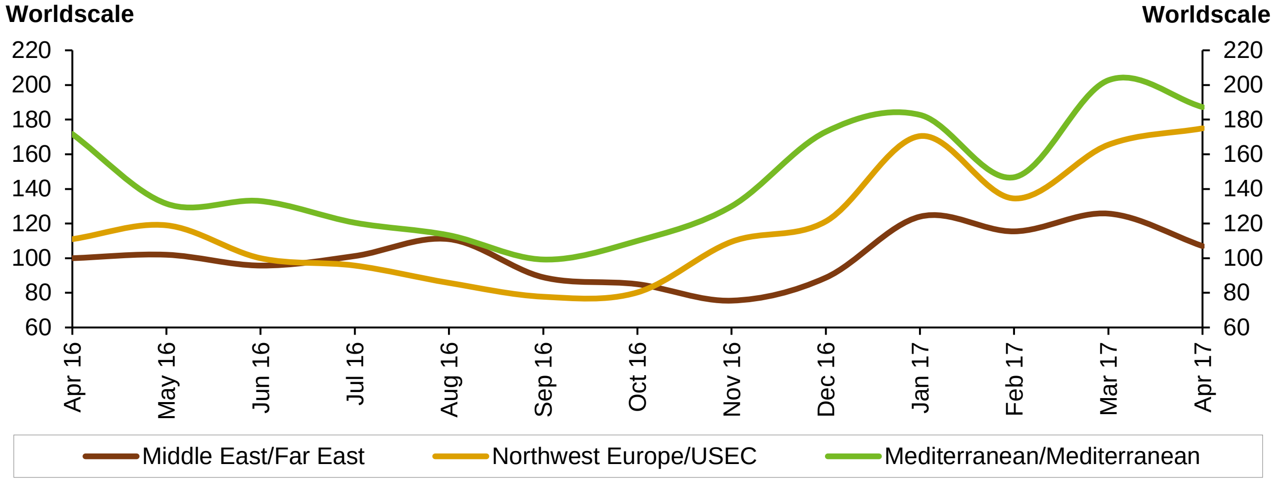
	Size 1,000 DWT	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17
Indonesia/East	80-85	105	121	101	-20
Caribbean/US East Coast	80-85	131	110	103	-7
Mediterranean/Mediterranean	80-85	103	113	104	-9
Mediterranean/Northwest Europe	80-85	94	107	98	-8

Sources: Argus Media and OPEC Secretariat.

Clean tanker freight rates

In April, although the month started with steady activities for both long-range (LR) 1 and LR2 vessels, activities soon slowed down and rates started to fall. **Clean tanker spot freight** mostly dropped with one exception registered on the NWE-to-US routes where it showed a gain of 6% from a month earlier to stand at WS175 points. The medium-range (MR) tanker market in the East and West weakened in April as freight rates declined on several routes.

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



Sources: Argus Media and OPEC Secretariat.

In the **East**, the MR market was weak as a result of low activity and thin inquiries in general. Freight rates for tankers operating on the Middle East-to-East route declined by 15% to average WS107 points. Rates for the Singapore-to-East route went down by 4% in April compared to the previous month.

The **Mediterranean** chartering market weakened in April as vessel availability was ample. Thus, the Mediterranean-to-Mediterranean and Mediterranean-to-NWE clean spot freight rates edged down by 8% each to stand at WS187 points and WS197 points, respectively.

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

	Size *1,000 DWT*	Feb 17	Mar 17	Apr 17	*Change* Apr 17/Mar 17
East of Suez					
Middle East/East	30-35	116	126	107	-19
Singapore/East	30-35	157	151	144	-7
West of Suez					
Northwest Europe/US East Coast	33-37	135	166	175	10
Mediterranean/Mediterranean	30-35	147	203	187	-16
Mediterranean/Northwest Europe	30-35	157	213	197	-16

Sources: Argus Media and OPEC Secretariat.

Oil Trade

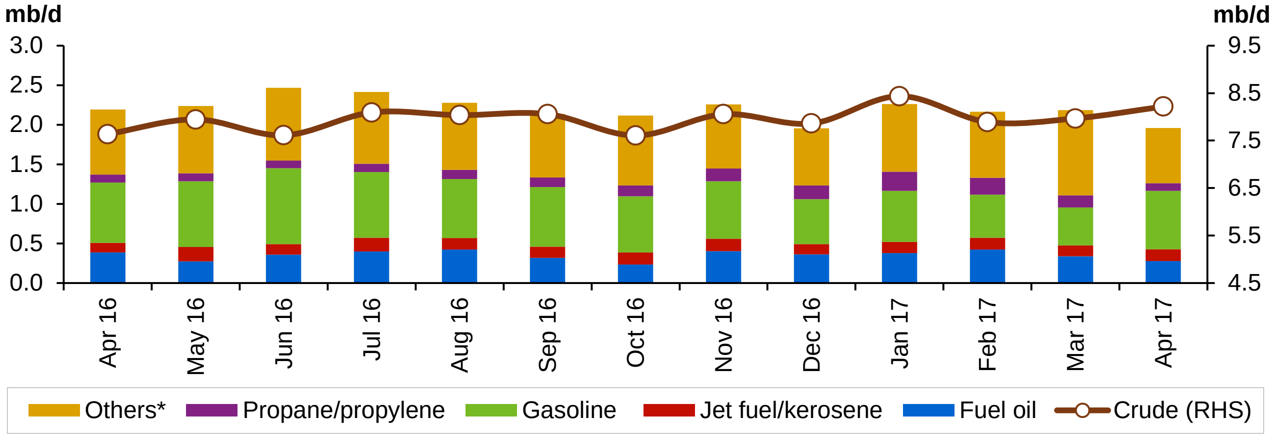
In April, preliminary data shows that US crude oil imports went up to average 8.2 mb/d, an increase of 250 tb/d from last month and 579 tb/d from last year. On a year-to-date (y-t-d) basis, US crude imports in April were 311 tb/d higher. US product monthly imports were down from the previous month by 223 tb/d, and by 232 tb/d from previous year. Japan's crude oil imports dropped in March from the previous month by 335 tb/d, or 10%, to average 3.2 mb/d. Y-o-y, crude imports decreased from last year by 356 tb/d. Japan's product imports dropped in March to the lowest level since October 2016, down by 108 tb/d, to average 534 tb/d. Y-o-y, product imports were up by 56 tb/d. China's crude imports reached new record high levels in March, increasing by 889 tb/d, to average 9.2 mb/d, while crude imports remained higher from last year by a remarkable 1.5 mb/d. China's product imports went down by 84 tb/d and 72 tb/d from the previous month and previous year, respectively. India's crude oil imports were flat in March from the previous month, while y-o-y, they dropped by 79 tb/d, or 2%, to average 4.3 mb/d. India's product imports were generally stable from the previous month, averaging 917 tb/d in March.

US

Preliminary data shows that **US crude oil imports** in April went up to average 8.2 mb/d, which is an increase of 250 tb/d from the previous month and 579 tb/d from last year. Y-t-d, US crude imports in April were 311 tb/d higher.

US product imports were down from the previous month by 223 tb/d and from the previous year by 232 tb/d.

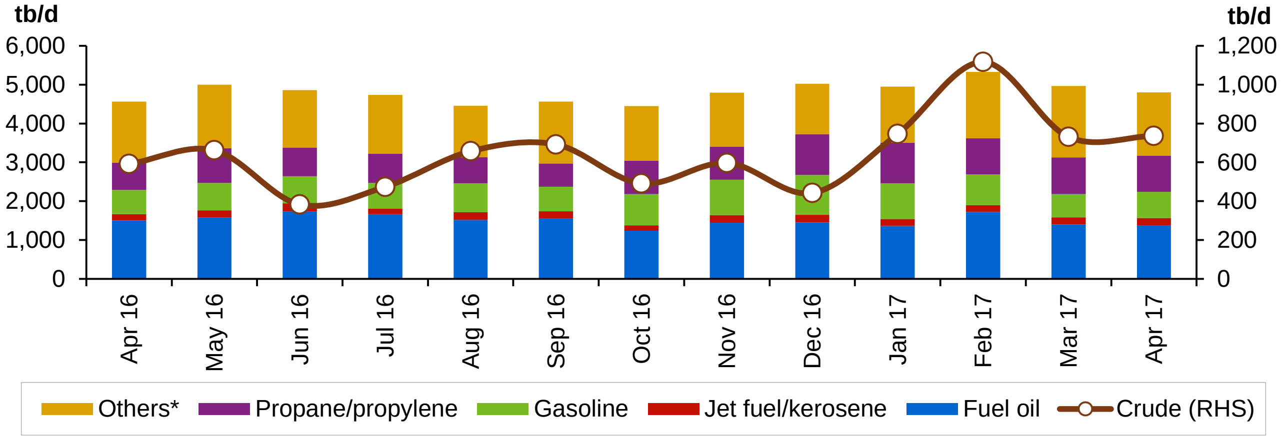
Graph 8 - 1: US imports of crude and petroleum products



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

US product exports were 158 tb/d lower than a month ago to average 4.8 mb/d. On an annual comparison, product exports were 240 tb/d higher than the previous year.

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



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

As a result, **US total net imports rose in April by 180 tb/d, or 4%, to average 4.6 mb/d.**

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

	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17
Crude oil	6,774	7,235	7,480	245
Total products	-3,164	-2,778	-2,843	-64
Total crude and products	**3,610**	**4,457**	**4,637**	**180**

Sources: US Energy Information Administration and OPEC Secretatiat.

In February, the top first and second suppliers to the US maintained the same order as previously seen. Canada was the **prime crude supplier** to the US with a share of 44% of total US crude imports, slightly lower than January, by 22 tb/d, to average 3.5 mb/d. Saudi Arabia came in as the second-biggest supplier to the US with no significant change in its exports from the previous month, exporting 1.3 mb/d to the US in February. Venezuela came in as the third-largest supplier, accounting for 9% of total US crude imports. Similarly, Venezuela exports to the US were lower in February from the previous month by 25 tb/d.

Total crude imports from OPEC Member Countries were down in February from the previous month by 403 tb/d, or 11%, accounting for 40% of total US crude imports. US product imports from OPEC Member Countries rose by 55 tb/d from the previous month and were 12 tb/d higher than the previous year.

As for the **product suppliers' shares**, Canada and Russia maintained their positions as first and second suppliers to the US, accounting for 31% and 13%, respectively. Algeria came in as the third-biggest supplier to the US, holding a share of 7%, which an increase of 44 tb/d from the previous month.

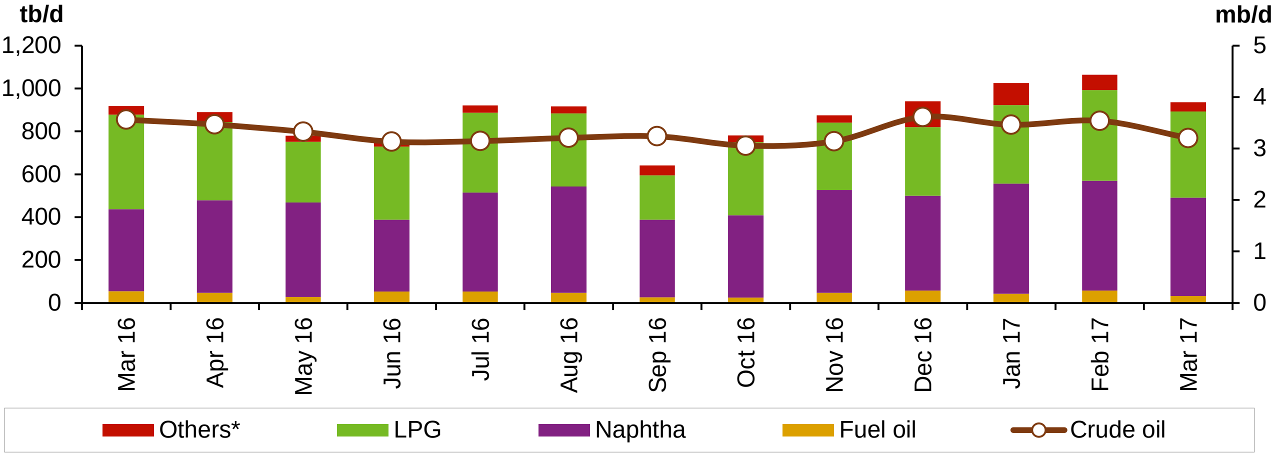
US crude imports by region registered no major changes in February 2017 as seen before. The largest crude import volumes in the US came from North America, averaging 3.5 mb/d, followed by the Middle East, which averaged 2 mb/d in February. Latin America came in as the third region with an average of 1.95 mb/d. Imports from Africa dropped from one month ago to average 387 tb/d in February.

As for **crude imports by PADD**, in PADD 1, on the East Coast, imports dropped by 177 tb/d from Africa and by 92 tb/d from North America. Imports from PADD 2 were mostly sourced from North America, which stood at 2.5 mb/d, up by 90 tb/d from January. PADD 3 sourced its largest imports from Latin America, followed by the Middle East. Imports from both regions dropped by 165 tb/d and 28 tb/d, respectively, in February. PADD 4 imported 270 tb/d from North America, a decrease of 55 tb/d from the previous month. In PADD 5, on the West Coast, the highest imports came from the Middle East, averaging 430 tb/d in February, followed by imports from Latin America and North America, which averaged 363 tb/d and 227 tb/d, respectively.

Japan

Japan's crude oil imports dropped in March from the previous month by 335 tb/d, or 9%, to average 3.2 mb/d. Y-o-y, crude imports decreased from last year by 356 tb/d. At the same time, Japan's refinery throughput went down from the month before as the refinery maintenance season continued.

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



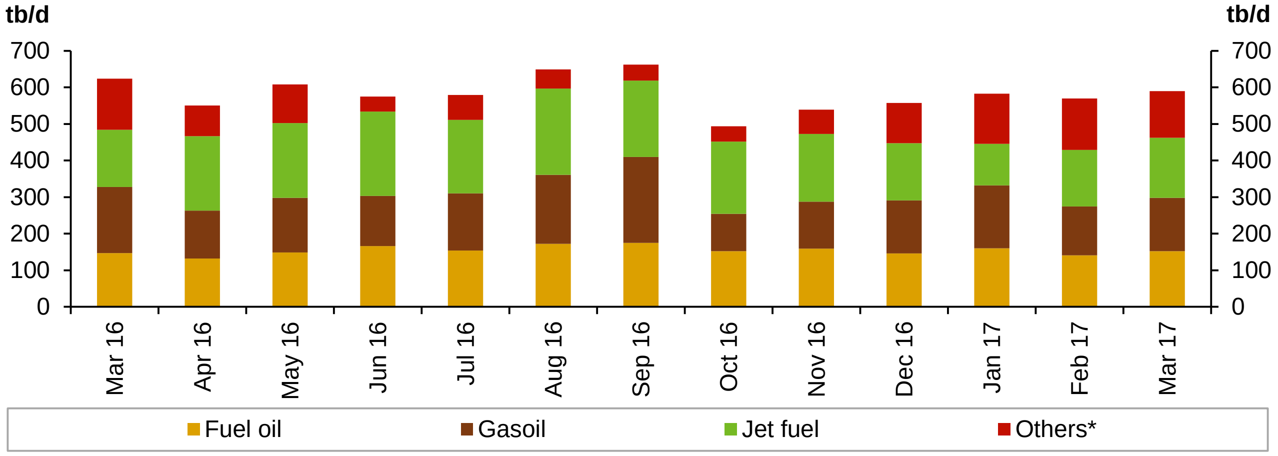
*Note: *Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Looking at the **crude suppliers' shares**, Saudi Arabia, as in previous month, came in as the first crude supplier to Japan, holding a share of 42% of total crude imports, yet with lesser volume, by 101 tb/d, from a month before. The UAE came in as the second largest supplier to Japan with a share of 23% of total crude imports, remaining stable from one month before. Qatar came in as third supplier in March with a share of 9%, as volumes imported from Qatar were up from the previous month by 10 tb/d.

Japan's product imports dropped in March to the lowest level since October of the previous year, down by 108 tb/d, to average 534 tb/d, which could be driven by the fall of **Japan's product sales** by 3.7% from the previous year.

Japan's products exports in March remained high, up from the previous month by 20 tb/d, to average 589 tb/d, while it recorded a drop of 34 tb/d, or 5%, from the previous year.

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



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

Accordingly, **Japan's net imports** dropped in March by 463 tb/d to average 3.1 mb/d.

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

	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17
Crude oil	3,460	3,539	3,203	-335
Total products	75	72	-56	-127
Total crude and products	**3,536**	**3,610**	**3,148**	**-463**

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

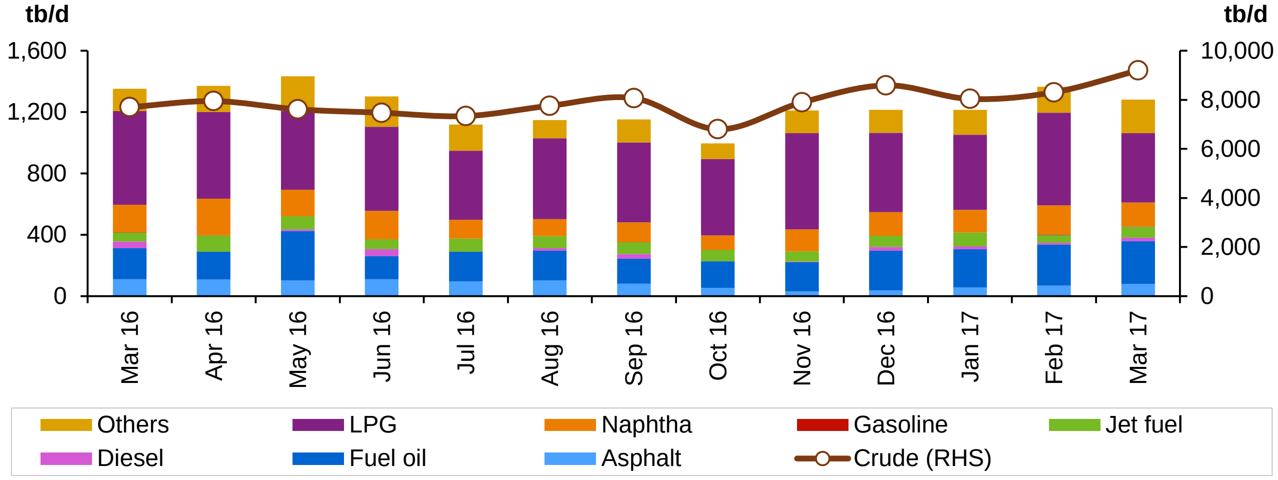
China

China's crude imports reached a new record high in March, increasing by 889 tb/d, to average 9.2 mb/d, and remained higher from last year by a remarkable 1.5 mb/d. Y-t-d, the figures reflected an increase of 1.2 mb/d, or 16%.

In terms of **crude oil suppliers' shares,** Russia, Angola and Saudi Arabia were the top suppliers to China in March, accounting for 12% each. Crude imports from Angola increased from a month before by 251 tb/d to average 1.1 mb/d. Imports from Saudi Arabia and Russia were lower from a month before by 172 tb/d and 14 tb/d, respectively. In March, China's refinery runs showed a drop from the previous month due to scheduled refinery maintenance.

China's product imports decreased by 84 tb/d and 72 tb/d from the previous month and previous year, respectively.

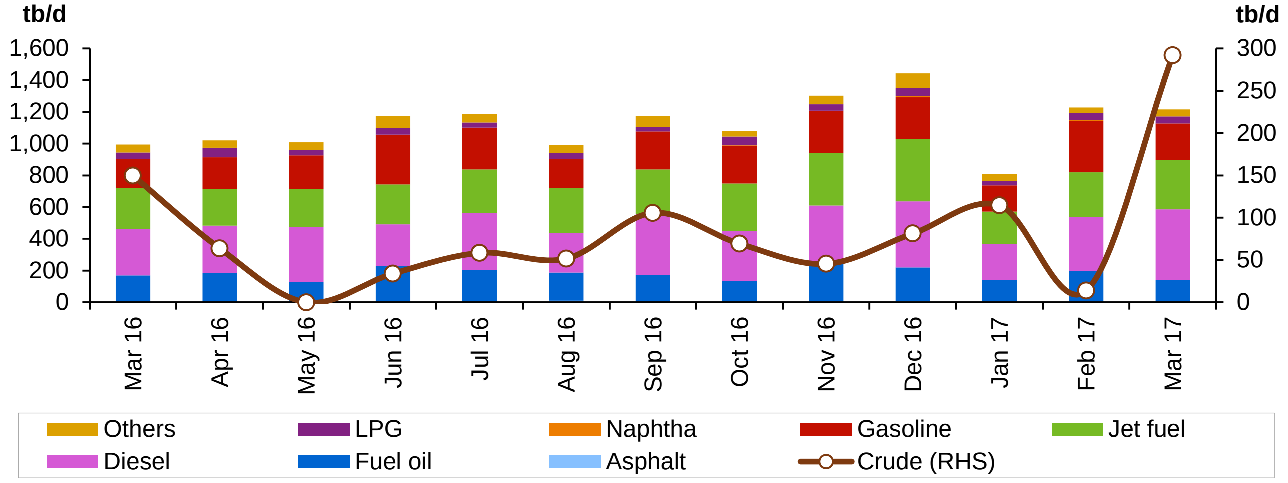
Graph 8 - 5: China's imports of crude and petroleum products



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

China's product exports in March averaged 1.2 mb/d, down slightly by 13 tb/d from February.

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



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

As a result, **China's net oil imports** increased by 540 tb/d from the previous month and remained above last year's level by 1.1 mb/d.

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

	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17
Crude oil	7,922	8,295	8,906	611
Total products	404	137	65	-71
Total crude and products	**8,326**	**8,432**	**8,971**	**540**

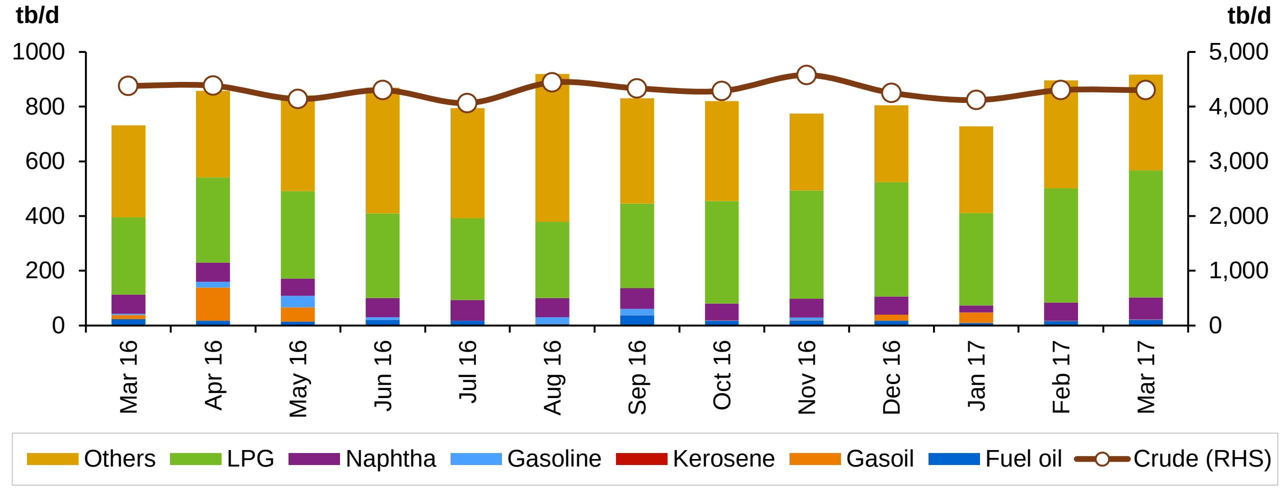
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

In March, **India's crude oil imports** remained flat from the previous month, while y-o-y, they dropped by 79 tb/d, or 2%, to average 4.3 mb/d.

Product imports were generally stable from the previous month, averaging 917 tb/d in March.

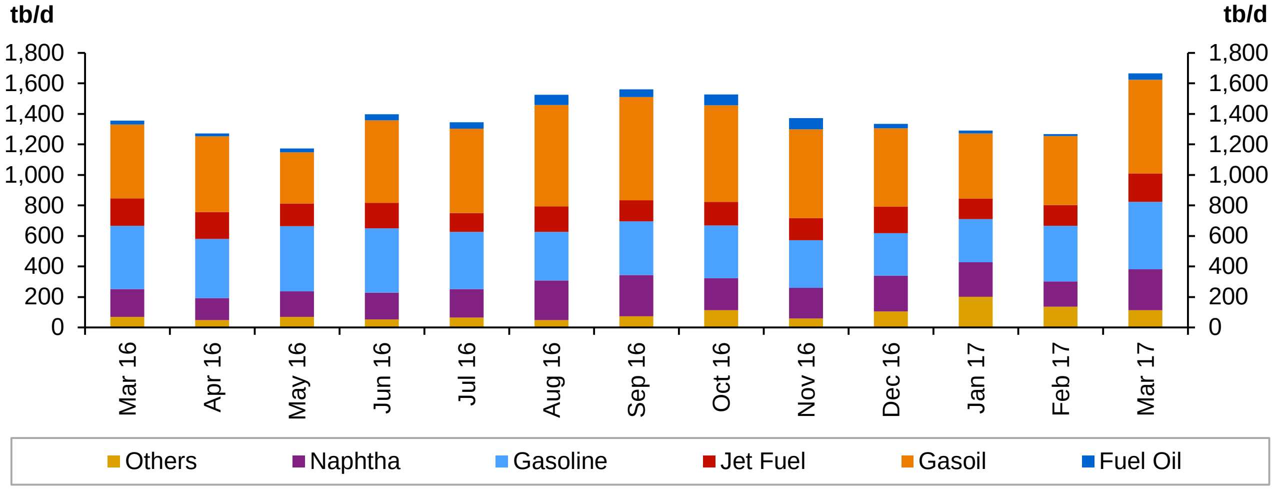
Graph 8 - 7: India's imports of crude and petroleum products



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

India's product exports rose from the previous month by 398 tb/d, or 31%, and were up by 309 tb/d y-o-y. In March, all products rose, particularly gasoil and naphtha.

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



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

Therefore, **India's net imports dropped by 378 tb/d to average 3.6 mb/d**, down by 10% m-o-m and by 202 mb/d, or 5%, from the previous year.

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

	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17
Crude oil	4,119	4,302	4,301	-1
Total products	-563	-371	-748	-377
Total crude and products	**3,557**	**3,931**	**3,553**	**-378**

Note: India data table does not include information for crude import and product export by Reliance Industries.
Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

FSU

In March, **total crude oil exports from the former Soviet Union rose by 98 tb/d, or 1.4%, to average 6.9 mb/d.** Similarly, total Russian crude exports increased by 112 tb/d, or 3%, to average 4.2 mb/d.

Total shipments from the **Black Sea** rose by 96 tb/d, or 18%, to average 614 tb/d in March. Total **Baltic Sea** exports rose by 25 tb/d in March as shipments from the UST Luga port terminal increased by 103 tb/d from the previous month, although the increase was offset by lower shipments from Primorsk port. The **Druzhba pipeline's total** shipments went up slightly by 9 tb/d to average 953 tb/d, while Kozmino shipments were generally flat, averaging 604 tb/d.

Exports through the **Lukoil system** were lower from the previous month in the Barents Sea and Baltic Sea, down by 17 tb/d and 6 tb/d, respectively. The other routes showed mixed performances in March from a month before, as exports from the Mediterranean Sea dropped by 118 tb/d.

Looking at **Asia**, **Russian Far East** total exports were up slightly by 6 tb/d.

FSU total product exports increased by 110 tb/d, or 3.2%, from last month, to average 3.6 mb/d. This gain in came mainly as a result of higher exports of fuel oil and gasoil, which increased from the previous month by 168 tb/d and 115 tb/d, respectively.

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

			2016	4Q16	1Q17	Feb 17	Mar 17
Transneft system							
	Europe	**Black sea total**	**600**	**545**	**558**	**519**	**614**
		Novorossiysk port terminal - total	600	545	558	519	614
		of which: Russian oil	443	386	387	308	431
		Others	157	159	172	211	184
		Baltic sea total	**1,593**	**1,668**	**1,650**	**1,671**	**1,697**
		Primorsk port terminal - total	1,000	1,010	1,011	1,055	977
		of which: Russian oil	1,000	1,010	1,011	1,055	977
		Others	0	0	0	0	0
		Ust-Luga port terminal - total	593	658	639	617	720
		of which: Russian oil	388	446	464	463	534
		Others	205	212	175	154	186
		Druzhba pipeline total	**1,072**	**1,098**	**987**	**944**	**953**
		of which: Russian oil	1,040	1,066	954	911	922
		Others	32	32	32	33	32
	Asia	**Pacific ocean total**	**646**	**666**	**617**	**601**	**604**
		Kozmino port terminal - total	646	666	617	601	604
		China (via ESPO pipeline) total	**335**	**332**	**342**	**348**	**328**
		China Amur	335	332	342	348	328
	Total Russian crude exports		**4,246**	**4,309**	**4,153**	**4,084**	**4,196**
Lukoil system							
	Europe &	**Barents sea total**	**159**	**154**	**156**	**155**	**139**
	North America	Varandey offshore platform	159	154	156	155	139
	Europe	**Baltic sea total**	**15**	**13**	**14**	**16**	**10**
		Kalinigrad port terminal	15	13	14	16	10
Other routes							
	Asia	**Russian Far East total**	**360**	**372**	**381**	**383**	**389**
		Aniva bay port terminal	119	135	138	133	139
		De Kastri port terminal	241	236	243	250	250
		Central Asia total	**194**	**195**	**230**	**229**	**224**
		Kenkiyak-Alashankou	194	195	230	229	224
	Europe	**Black sea total**	**1,078**	**1,226**	**1,239**	**1,217**	**1,349**
		Novorossiysk port terminal (CPC)	957	1,113	1,144	1,105	1,259
		Supsa port terminal	79	64	74	93	65
		Batumi port terminal	42	49	21	18	25
		Kulevi port terminal	0	0	0	0	0
		Mediterranean sea total	**668**	**615**	**674**	**706**	**588**
		BTC	668	615	674	706	588
Russian rail							
		Russian rail	**34**	**37**	**44**	**49**	**42**
		of which: Russian oil	30	36	44	49	42
		Others	4	2	0	0	0
	Total FSU crude exports		**6,754**	**6,921**	**6,892**	**6,840**	**6,938**
Products							
		Gasoline	189	173	188	206	179
		Naphtha	506	510	594	565	606
		Jet	40	30	32	34	30
		Gasoil	972	877	1,188	1,175	1,290
		Fuel oil	1,043	1,023	1,162	1,077	1,245
		VGO	299	333	346	429	246
	Total FSU product exports		**3,050**	**2,945**	**3,510**	**3,486**	**3,596**
Total FSU oil exports			**9,804**	**9,866**	**10,402**	**10,326**	**10,534**

Sources: Argus Nefte Transport and Argus Global Markets.

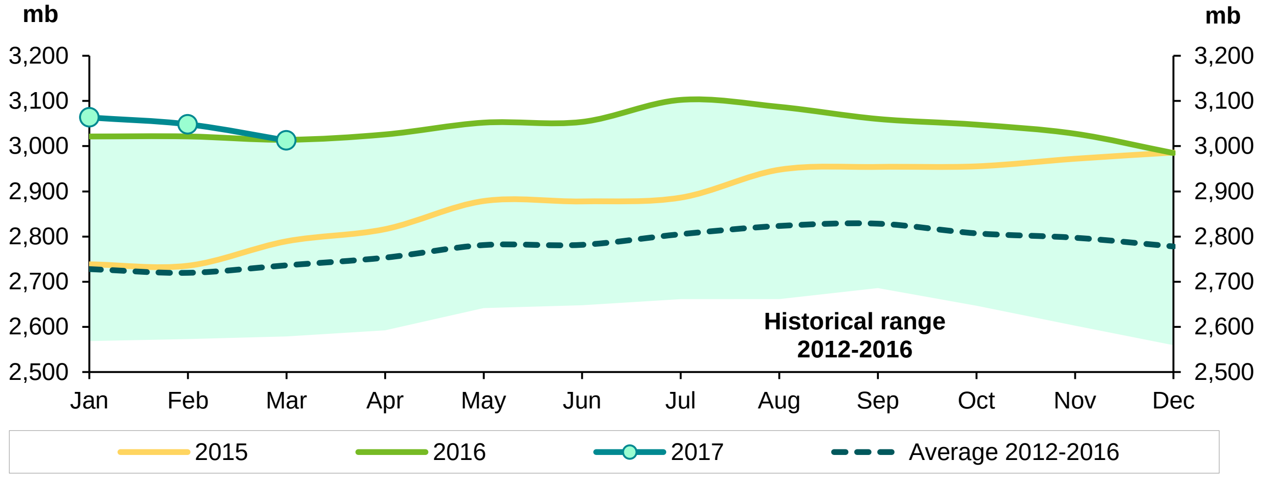
Stock Movements

OECD commercial oil stocks fell in March to stand at 3,013 mb, which is around 276 mb above the latest five-year average. Crude and products indicated a surplus of around 187 mb and 89 mb above the seasonal norm, respectively. In terms of days of forward cover, OECD commercial stocks stood at 64.8 days in March, 4.8 days higher than the latest five-year average. Preliminary data for April shows that US total commercial oil stocks rose slightly in April to stand at 1,339 mb, indicating a surplus of 187 mb above the latest five-year average. Within the components, crude fell by 7.8 mb, while products rose by 9.3 mb, m-o-m. The latest information for China shows that total commercial oil inventories fell in March to 390.9 mb, which is 17.8 mb lower than the previous year. Within the components, crude and product stocks fell by 4.9 mb and 0.4 mb, respectively.

OECD

Preliminary data for March shows that **total OECD commercial oil stocks** fell by 36.0 mb for the second consecutive month to stand at 3,013 mb, which is around 2.0 mb lower than the same time one year ago, but 276 mb above the latest five-year average. Within the components, crude rose by 7.4 mb, while products fell by 43.4 mb. All regions witnessed a stock draw.

Graph 9 - 1: OECD's commercial oil stocks



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

OECD commercial crude stocks rose by 7.4 mb in March for the second consecutive month to stand at 1,537 mb, which is 35 mb above the same time a year ago and around 187 mb higher than the latest five-year average. While OECD Asia Pacific stocks witnessed a stock draw, OECD Americas experienced a stock build in commercial crude stocks. OECD Europe remained unchanged.

By contrast, **OECD product inventories** fell by 43.4 mb in March to stand at 1,475 mb, which is 36 mb below the same time a year ago, but 89 mb above the seasonal norm. All regions witnessed product stock draws.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.7 mb in March to stand at 64.8 days, which is 0.3 days less than the same period in 2016, and 4.8 days higher than the latest five-year average. Within the regions, OECD Americas had 6.6 more days of forward cover than the historical average to stand at 64.4 days in March. OECD Asia Pacific stood 0.2 days below the seasonal average to finish the month at 52.6 days, while OECD Europe indicated a surplus of 4.0 days above the seasonal norm, averaging 72.4 days in March.

OECD Americas

Total commercial stocks in OECD Americas fell by 17.0 mb in March to stand at 1,597 mb, which is 8.0 mb above a year ago and 205 mb higher than the seasonal norm. Within the components, crude rose by 12.0 mb, while product stocks fell by 29.0 mb, m-o-m.

At the end of March, **commercial crude oil stocks** in OECD Americas rose, ending the month at 870 mb, which is 39 mb above the same time one year ago and 164 mb above the latest five-year average. The build could be attributed to higher US crude imports combined with higher domestic production. However, higher US crude throughput limited further builds.

By contrast, **commercial product stocks** in OECD Americas fell by 29 mb in March, the second consecutive monthly drop, to stand at 727 mb, which is 31 mb less than the same time one year ago but 41 mb higher than the seasonal norm. This drop was mainly driven by higher US consumption of the major products.

OECD Europe

OECD Europe's **total commercial stocks** fell by 10.4 mb in March, ending the month at 1,012 mb, which is 8.5 mb lower than the same time a year ago, but 74 mb above the latest five-year average. Crude remained unchanged, while product stocks fell by 10.4 mb.

OECD Europe's **commercial crude stocks** remained unchanged at 424 mb, which is 7.7 mb higher than a year earlier and 23.8 mb higher than the latest five-year average. The increase in production in the North Sea offset the drop in OECD Europe crude runs in March leading to stable crude stocks in March vs. February.

OECD Europe's **commercial product stocks** fell by 10.4 mb to end March at 589 mb, which is 0.8 mb higher than the same time a year ago and 50 mb higher than the seasonal norm.

OECD Asia Pacific

OECD Asia Pacific's **total oil commercial stocks** fell by 8.6 mb in March to stand at 403 mb, which is 18.1 mb lower than a year ago and 1.9 mb lower than the five-year average.

Within the components, **crude and products** fell in March by 4.6 mb and 4.0 mb from February, respectively. **Crude inventories** ended the month of March at 244 mb, which is 11.6 mb below a year ago and 0.6 mb less than the seasonal norm.

OECD Asia Pacific's **total product inventories** ended March at 160 mb, standing 6.5 mb lower than the same time a year ago and 1.4 mb lower than the seasonal norm.

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

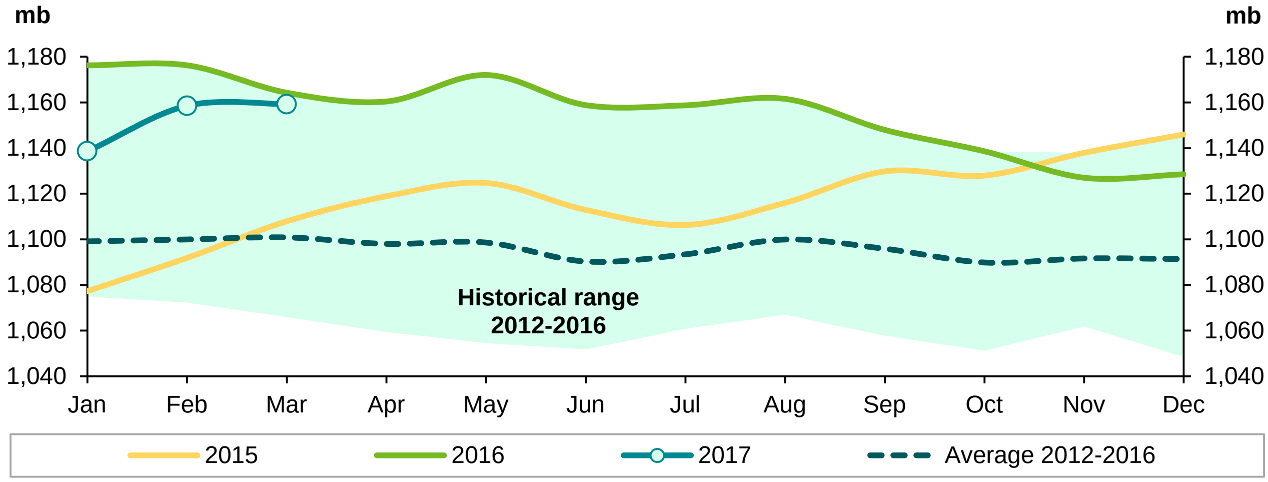
	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17	Mar 16
Crude oil	1,521	1,530	1,537	7.4	1,503
Products	1,543	1,518	1,475	-43.4	1,512
Total	**3,064**	**3,049**	**3,013**	**-36.0**	**3,014**
Days of forward cover	**65.0**	**65.5**	**64.8**	**-0.7**	**65.2**

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

EU plus Norway

Preliminary data for March shows that **total European stocks** rose slightly by 0.6 mb following a build of 20.0 mb in February. At 1,159.2 mb, European stocks were 5.1 mb, or 0.4%, lower than the same time a year ago, but remained 58.3 mb, or 5.3%, higher than the latest five-year average. Crude stocks remained unchanged, while total product stocks rose by 0.6 mb, m-o-m.

Graph 9 - 2: EU-15 plus Norway's total oil stocks



Source: Euroilstock.

European **crude inventories** remained unchanged in March to stand at 486.4 mb, which is 0.4 mb, or 0.1%, higher than the same period a year ago. Comparing to the seasonal average, they were 13.7 mb, or 2.9%, higher. The decline of crude throughput offset the increase in North Sea production, leading to almost a flat level in European inventories. Preliminary data indicates that European refiners were running at around 10.3 mb/d in March, about 20 tb/d lower than the same period one year ago.

By contrast, European **product stocks** rose by 0.6 mb, ending March at 673 mb, which is 5.5 mb, or 0.8%, lower than the same time a year ago but still 44.6 mb, or 7.1%, above the seasonal norm. Within products, distillate and naphtha stocks rose, while gasoline and residual fuel oil inventories witnessed draws.

Distillate stocks rose by 1.0 mb in March to end the month at 453.0 mb, which is 6.7 mb, or 1.5%, higher than the same time a year ago, and 54.6 mb, or 13.7%, above the latest five-year average. The build was driven mainly by lower demand in March compared to January. In contrast, **gasoline stocks** fell by 0.9 mb in March to stand at 123.9 mb, which is 0.4 mb, or 0.3%, higher than the same time one year ago, and 6.1 mb, or 5.2%, higher than the seasonal norm. The fall in gasoline stocks was mainly driven by lower output. **Residual fuel oil stocks** also fell by 0.3 mb in March to stand at 70.4 mb, which is 12.5 mb, or 15.0%, less than the same month a year ago, and 11.0 mb, or 13.5%, lower than the latest five-year average.

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

	Jan 17	Feb 17	Mar 17	*Change* Mar 17/Feb 17	Mar 16
Crude oil	**480.1**	**486.4**	**486.4**	**0.0**	**486.0**
Gasoline	122.3	124.8	123.9	-0.9	123.5
Naphtha	24.2	24.6	25.5	0.9	25.7
Middle distillates	441.5	452.0	453.0	1.0	446.3
Fuel oils	70.5	70.7	70.4	-0.3	82.9
Total products	**658.4**	**672.2**	**672.8**	**0.6**	**678.3**
Total	**1,138.6**	**1,158.6**	**1,159.2**	**0.6**	**1,164.3**

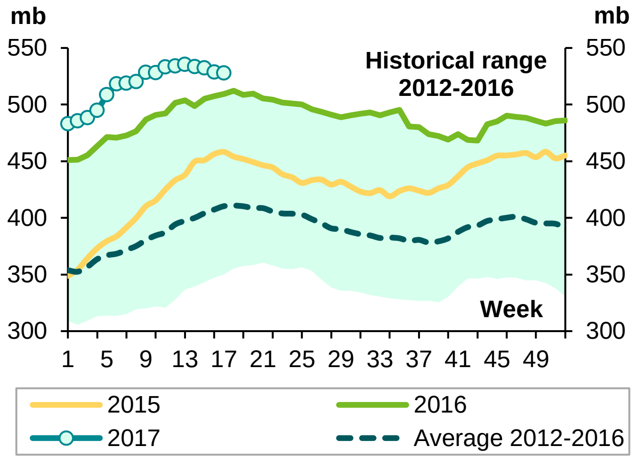
Sources: Argus and Euroilstock.

US

Preliminary data for April shows that US **total commercial oil stocks** rose slightly by 1.6 mb, reversing the fall of 17 mb in March. At 1,339 mb, US commercial stocks stood at 2.1 mb, or 0.2%, above the same period a year ago and 187 mb, or 16.2%, higher than the latest five-year average. Within the components, crude fell by 7.8 mb, while products rose by 9.3 mb, m-o-m.

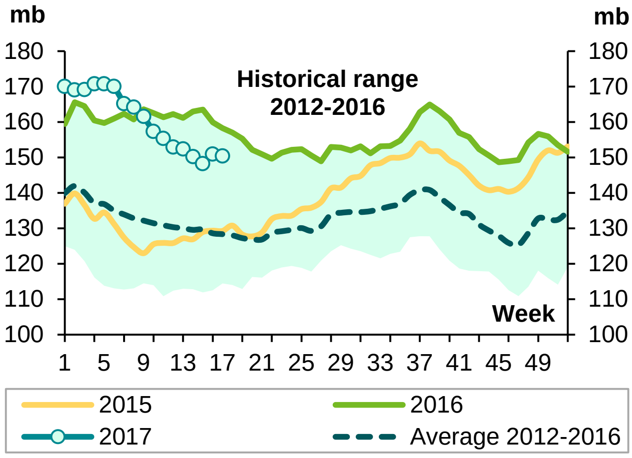
US **commercial crude stocks** fell in April, reversing the build of the last three consecutive months, to stand at 527.8 mb, which is 21.5 mb, or 4.2%, above the same time one year ago and 118.0 mb, or 28.8%, above the latest five-year average. The decline was mainly driven by higher crude throughput, which increased by nearly 1.0 mb/d to average 17.0 mb/d. However, higher crude imports limited further drops.

Graph 9 - 3: US weekly commercial crude oil inventories



Sources: US Energy Information Administration and OPEC Secretariat.

Graph 9 - 4: US weekly distillates inventories



Sources: US Energy Information Administration and OPEC Secretariat.

In contrast, **total product stocks** rose by 9.3 mb in April, reversing the drop of last two months, to stand at 811.2 mb, which is 19.4 mb, or 2.3%, down from the level seen at the same time in 2016, but 68.6 mb, or 9.2%, above the seasonal average. Within products, the picture was mixed, with gasoline and jet fuel showing builds, while distillates and residual fuel stocks witnessing stock draws.

Gasoline stocks rose by 2.1 mb in March, reversing the drop of the last two months. At 241.2 mb, they were 1.5 mb, or 0.6%, lower than the same period a year ago, but 17.4 mb, or 7.8%, above the latest five-year average. The build came mainly as a result of lower consumption, which declined by nearly 100 tb/d from the previous month to stand at 9.2 mb/d. **Jet fuel oil inventories** also rose by 1.3 mb to 43.4 mb in April, which is 0.1 mb, or 0.2%, down from the level seen the same time in 2016, but 2.9 mb, or 7.2%, above the seasonal norm.

In contrast, **distillate stocks** fell by 2.0 mb in April for the third consecutive month to stand at 150.4 mb, indicating a deficit of 4.3 mb, or 2.8%, the same period a year ago, yet 21.4 mb, or 16.6%, above the latest five-year average. The drop in middle distillate stocks mainly came as a result of relatively higher consumption as distillation production increased. **Residual fuel stocks** also fell by 0.2 mb, ending April at 39.4 mb, which is 3.8 mb, or 8.9%, below the same period a year ago and 0.8 mb, or 2.0%, higher than the latest five-year average.

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

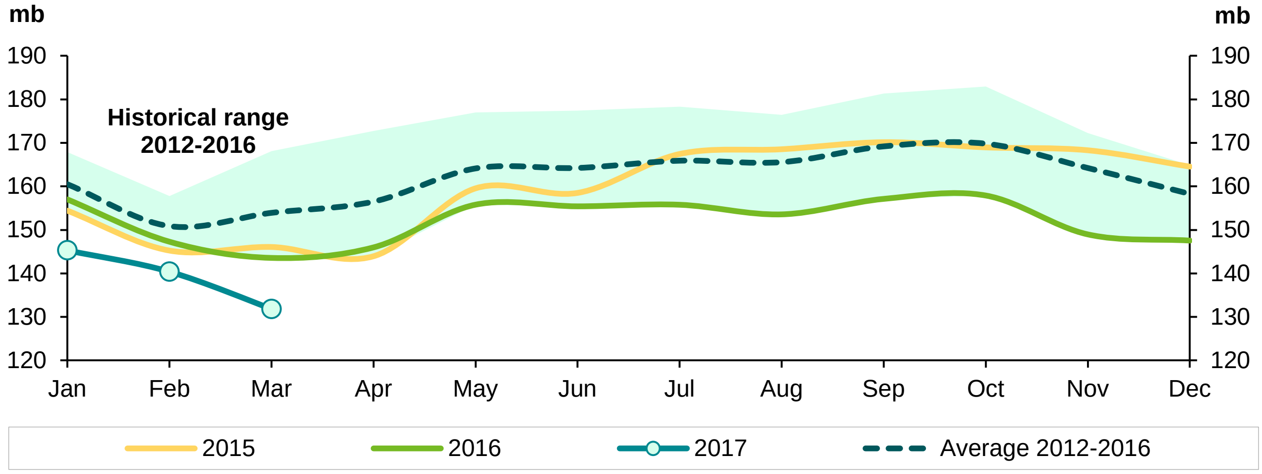
	Feb 17	Mar 17	Apr 17	Change Apr 17/Mar 17	Apr 16
Crude oil	**523.6**	**535.5**	**527.8**	**-7.8**	**506.3**
Gasoline	253.1	239.1	241.2	2.1	242.7
Distillate fuel	162.2	152.4	150.4	-2.0	154.7
Residual fuel oil	39.6	39.6	39.4	-0.2	43.3
Jet fuel	43.9	42.1	43.4	1.3	43.5
Total	**1,354.5**	**1,337.4**	**1,339.0**	**1.6**	**1,336.9**
SPR	**694.8**	**692.1**	**689.3**	**-2.8**	**695.1**

Sources: US Energy Information Administration and OPEC Secretariat.

Japan

In Japan, **total commercial oil stocks** fell by 8.6 mb in March for the fifth consecutive month to stand at 131.8 mb, which is 11.7 mb, or 8.2%, less than the same time a year ago and 22.1 mb, or 14.4%, below the five-year average. Within the components, crude and products fell by 4.6 mb and 4.0 mb m-o-m, respectively.

Graph 9 - 5: Japan's commercial oil stocks



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

Japanese **commercial crude oil stocks** fell in March to stand at 78.5 mb, which is 9.9 mb, or 11.2%, below the same period a year ago, and 14.7 mb, or 15.8%, below the seasonal norm. The fall was driven by lower crude imports, which decreased by 335 tb/d, or 9.5%, to average 3.2 mb/d. Lower crude throughputs limited further crude oil stock draws. Indeed, crude runs fell by 269 tb/d, or 7.5%, to stand at 3.35 mb/d.

Japan's **total product inventories** fell by 4.0 mb in March to stand at 53.3 mb, which is 1.8 mb, or 3.2%, lower than the same month the previous year, and 7.4 mb, or 12.1%, less than the seasonal norm. This stock draw came on the back of lower refinery output combined with lower product imports. With the exception of residual fuel, which remained unchanged, all other products witnessed stock draws.

Gasoline stocks fell in March by 0.3 mb to stand at 10.9 mb, which is 0.1 mb, or 1.3%, higher than the same time a year ago, but 1.4 mb, or 11.6%, below the latest five-year average. The decline was driven by higher domestic sales, which increased by 12% from the previous month.

Distillate stocks also fell, dropping by 3.5 mb in March, to stand at 20.5 mb, which is the same level as one year ago, but 3.2 mb, or 13.7%, below the seasonal average. Within the **distillate components**, gasoil and kerosene fell by 8.5% and 30%, respectively, while jet fuel rose by 2.0%. The fall in kerosene stocks came mainly from lower production, which fell by 17.8%, while the fall in gasoil was driven by higher domestic sales, which increased by 4.2%. The build in jet fuel stocks could be attributed to higher output, which increased by 31.2%. High domestic sales limited the build in jet fuel oil stocks.

Total residual fuel oil stocks remained almost unchanged in March to stand at 13.1 mb, which is 0.1 mb, or 0.7%, higher than a year ago, but 1.5 mb, or 10.1%, below the latest five-year average. Within the fuel oil components, fuel oil A rose by 1.3%, while fuel B.C fell by 0.5%. The build in fuel oil A was driven by higher production, which rose by 1.4%, while the fall in fuel oil B.C was attributed to higher exports.

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

	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17	Mar 16
Crude oil	**85.3**	**83.1**	**78.5**	**-4.6**	**88.5**
Gasoline	10.9	11.2	10.9	-0.3	10.7
Naphtha	8.9	9.0	8.9	-0.2	10.9
Middle distillates	27.1	24.0	20.5	-3.5	20.5
Residual fuel oil	13.0	13.1	13.1	0.0	13.0
Total products	**59.9**	**57.3**	**53.3**	**-4.0**	**55.1**
Total**	**145.3**	**140.4**	**131.8**	**-8.6**	**143.6**

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

China

The latest information for China showed that **total commercial oil inventories** fell by 5.3 mb in March, reversing the build of the last two months. At 390.9 mb, Chinese commercial oil inventories stood at 17.8 mb lower than the previous year. Within the components, crude and products stocks fell by 4.9 mb and 0.4 mb m-o-m, respectively.

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

	Jan 17	Feb 17	Mar 17	Change Mar 17/Feb 17	Mar 16
Crude oil	**225.9**	**222.7**	**217.8**	**-4.9**	**237.9**
Gasoline	63.4	64.8	71.2	6.5	62.8
Diesel	68.3	88.6	82.1	-6.5	89.8
Jet kerosene	20.4	20.1	19.8	-0.4	18.2
Total products	**152.1**	**173.5**	**173.1**	**-0.4**	**170.8**
Total	**378.0**	**396.2**	**390.9**	**-5.3**	**408.7**

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

In March, **commercial crude stocks** fell by 4.9 mb for the second consecutive month to stand at 217.8 mb, which is 20.1 mb below the previous year at the same time. This fall could be mainly attributed to higher crude runs as higher crude imports limited further draws in crude oil stocks.

Total product stocks in China also fell by 0.4 mb in March to stand at 173.1 mb, stood at 2.3 mb above the same time a year ago. Within products, the picture was mixed; gasoline saw a build, while diesel and kerosene witnessed stock draws.

Gasoline rose in March by 6.5 mb to stand at 71.2 mb driven by higher production. In contrast, diesel and kerosene inventories fell in March by 6.5 mb and 0.4 mb to stand at 82.1 mb and 19.8 mb, respectively. The fall in diesel stocks was mainly driven by higher demand from industrial and mining companies.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

Singapore

At the end of March**, product stocks** in Singapore fell by 0.7 mb to stand at 51.7 mb, which is 1.5 mb, or 2.8%, below the same period a year ago. Within products, the picture was mixed; fuel oil saw a large drop, while light distillates witnessed a stock build. Middle distillates remained unchanged.

Residual fuel oil stocks fell in March by 1.7 mb in Singapore to stand at 24.9 mb, which is 0.5 mb, or 1.9%, lower than the same time a year ago. The stock draw was mainly driven by higher exports combined with higher marine bunker demand in the region.

In contrast, **light distillate stocks** rose by 1.1 mb in March to stand at 14.26 mb, which is 0.5 mb, or 3.6%, below the same time one year ago. The decline could be driven by lower imports as demand for this product was low in the region. **Middle distillate stocks** remained unchanged in March to end the month at 12.56 mb, which is 0.5 mb, or 3.5%, higher than the same period a year ago.

Amsterdam-Rotterdam-Antwerp (ARA)

Product stocks in ARA rose massively by 5.7 mb in March to stand at 50.7 mb, which is 0.7 mb, or 1.3%, higher than at the same time a year ago. Within products, naphtha, fuel oil and gasoil saw builds, while jet oil and gasoline experienced stock draws.

Gasoil stocks rose by 2.8 mb in March to stand at 24.3 mb, which is 1.8 mb, or 6.8%, below the same time a year ago.

Fuel oil and naphtha inventories also rose, increasing by 4.5 mb and 0.4 mb, respectively. Fuel oil stocks and naphtha ended March above the same time a year ago.

In contrast, **gasoline and jet fuel inventories** fell by 1.2 mb and 0.8 mb, respectively. At 8.5 mb, gasoline stocks were 1.2 mb, or 12%, below the same time a year ago. Jet fuel oil stocks ended the month of March at 4.9 mb, which is 0.6 mb, or nearly 12%, lower than the same time a year ago.

Balance of Supply and Demand

Demand for OPEC crude in 2016 stood at 31.8 mb/d, which is 2.0 mb/d higher than the 2015 level. In 2017, the demand for OPEC crude is projected at 31.9 mb/d, around 0.2 mb/d higher than last year.

Balance of supply and demand in 2016

Demand for OPEC crude in 2016 stood at 31.8 mb/d, which is 0.1 mb/d higher than in the previous report and 2.0 mb/d higher than the 2015 level. Within the quarters, the first two quarters were revised up by 0.1 mb/d, while the fourth was revised up by 0.2 mb/d. The third quarter remained unchanged.

Comparing to the same quarters of last year, the first and the second quarters increased by 1.4 mb/d and 2.5 mb/d, respectively, while the third quarter grew by 2.2 mb/d. The fourth quarter rose by 2.0 mb/d.

Table 10 - 1: Supply/demand balance for 2016, mb/d

	2015	1Q16	2Q16	3Q16	4Q16	2016	Change 2016/15
(a) World oil demand	**93.68**	**94.12**	**94.13**	**96.00**	**96.19**	**95.12**	**1.44**
Non-OPEC supply	58.00	57.97	56.49	56.85	57.88	57.30	-0.71
OPEC NGLs and non-conventionals	5.94	5.95	6.08	6.15	6.02	6.05	0.11
(b) Total non-OPEC supply and OPEC NGLs	**63.95**	**63.93**	**62.57**	**63.00**	**63.90**	**63.35**	**-0.60**
Difference (a-b)	**29.73**	**30.20**	**31.56**	**33.00**	**32.29**	**31.77**	**2.03**
OPEC crude oil production	**31.52**	**31.96**	**32.17**	**32.63**	**33.12**	**32.47**	**0.95**
Balance	**1.79**	**1.76**	**0.61**	**-0.37**	**0.84**	**0.71**	**-1.08**

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

Balance of supply and demand in 2017

Demand for OPEC crude in 2017 was revised down by 0.3 mb/d from the previous month, mainly due to the upward revision in non-OPEC supply as world oil demand remained almost unchanged. Within the quarters, the first and the second quarters were revised down by 0.4 mb/d and 0.1 mb/d, respectively, while the third and the fourth quarters were revised down by 0.3 mb/d and 0.4 mb/d. Demand for OPEC crude this year is projected to increase by 0.2 mb/d to average 31.9 mb/d.

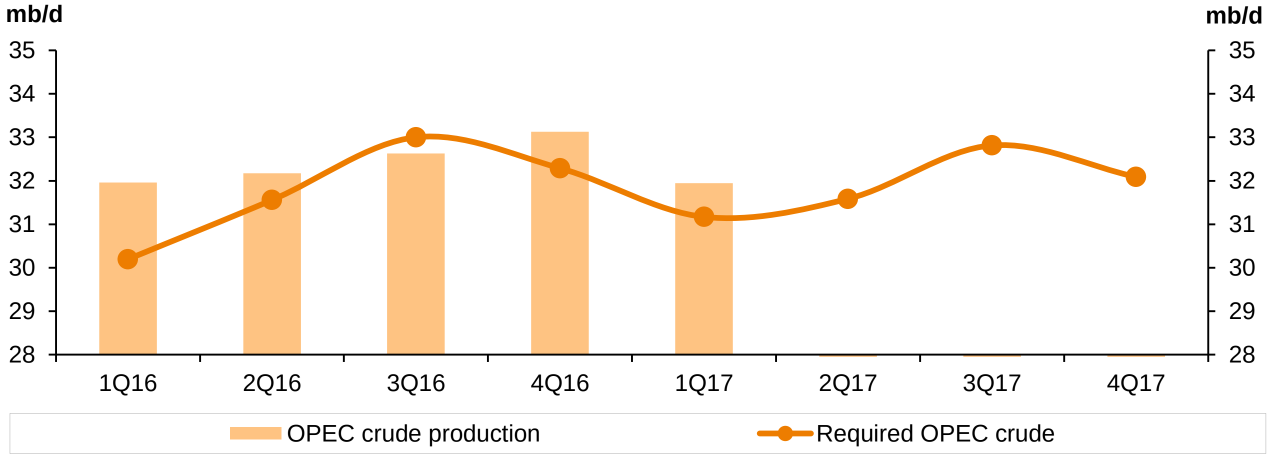
Comparing to the same quarters of last year, the first quarter is expected to increase by 1.0 mb/d, while both the third and the fourth quarters are projected to fall by 0.2 mb/d. The second quarter in 2017 is expected to remain flat.

Table 10 - 2: Supply/demand balance for 2017*, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16
(a) World oil demand	**95.12**	**95.44**	**95.33**	**97.27**	**97.47**	**96.38**	**1.27**
Non-OPEC supply	57.30	58.15	57.57	58.20	59.05	58.25	0.95
OPEC NGLs and non-conventionals	6.05	6.12	6.17	6.26	6.33	6.22	0.17
(b) Total non-OPEC supply and OPEC NGLs	**63.35**	**64.27**	**63.74**	**64.46**	**65.38**	**64.47**	**1.12**
Difference (a-b)	**31.77**	**31.17**	**31.59**	**32.81**	**32.09**	**31.92**	**0.15**
OPEC crude oil production	**32.47**	**31.94**					
Balance	**0.71**	**0.78**					

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

Graph 10 - 1: Balance of supply and demand, 2016-2017*



*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

Monthly Endnotes

Trade a focus of Spring IMF discussions

The global economic recovery is gaining some momentum, commodity prices have firmed up, and deflation risks are receding, but growth remains modest and subject to heightened political and policy uncertainties, according to the communique of the International Monetary and Finance Committee (IMFC), issued following its meeting on 22 April in Washington, D.C.

The communique highlighted that trade, financial integration, and technological innovation has brought significant benefits, improving living standards, and lifted hundreds of millions out of poverty. At the same time the prolonged period of low growth since the 2007/2008 financial crisis has “brought to the fore the concerns of those who have been left behind.” Therefore, members said it was “important to ensure that everyone has the opportunity to benefit from global economic integration and technological progress.”

The IMFC – the body of finance ministers and central bankers that advises the Board of Governors of the International Monetary Fund (IMF) – was meeting as part of the World Bank/IMF’s Spring Meetings. The meeting was chaired by Agustin Carstens, the Governor of the Bank of Mexico. A number of international organisations participate in the meeting as observers including OPEC. In his statement to the IMFC, the OPEC Secretary General, H.E. Mohammad Sanusi Barkindo, detailed the efforts being made to bring forward the rebalancing of the oil market, as well as OPEC’s longstanding commitment to support oil market stability for the mutual benefit of consuming and production nations.

This was the first meeting since US President Donald Trump assumed office. Although the US Federal Reserve Chair, Janet Yellen, represented the US at the meeting, the country’s Treasury Secretary, Steven Mnuchin, issued the US statement to the IMFC. He noted in his statement that the US economy has been expanding at a steady pace, with forecasts suggesting stronger growth this year and next. Nevertheless, the economy continues to face challenges, with growth last year remaining below pre-crisis levels amid weak business investment. In response, the Administration is undertaking “an ambitious policy agenda that includes tax reform, deregulation, and infrastructure investment to sustainably raise US economic output and employment.” He also highlighted that the US will “continue to promote an expansion of trade with those partners committed to market-based competition, while more rigorously defending ourselves against unfair trade practices.” He further noted that “excessively large trade surpluses, like excessively large trade deficits, are not conducive to supporting a free and fair trading system.”

In Germany’s statement to the IMFC, the country’s Federal Minister of Finance, Wolfgang Schäuble, warned of “the rise of protectionism and protectionist sentiments.” He said, “trade has benefited the world economy enormously – pulling millions out of poverty, bringing prosperity and stability,” and noted that “turning back the clock on globalization could harm growth substantially.” In this regard, he pledged Germany’s commitment to “keep the global economy open, resist protectionism and keep global economic and financial cooperation on track, including by further strengthening a rules-based international order, of which multilateral institutions and fora, and their processes, form an important part.” Echoing similar sentiments, the Governor of the People’s Bank of China, Zhou Xiaochuan, said in his statement that “political and policy uncertainties, and the rising anti-globalization and protectionist sentiment against international trade and investment, pose challenges to global growth.”

Despite these comments, there was no explicit warning regarding protectionism in the communique, despite the issue being highlighted previously. At the press conference following the meeting, the chairman dismissed the importance of the omission. He said “the membership agreed to counsel against inward-looking policies, and stressed that we should work to strengthen the contribution of trade to our economies.” He added that “this was a very strong consensus, and a more positive or constructive way to address issues that at the end of the day have to do with free and also fair trade.”

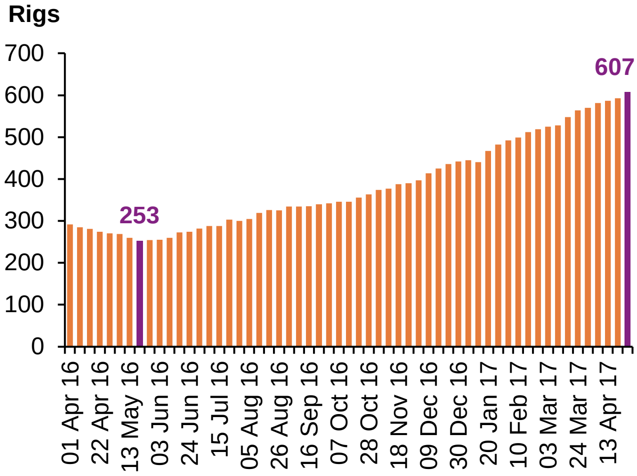
Also during the press conference, the IMF’s Managing Director, Christine Lagarde noted countries have made considerable progress in overcoming the crisis and achieve greater financial stability and, therefore, efforts now should be focused more on “preserving the growth momentum.” “In other words, we are shifting from primarily focus on the financial sector to the real sector,” adding that “we should avoid the syndrome of green shoots turning brown.”

Recovery in the energy sector supports US growth

Increased investment in the energy sector supported US economic activity in 1Q17, a quarter that otherwise showed lacklustre growth. According to the advanced estimate released by the US Department of Commerce, the US economy grew by just 0.7% in the first quarter, underperforming market expectations for growth around 1.5%. The sluggish activities were mainly attributed to weak consumer and federal government spending. Growth was supported by increased business investment, particularly in the category of mining exploration, shafts and wells which includes investment in oil and gas production. This accounted for a 77% share of the growth seen in 1Q17.

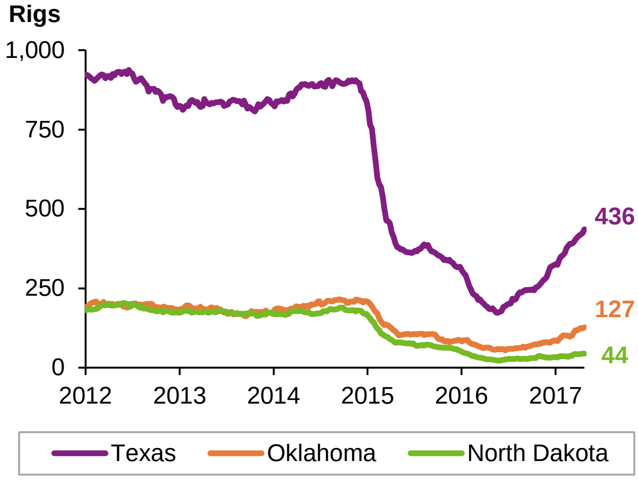
The increased investment in the oil and gas sector has come alongside a recovery in oil prices since mid-November 2016, with WTI futures prices rebounding from around $43/b to over $50/b following OPEC efforts to bring forward oil market rebalancing. Already, cost cuts and efficiency gains, as well as hedging and improving market sentiment had allowed for increased drilling. Since the end of May 2016, oil and gas drilling activities have risen steadily in the key US shale states of Texas, Oklahoma and North Dakota from a low of around 250 units to now stand at over 600 rigs (***Graph 11 – 1 and Graph 11 – 2***).

Graph 11 - 1: US total oil and gas rig counts in Texas, Oklahoma, and North Dakota



Sources: Baker Hughes and OPEC Secretariat.

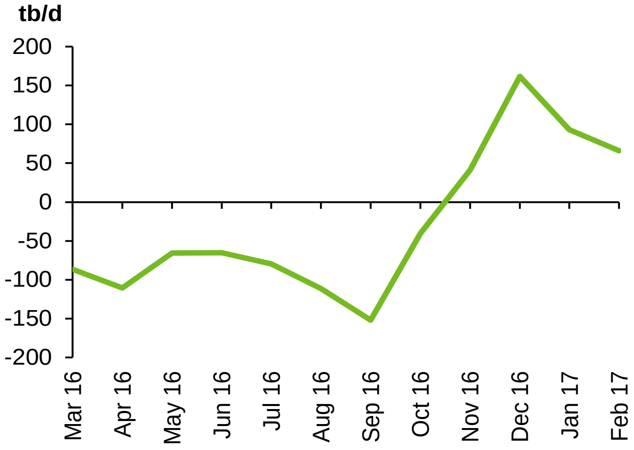
Graph 11 - 2: US oil and gas rig counts by region



Sources: Baker Hughes and OPEC Secretariat.

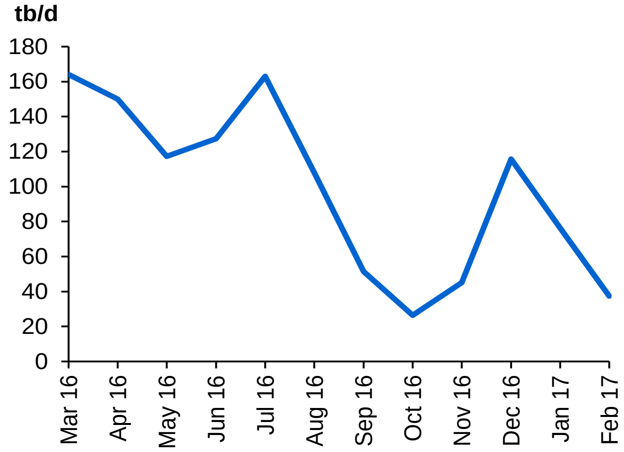
This increased activity has also been reflected in distillate consumption, which is used for trucking and industrial activities including those related to oil and gas production. EIA data shows that in areas of shale activity demand for middle distillates has picked-up noticeably (***Graph 11 – 3***). This has helped to partially compensate for the slowing trend seen in US gasoline growth (***Graph 11 – 4***), which reflects the weakness in consumer spending.

Graph 11 - 3: US distillate demand growth, three-month moving average (PADD[2] 2 and 3)



Sources: US EIA and OPEC Secretariat.

Graph 11 - 4: US gasoline demand growth, three-month moving average (PADD[2] 2 and 3)



Sources: US EIA and OPEC Secretariat.

Overall, the increase in energy activities has been supportive to the US economy, at a time when other sectors have been sluggish. These activities have also helped boost demand for middle distillates, partially offsetting the weak gasoline consumption seen in the US in the first quarter of this year.

[2] *The Petroleum Administration for Defense Districts (PADDs) are geographic aggregations of the 50 States and the District of Columbia into five districts: PADD 2 the Midwest including Oklahoma and North Dakota, while PADD 3 the US Gulf Coast which includes Texas and New Mexico.*

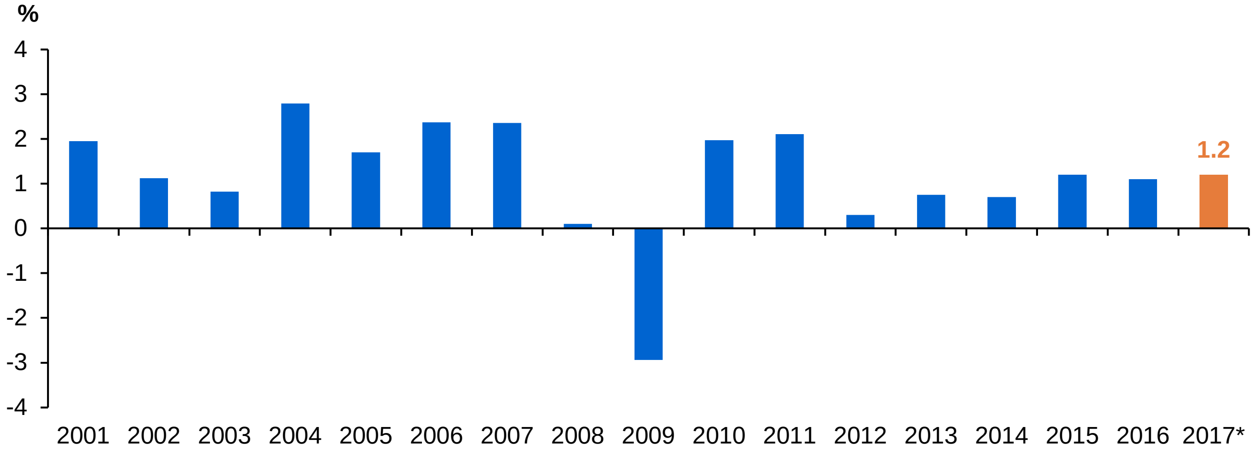
Centrist secures decisive victory in French Presidential election

The pro-EU independent candidate, Emmanuel Macron, defeated the far-right candidate Marine Le Pen in the French Presidential election run-off, winning just over 66% of the vote. The outcome was a particular achievement for the 39-year old former banker and government minister who has never held elective office and whose political movement '*En Marche!'* was set up in 2016.

Macron's victory is not only a defeat for Le Pen's far right National Front party, but also the centre-right Republicans and centre-left party Socialists that have previously dominated French politics for decades, but this time failed to make the Presidential run-off. However, he benefited in the final stage of the campaign from the support of France's main parties.

The results temporarily pushed the euro to a six-month high against the dollar. With the election outcome in France, risks associated with anti-EU populists winning high-level positions in Austria, the Netherlands and France have been avoided. It also provides a positive signal for the outcome of federal elections in Germany in September.

Graph 11 - 5: France GDP growth



*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

The day after Macron's victory, the euro fell back against the dollar, reflecting an awareness that the newly elected president will face significant challenges. This includes the fact that, as he is not a member of an established party, the new President-elect will need to build support in Parliament to help pass economic reforms.

At the same time, having a pro-European President should help keep economic developments in France stable (***Graph 11 – 5***). As a result, French energy demand, including for crude oil, is likely to remain around current levels in the near term.

Appendix

Table 12 - 1: World oil demand and supply balance, mb/d

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	46.1	45.8	46.4	46.7	46.3	47.3	47.1	46.9	46.9	46.5	47.6	47.3	47.1
Americas	24.2	24.2	24.6	24.5	24.7	25.0	24.8	24.7	24.6	24.8	25.3	24.9	24.9
Europe	13.6	13.5	13.7	13.7	14.0	14.5	14.1	14.1	13.8	14.1	14.6	14.1	14.1
Asia Pacific	8.3	8.1	8.0	8.5	7.6	7.8	8.3	8.1	8.5	7.6	7.8	8.3	8.0
DCs	29.4	30.1	30.8	31.1	31.3	31.8	31.3	31.4	31.6	31.9	32.4	32.0	32.0
FSU	4.5	4.6	4.6	4.5	4.4	4.7	5.1	4.7	4.6	4.4	4.8	5.1	4.7
Other Europe	0.6	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	10.4	10.8	11.2	11.1	11.5	11.5	11.9	11.5	11.6	11.8	11.8	12.2	11.8
(a) Total world demand	**91.1**	**92.0**	**93.7**	**94.1**	**94.1**	**96.0**	**96.2**	**95.1**	**95.4**	**95.3**	**97.3**	**97.5**	**96.4**
Non-OPEC supply													
OECD	22.3	24.3	25.3	25.4	24.2	24.6	25.1	24.8	25.4	25.3	25.6	26.3	25.6
Americas	18.2	20.1	21.1	21.0	20.1	20.5	20.8	20.6	21.0	21.1	21.6	22.1	21.5
Europe	3.6	3.6	3.8	3.9	3.7	3.6	3.9	3.8	4.0	3.7	3.6	3.8	3.8
Asia Pacific	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
DCs	11.9	12.1	12.3	12.1	12.1	12.3	12.4	12.2	12.3	12.3	12.3	12.4	12.3
FSU	13.6	13.5	13.7	14.0	13.7	13.7	14.1	13.9	14.2	13.8	14.0	14.1	14.0
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.3	4.3	4.4	4.2	4.1	4.0	4.0	4.1	4.0	3.9	3.9	3.9	3.9
Processing gains	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Total non-OPEC supply	**54.2**	**56.5**	**58.0**	**58.0**	**56.5**	**56.8**	**57.9**	**57.3**	**58.2**	**57.6**	**58.2**	**59.1**	**58.2**
OPEC NGLs + non-conventional oils	5.6	5.8	5.9	6.0	6.1	6.1	6.0	6.1	6.1	6.2	6.3	6.3	6.2
(b) Total non-OPEC supply and OPEC NGLs	**59.8**	**62.3**	**63.9**	**63.9**	**62.6**	**63.0**	**63.9**	**63.3**	**64.3**	**63.7**	**64.5**	**65.4**	**64.5**
OPEC crude oil production (secondary sources)	30.5	30.3	31.5	32.0	32.2	32.6	33.1	32.5	31.9				
Total supply	90.3	92.6	95.5	95.9	94.7	95.6	97.0	95.8	96.2				
Balance (stock change and miscellaneous)	-0.8	0.6	1.8	1.8	0.6	-0.4	0.8	0.7	0.8				
OECD closing stock levels, *mb*													
Commercial	2,559	2,704	2,986	3,012	3,052	3,060	2,982	2,982	3,013				
SPR	1,584	1,580	1,587	1,593	1,591	1,594	1,598	1,598	1,601				
Total	**4,144**	**4,285**	**4,573**	**4,606**	**4,643**	**4,654**	**4,580**	**4,580**	**4,614**				
Oil-on-water	909	924	1,017	1,055	1,094	1,068	1,102	1,102	1,043				
Days of forward consumption in OECD, *days*													
Commercial onland stocks	55.9	58.3	63.7	65.1	64.6	64.9	63.5	63.3	64.8				
SPR	34.6	34.1	33.9	34.4	33.6	33.8	34.0	33.9	34.4				
Total	**90.4**	**92.4**	**97.6**	**99.5**	**98.2**	**98.7**	**97.6**	**97.3**	**99.2**				
Memo items													
FSU net exports	9.0	8.9	9.1	9.5	9.4	8.9	9.0	9.2	9.6	9.4	9.2	9.0	9.3
(a) - (b)	**31.2**	**29.7**	**29.7**	**30.2**	**31.6**	**33.0**	**32.3**	**31.8**	**31.2**	**31.6**	**32.8**	**32.1**	**31.9**

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

Source: OPEC Secretariat.

Table 12 - 2: World oil demand/supply balance: changes from last month's table*, mb/d

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	-	-	-	-	-	-	0.1	-	-0.1	-	-	0.1	-
Americas	-	-	-	-0.1	-	-0.1	-	-	-0.2	-	-0.1	-	-0.1
Europe	-	-	-	-	-	0.1	0.1	0.1	0.1	-	0.1	0.1	0.1
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	0.1	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	0.1	-	-	-	-
(a) Total world demand	**-**	**-**	**-**	**-**	**0.1**	**-**	**0.1**	**0.1**	**-**	**0.1**	**-**	**0.1**	**0.1**
World demand growth	***-***	***-***	***-***	***-***	***0.1***	***-***	***0.1***	***0.1***	***-***	***-***	***-***	***-***	***-***
Non-OPEC supply													
OECD	-	-	-	-	-	-	-	-	0.3	0.1	0.4	0.5	0.3
Americas	-	-	-	-	-	-	-	-	0.2	0.1	0.4	0.5	0.3
Europe	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-0.1	-	0.1	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	-0.1	-	0.4	0.1	0.4	0.5	0.4
Total non-OPEC supply growth	-	-	-	-	-	-	-0.1	-	0.4	0.1	0.4	0.5	0.4
OPEC NGLs + non-conventionals	-	-	-	-0.1	-	-	-0.1	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-**	**-**	**-**	**-0.1**	**-**	**-**	**-0.2**	**-0.1**	**0.5**	**0.1**	**0.4**	**0.5**	**0.4**
OPEC crude oil production (secondary sources)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-0.1**				
Total supply	-	-	-	-0.1	-	-	-0.2	-0.1	0.4				
Balance (stock change and miscellaneous)	-	-	-	-0.2	-0.1	-	-0.3	-0.1	0.3				
OECD closing stock levels (mb)													
Commercial	-	-	-	-	-	-	-	-	-				
SPR	-	-	-	-	-	-	-	-	-				
Total	-	-	-	-	-	-	-	-	-				
Oil-on-water	-	-	-	-	-	-	-	-	-				
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-	-	-	-				
SPR	-	-	-	-	-	-	-	-	-				
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**				
Memo items													
FSU net exports	-	-	-	-	-	-	-0.1	-	0.1	-	-	-	-
(a) - (b)	**-**	**-**	**-**	**0.1**	**0.1**	**-**	**0.2**	**0.1**	**-0.4**	**-0.1**	**-0.3**	**-0.4**	**-0.3**

*Note: * This compares Table 12 - 1 in this issue of the MOMR with Table 12 - 1 in the April 2017 issue.*

This table shows only where changes have occurred.

Source: OPEC Secretariat.

Table 12 - 3: OECD oil stocks and oil on water at the end of period

	2014	2015	2016	1Q15	2Q15	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17
Closing stock levels, mb												
OECD onland commercial	**2,704**	**2,986**	**2,982**	**2,789**	**2,878**	**2,954**	**2,986**	**3,012**	**3,052**	**3,060**	**2,982**	**3,013**
Americas	1,414	1,561	1,600	1,458	1,508	1,542	1,561	1,589	1,609	1,617	1,600	1,597
Europe	885	990	968	939	940	967	990	1,002	1,006	992	968	1,012
Asia Pacific	405	435	414	392	430	445	435	421	438	450	414	403
OECD SPR	**1,580**	**1,587**	**1,598**	**1,583**	**1,585**	**1,579**	**1,587**	**1,593**	**1,591**	**1,594**	**1,598**	**1,601**
Americas	693	697	697	693	696	697	697	697	697	697	697	697
Europe	470	473	480	470	471	467	473	477	473	476	480	483
Asia Pacific	417	416	421	420	418	415	416	419	421	421	421	421
OECD total	**4,285**	**4,573**	**4,580**	**4,372**	**4,463**	**4,533**	**4,573**	**4,606**	**4,643**	**4,654**	**4,580**	**4,614**
Oil-on-water	**924**	**1,017**	**1,102**	**864**	**916**	**924**	**1,017**	**1,055**	**1,094**	**1,068**	**1,102**	**1,043**
Days of forward consumption in OECD, days												
OECD onland commercial	**58**	**56**	**63**	**61**	**61**	**64**	**64**	**65**	**65**	**65**	**63**	**65**
Americas	55	53	65	60	60	63	64	64	64	65	65	64
Europe	67	65	71	69	66	70	73	72	70	71	71	72
Asia Pacific	49	48	48	52	56	54	51	55	57	54	48	53
OECD SPR	**34**	**35**	**34**	**35**	**34**	**34**	**34**	**34**	**34**	**34**	**34**	**34**
Americas	29	29	28	28	28	28	28	28	28	28	28	28
Europe	32	35	35	35	33	34	35	34	33	34	35	34
Asia Pacific	50	51	49	55	54	51	49	55	54	51	49	55
OECD total	**91**	**90**	**97**	**96**	**95**	**98**	**98**	**100**	**98**	**99**	**97**	**99**

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

Table 12 - 4: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2013	2014	2015	3Q16	4Q16	2016	Change 16/15	1Q17	2Q17	3Q17	4Q17	2017	Change 17/16
US	11.2	13.0	14.0	13.4	13.6	13.6	-0.4	13.9	14.3	14.6	15.0	14.4	0.8
Canada	4.0	4.3	4.4	4.6	4.9	4.5	0.1	4.8	4.5	4.7	4.9	4.7	0.2
Mexico	2.9	2.8	2.6	2.5	2.4	2.5	-0.1	2.3	2.3	2.3	2.3	2.3	-0.2
OECD Americas*	**18.2**	**20.1**	**21.1**	**20.5**	**20.8**	**20.6**	**-0.5**	**21.0**	**21.1**	**21.6**	**22.1**	**21.5**	**0.9**
Norway	1.8	1.9	1.9	1.9	2.1	2.0	0.0	2.1	1.9	1.9	2.0	2.0	0.0
UK	0.9	0.9	1.0	1.0	1.0	1.0	0.1	1.1	1.0	0.9	1.0	1.0	0.0
Denmark	0.2	0.2	0.2	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	0.6	0.7	0.6	-0.1	0.7	0.6	0.6	0.6	0.6	0.0
OECD Europe	**3.6**	**3.6**	**3.8**	**3.6**	**3.9**	**3.8**	**0.0**	**4.0**	**3.7**	**3.6**	**3.8**	**3.8**	**0.0**
Australia	0.4	0.4	0.4	0.4	0.3	0.3	0.0	0.3	0.4	0.4	0.3	0.3	0.0
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**	**0.0**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.0**
Total OECD	**22.3**	**24.3**	**25.3**	**24.6**	**25.1**	**24.8**	**-0.5**	**25.4**	**25.3**	**25.6**	**26.3**	**25.6**	**0.8**
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	0.9	0.8	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.1	0.9	0.9	0.9	0.8	0.9	-0.1
Malaysia	0.6	0.7	0.7	0.7	0.7	0.7	0.0	0.8	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	0.4	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Asia others	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.3	0.3	0.3	0.3	0.0
Other Asia*	**3.6**	**3.6**	**3.7**	**3.7**	**3.7**	**3.7**	**0.0**	**3.7**	**3.7**	**3.7**	**3.6**	**3.7**	**0.0**
Argentina	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Brazil	2.6	2.9	3.1	3.3	3.3	3.1	0.1	3.3	3.3	3.4	3.4	3.4	0.2
Colombia	1.0	1.0	1.0	0.9	0.9	0.9	-0.1	0.9	0.9	0.8	0.9	0.9	0.0
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	**4.8**	**5.0**	**5.2**	**5.2**	**5.2**	**5.1**	**-0.1**	**5.2**	**5.2**	**5.2**	**5.3**	**5.3**	**0.1**
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	0.9	0.9	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Syria	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**0.0**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**-0.1**
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Congo	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.4	0.3	0.0
Egypt	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Equatorial Guinea	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
South Africa	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.2	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Africa other	0.3	0.3	0.3	0.3	0.4	0.3	0.0	0.3	0.3	0.3	0.4	0.3	0.0
Africa	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**0.0**	**2.1**	**2.1**	**2.2**	**2.2**	**2.2**	**0.1**
Total DCs	**11.9**	**12.1**	**12.3**	**12.3**	**12.4**	**12.2**	**-0.1**	**12.3**	**12.3**	**12.3**	**12.4**	**12.3**	**0.1**
FSU	**13.6**	**13.5**	**13.7**	**13.7**	**14.1**	**13.9**	**0.2**	**14.2**	**13.8**	**14.0**	**14.1**	**14.0**	**0.2**
Russia	10.6	10.7	10.8	11.0	11.2	11.1	0.2	11.3	11.0	11.2	11.2	11.2	0.1
Kazakhstan	1.6	1.6	1.6	1.4	1.7	1.6	0.0	1.7	1.7	1.7	1.7	1.7	0.1
Azerbaijan	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	-0.1
FSU others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
China	**4.3**	**4.3**	**4.4**	**4.0**	**4.0**	**4.1**	**-0.3**	**4.0**	**3.9**	**3.9**	**3.9**	**3.9**	**-0.2**
Non-OPEC production	**52.1**	**54.3**	**55.8**	**54.7**	**55.7**	**55.1**	**-0.7**	**56.0**	**55.4**	**56.0**	**56.9**	**56.1**	**0.9**
Processing gains	2.1	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2	2.2	0.0
Non-OPEC supply	**54.2**	**56.5**	**58.0**	**56.8**	**57.9**	**57.3**	**-0.7**	**58.2**	**57.6**	**58.2**	**59.1**	**58.2**	**0.9**
OPEC NGL	5.4	5.6	5.7	5.9	5.8	5.8	0.1	5.9	5.9	6.0	6.1	6.0	0.2
OPEC non-conventional	0.2	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.3	0.3	0.2	0.0
OPEC (NGL+NCF)	**5.6**	**5.8**	**5.9**	**6.1**	**6.0**	**6.1**	**0.1**	**6.1**	**6.2**	**6.3**	**6.3**	**6.2**	**0.2**
Non-OPEC & OPEC (NGL+NCF)	**59.8**	**62.3**	**63.9**	**63.0**	**63.9**	**63.3**	**-0.6**	**64.3**	**63.7**	**64.5**	**65.4**	**64.5**	**1.1**

*Note: * OECD Americas includes Chile.*

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 12 - 5: World rig count, units

	2014	2015	2016	Change 2016/15	2Q16	3Q16	4Q16	1Q17	Mar 17	Apr 17	Change Apr/Mar
US	1,862	977	509	*-468*	420	479	586	739	789	853	*64*
Canada	380	192	131	*-61*	49	122	180	299	253	109	*-144*
Mexico	86	52	26	*-26*	22	25	19	17	18	22	*4*
OECD Americas	2,327	1,221	665	*-556*	490	626	785	1,054	1,060	984	*-76*
Norway	17	17	17	*-1*	17	18	13	14	15	17	*2*
UK	16	14	9	*-5*	9	9	9	9	8	8	*0*
OECD Europe	145	117	96	*-21*	92	94	94	100	94	91	*-3*
OECD Asia Pacific	26	17	7	*-11*	6	5	6	14	13	19	*6*
Total OECD	**2,499**	**1,355**	**768**	***-587***	**588**	**724**	**885**	**1,168**	**1,167**	**1,094**	***-73***
Other Asia*	228	202	180	*-22*	178	185	181	184	185	186	*1*
Latin America	172	145	68	*-77*	62	64	64	61	64	55	*-9*
Middle East	108	102	88	*-14*	92	85	75	74	78	77	*-1*
Africa	47	30	18	*-12*	19	15	17	16	16	17	*1*
Total DCs	**555**	**479**	**354**	***-126***	**351**	**349**	**337**	**335**	**343**	**335**	***-8***
Non-OPEC rig count	**3,053**	**1,834**	**1,122**	***-712***	**939**	**1,073**	**1,223**	**1,503**	**1,510**	**1,429**	***-81***
Algeria	48	51	54	*3*	54	55	53	51	51	57	*6*
Angola	15	11	6	*-5*	9	4	3	3	2	4	*2*
Ecuador	24	12	4	*-8*	3	5	6	7	7	7	*0*
Gabon	7	4	1	*-3*	1	0	0	0	0	1	*1*
Iran**	54	54	57	*3*	59	60	61	61	61	61	*0*
Iraq**	79	52	43	*-9*	42	39	41	41	43	46	*3*
Kuwait**	38	47	44	*-2*	42	47	46	55	54	53	*-1*
Libya**	10	3	1	*-2*	1	1	1	1	1	1	*0*
Nigeria	34	30	25	*-5*	25	24	23	27	29	29	*0*
Qatar	10	8	8	*0*	7	7	10	11	11	12	*1*
Saudi Arabia	134	155	156	*1*	154	155	157	152	150	150	*0*
UAE	34	42	51	*8*	50	51	52	50	50	51	*1*
Venezuela	116	110	100	*-10*	103	93	92	95	96	98	*2*
OPEC rig count	**603**	**578**	**549**	***-29***	**551**	**542**	**546**	**553**	**555**	**570**	***15***
World rig count***	**3,656**	**2,412**	**1,670**	***-742***	**1,490**	**1,615**	**1,769**	**2,056**	**2,065**	**1,999**	***-66***
of which:											
Oil	2,795	1,727	1,170	*-557*	1,043	1,135	1,235	1,446	1,473	1,430	*-43*
Gas	743	563	370	*-193*	315	343	400	477	466	443	*-23*
Others	95	100	111	*11*	112	119	116	115	107	106	*-1*

*Note: * Other Asia includes Indonesia.*

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

**** Data excludes China and FSU.*

Totals may not add up due to independent rounding.

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

Glossary of Terms

Abbreviations

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

Acronyms

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

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

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