Monthly Oil Market Report

12 June 2018

Feature article:

World oil market prospects for the second half of 2018

Oi	l mar	Lat hi	iahli	ohte	i
UI	lillai	VET III	1511113	SIILO	

Feature	artic	ii
reallie	anno	

Crude oil price movements 1

Commodity markets 9

World economy 12

World oil demand 32

World oil supply 44

Product markets and refinery operations 61

Tanker market 67

Oil trade 72

Stock movements 79

Balance of supply and demand 86



Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: prid(at)opec.org Website: www.opec.org

# Oil Market Highlights

### **Crude Oil Price Movements**

In May, the OPEC Reference Basket (ORB) increased by about 8.5% above the previous month, settling at \$74.11/b. Year-to-date in May, the ORB value was 31.7% higher at \$67.48/b, compared to the same period in 2017. In comparison, Dated Brent rose by 7.4%, Dubai by 8.7% and spot WTI by 5.4%, m-o-m. The oil market continues to be underpinned by escalating geopolitical tensions and bullish drawdowns in US crude inventories. However, late in the month, prices slipped on talk of a potential easing of output adjustments. With regard to crude oil futures, ICE Brent was \$5.24/b, or 7.3%, higher at \$77.01/b, while NYMEX WTI gained \$3.66, or 5.5%, to average \$69.98/b m-o-m. Y-t-d, ICE Brent is 30.6% higher at \$70.22/b, while NYMEX WTI rose 27.7% to \$65.09/b, compared to the same period a year earlier. The ICE Brent/NYMEX WTI spread widened by \$1.59 to \$7.02/b in May, on increasing US supplies. Despite the surge in crude oil futures prices, speculative net long positions ended lower. The Dubai market structure moved deeper into backwardation, while that of Brent eased markedly and WTI remained unchanged. The sweet/sour differentials narrowed in Europe and Asia, while in the US Gulf Coast (USGC), the spread widened.

### **World Economy**

The global GDP growth forecast remains at 3.8% for 2018, following growth of 3.8% in 2017. Expected US growth in 2018 is unchanged from the previous month at 2.7%, after growth of 2.3% in 2017. Growth in Japan was revised down to 1.2% in 2018, following growth of 1.7% in 2017. The Euro-zone's 2018 growth forecast remains at 2.2%, after growth of 2.5% in 2017. Both India's and China's 2018 forecasts are unchanged at 7.3% and 6.5%, following 2017 GDP growth of 6.3% and 6.9%, respectively. Growth in Brazil was revised down to 1.9% in 2018, following growth of 1.0% in 2017. Russia's GDP growth forecast remained unchanged at 1.8% in 2018, following growth of 1.5% in 2017.

### World Oil Demand

World oil demand growth in 2017 remained unchanged at 1.65 mb/d to stand at 97.20 mb/d, unchanged from the previous month's report. In 2018, projected oil demand growth was also kept unchanged despite some offsetting revisions in both OECD and non-OECD. Global oil demand is now estimated at 1.65 mb/d y-o-y to average 98.85 mb/d. OECD consumption is forecast to grow by 0.40 mb/d in 2018, some 0.02 mb/d higher than in the previous report, following positive revisions in OECD Americas. Meanwhile, oil demand in the non-OECD is now projected to grow by 1.27 mb/d, showing a downward revision of 0.02 mb/d from last month's assessment. While China's and Other Asia's oil demand was revised up, this was more than offset by downward revisions in Latin America and the Middle East.

# **World Oil Supply**

Non-OPEC supply growth in 2017 stands at 0.88 mb/d y-o-y, revised up marginally by 0.01 mb/d from last month's assessment due to rounding. For 2018, total non-OPEC supply was revised up by 0.13 mb/d, to 59.75 mb/d, representing y-o-y growth of 1.86 mb/d. Upward revisions were made for 1Q18 in the OECD, particularly the US and Canada, and also in the forecast of 2Q18 in the OECD, FSU and China, due to higher-than-expected output. However, these upward revisions were offset by downward revisions the same quarters. OPEC NGLs and non-conventional liquids' production was revised down by 74 tb/d for 2017 to now show growth of 0.09 mb/d y-o-y and average 6.23 mb/d. For 2018, OPEC NGLs and non-conventional liquids are forecast to grow by 0.12 mb/d and average 6.35 mb/d. In May 2018, OPEC crude oil production increased by 35 tb/d, to average 31.87 mb/d, according to secondary sources.

# **Product Markets and Refining Operations**

Product markets in the Atlantic Basin showed positive performances in May with gains all across the barrel. In the US, improved domestic gasoline demand, along with a relatively tighter middle distillates and fuel oil market, drove refinery margins beyond last year's record-high figures. In Europe, product markets retained the gains achieved in the previous month with most of the support stemming from the top and bottom of the barrel. Record-high product prices witnessed in May weighed on refinery margins and probably prevented further upside. Meanwhile, product markets in Asia weakened marginally, pressured by slower jet/kerosene demand and rising inventory levels.

### **Tanker Market**

In May, the dirty tanker market showed some positive developments with spot freight rates mostly gaining across number of routes compared with the previous month. On average, dirty tanker freight rates rose by 18% m-o-m while average clean spot freight rates remained flat. The increase in spot rates came on the back of enhanced activities, tightening of the tonnage lists as well as port and weather delays. However, rate gains in both sectors were only relative, as market returns remain low, pressured by high bunker prices.

### **Stock Movements**

Preliminary data for April shows that total OECD commercial oil stocks fell by 6.7 mb m-o-m to stand at 2,811 mb, which is 26 mb below the latest five-year average, but remain 240 mb above January 2014 levels. Crude stocks indicated a slight surplus of 0.4 mb, while product stocks witnessed a deficit of 26 mb below the latest five-year average. In terms of days of forward cover, OECD commercial stocks fell in April to stand at 59.1 days, which is 2.2 days lower than the latest five-year average.

### **Balance of Supply and Demand**

In 2017, demand for OPEC crude is estimated to stand at 33.1 mb/d, which is 0.7 mb/d higher than a year earlier. In 2018, demand for OPEC crude is forecast at 32.7 mb/d, a decline of 0.3 mb/d from the previous year's level.

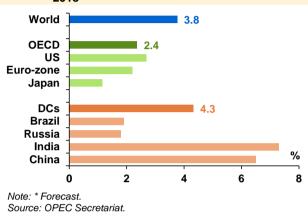
# **Feature Article**

### World oil market prospects for the second half of 2018

Recent developments in the oil market have led to pronounced uncertainty about the second half of the year. Year-to-date (y-t-d) at the end of May, crude oil prices are 30% higher than in the same period last year, with ICE Brent averaging above \$70/b for the first time since 2014. Draws in crude oil inventories, healthy oil demand and geo-political developments have supported this rising trend. NYMEX WTI futures also rose to average \$65.09/b during this time, but were trailing other markets due to high US oil production as well as the strengthening of the US dollar. Recently, crude oil futures have lost some momentum amid uncertainty as traders prepare for potentially more supply returning to the market.

Global economic activity has slowed in 1Q18, with Graph 1: GDP growth in selected countries/regions, growth below expectations in the major OECD economies. The global growth forecast for 2018 remains at 3.8%, with a pick up expected in the second half of the year, led by the US, whose economic performance will be supported by the fiscal stimulus measures. Moreover, Japan and the Euro-zone are projected to accelerate in 2H18. following a slow start to the year. While the OECD shows upside potential, the major emerging economies will likely slow from relatively higher activity in 1H18. China is expected to continue financial tightening, which combined with monetary measures in the US, could dampen growth in 2H18. India is also forecast to show lower growth in the second half of the year, after a strong recovery during 1H18.

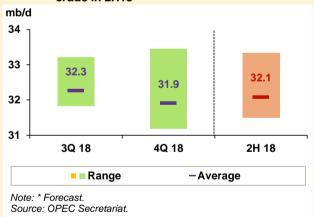
2018\*



Brazil and Russia are projected to remain stable in 2H18, subject to short-term commodity prices and political developments. Moreover, the re-emergence of global trade barriers, continued growing debt levels and potentially rising volatility in asset markets amid ongoing monetary tightening, are some of the challenges that may negatively impact the 2H18 growth dynamic.

Turning to the oil market, global oil demand growth Graph 2: Range of uncertainty for demand for OPEC is anticipated at 1.61 mb/d y-o-y in 2H18, with total oil consumption projected to surpass the 100 mb/d threshold during 4Q18. In 2H18, OECD countries are projected to sustain the positive momentum with most of the growth seen in OECD Americas, mainly supported by a healthy US economy. OECD Europe is forecast to continue to show steady oil demand growth, largely driven by middle distillates. Non-OECD countries are again projected to lead oil demand growth with 1.28 mb/d y-o-y in 2H18. Growth is mainly focused in China, in the transportation and industrial sectors. The steady economic development in most Other Asian countries, including India, will also contribute.

crude in 2H18\*



While oil demand in the US, China and India shows some upside potential, downside risks might limit this potential going forward, including a slowdown in the pace of economic growth in some major economies, stronger impact of policy reform with regard to retail prices, and further substitution toward natural gas.

Meanwhile, non-OPEC oil supply in 2H18 is anticipated to increase by 2.0 mb/d y-o-y. The US is the main driver, contributing 1.4 mb/d to growth, followed by Canada and Brazil. Non-OPEC supply growth is forecast to show further upside potential for the rest of the year, due to higher drilling activity in the US, more new project start-ups in Brazil and possibly higher output following the end of heavy maintenance at upgrading facilities in Canada.

Given the Secretariat's forecast for 2H18, demand for OPEC crude is projected at 33.3 mb/d, down by 0.5 mb/d from 2H17. However, looking at various sources, considerable uncertainty as to world oil demand and non-OPEC supply prevails, leading to a wide forecast range for demand for OPEC crude of around 1.8 mb/d (Graph 2). This outlook for 2H18 warrants close monitoring of the factors impacting both world oil demand and non-OPEC supply that will shape the outlook of the oil market going forward.

## **Feature Article**

# **Table of Contents**

Oil Market Highlights	i
Feature Article	iii
World oil market prospects for the second half of 2018	ii
Crude Oil Price Movements	1
OPEC Reference Basket	1
The oil futures market	3
The futures market structure	5
The light sweet/medium sour crude spread	6
Impact of US dollar and inflation on oil prices	7
Commodity Markets	9
Trends in selected commodity markets	9
Investment flows into commodities	11
World Economy	12
OECD	12
Non-OECD	20
World Oil Demand	32
World oil demand in 2017	32
World oil demand in 2018	33
OECD	33
Non-OECD	38
World Oil Supply	44
Monthly revisions on non-OPEC supply growth forecast	45
Main countries for non-OPEC oil supply changes in 2017 and 2018	45
Non-OPEC oil supply highlights in 2018	46
Non-OPEC oil supply in 2017 and 2018	48
OECD	48
Developing Countries	54
OPEC NGLs and non-conventional oils	58
OPEC crude oil production	59
World oil supply	60
Product Markets and Refinery Operations	61
Refinery margins	61
Refinery operations	62
Product markets	62

## **Table of Contents**

Tanker Market	67
Spot fixtures	67
Sailings and arrivals	67
Dirty tanker freight rates	68
Clean tanker freight rates	70
Oil Trade	72
US	72
Japan	74
China	75
India	76
FSU	77
Stock Movements	79
OECD	79
EU plus Norway	81
US	82
Japan	83
China	84
Singapore and Amsterdam-Rotterdam-Antwerp (ARA)	85
Balance of Supply and Demand	86
Balance of supply and demand in 2017	86
Balance of supply and demand in 2018	87
Appendix	88
OPEC Annual Statistical Bulletin (ASB) 2018	94
Glossary of Terms	95
Abbreviations	95
Acronyms	96
Contributors to the OPEC Monthly Oil Market Report	98

# **Crude Oil Price Movements**

In May, the OPEC Reference Basket (ORB) witnessed a surge, increasing by close to 8.5% over the previous month to settle at \$74.11/b, its highest monthly value since November 2014. The ORB's cumulative gain over the last two months was more than \$10/b, or 16%. All ORB component values improved sharply, along with their respective crude oil benchmarks, particularly Brent and Dubai, and saw increases in their Asian official selling prices (OSPs) due to steep Dubai backwardation. Year-to-date (y-t-d), the ORB value was 31.7%, or \$16.23, higher at \$67.48/b in May.

Oil futures expanded to their highest value since late 2014, with ICE Brent crude oil futures ending the month significantly higher above the \$75/b level. The oil market was again underpinned over the month by escalating geopolitical tensions, as well as bullish drawdowns in US crude inventories. Strong conformity from OPEC and participating non-OPEC nations in terms of the production adjustments through the 'Declaration of Cooperation' also continued to support the oil market. ICE Brent was up \$5.24, or 7.3%, to an average of \$77.01/b in May, while NYMEX WTI gained \$3.66, or 5.5%, to average \$69.98/b. Y-t-d, ICE Brent is \$16.47, or 30.6%, higher at \$70.22/b, while NYMEX WTI is up by \$14.12, or 27.7%, at \$65.09/b. The first-month ICE Brent/NYMEX WTI benchmark spread widened further in May, by \$1.59 m-o-m, to \$7.02/b. This is its widest in three years and came on the back of increasing US supplies.

Despite the surge in crude oil futures prices, speculative net length positions again ended the month lower, following a drop in April. The long- to- short ratio in ICE Brent speculative positions more than halved to 6:1. In NYMEX WTI, the ratio also decreased sharply to 7:1. The total futures and options open interest volume in the two exchanges stood at 6.8 million contracts on 29 May.

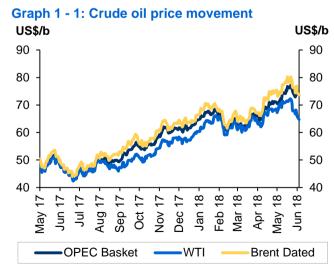
The Dubai market structure moved deeper into backwardation on healthy demand. Despite Brent's exposure to European and Asian markets and its current greater geopolitical sensitivity, its backwardation weakened significantly to flatten over the month. In the US, WTI backwardation remained at the same level under pressure from higher US supplies. Apart from the US Gulf Coast (USGC), all sour crudes changed course in May and revived relative to sweet crudes. The sweet/sour differentials narrowed in Europe and Asia, while in the USGC the spread widened.

# **OPEC Reference Basket**

The **ORB** surged by almost 8.5% in May, the highest monthly percentage gain this year, to sit at \$74.11/b. This is the highest monthly value since November 2014. All ORB component values increased sharply, alongside their perspective crude oil benchmarks, particularly Dated Brent and Dubai, which m-o-m rose by 7.4% and 8.7%, respectively. The cumulative gain in the ORB value over the past two months was more than \$10/b, or 16%.

**Crude oil physical benchmarks,** WTI, Dated Brent and Dubai spot prices, rose m-o-m by \$3.57, \$5.27 and \$5.91, respectively.

The light sweet crude **Basket components from West and North Africa** – Saharan Blend, Es Sider, Girassol, Bonny Light, Equatorial Guinea's Zafiro and Gabon's Rabi – increased on average by \$5.07, or 7.1%, to \$76.59/b in May.



Sources: Argus Media, OPEC Secretariat and Platts.

#### Crude Oil Price Movements

The gains in West and North African Basket components were capped as trading continued to drag across West Africa crude oil markets. There was with little movement in demand from either Asia or Europe, where competition remained ample as US exports continued to grow and the Brent-WTI differential moved above \$10/b.

The performance of Latin American ORB components, Venezuela's Merey and Ecuador's Oriente, were well above that of the WTI market, which failed to keep pace with other global benchmarks over the month. Merey was up \$7.98, or 13.2%, the largest gain among all Basket components, at \$68.22/b in May. Oriente was up \$5.02, or 7.7%, at \$70.39/b.

The value of **multiple-region destination grade components**, Arab Light, Basrah Light, Iran Heavy and Kuwait Export, which also benefited from ongoing increases in their official selling prices (OSPs), on the back of Dubai's steeper backwardation, expanded by \$5.67, or 8.4%, to \$73.05/b in May.

**Middle Eastern spot components**, Murban and Qatar Marine, saw their values rise. Murban rose by \$5.74 m-o-m, or 8.1%, to \$76.71/b in May. Qatar Marine increased by \$5.73, or 8.5%, to \$73.36/b. These grades also profited from higher spot premiums, as robust demand in Asia kept premiums elevated.

On a monthly basis, the **May ORB value** increased by \$5.68, or 8.3%, to settle at \$74.11/b. Y-t-d, the ORB value was \$16.23, or 31.7% higher, at \$67.48/b in May, compared with the same period in 2017.

On 11 June, the ORB stood at \$73.96/b, 15¢ below the May average.

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

			Chang	ge -	Year-to-d	ate
	<u>Apr 18</u>	<u>May 18</u>	May/Apr	<u>%</u>	<u>2017</u>	<u>2018</u>
Basket	68.43	74.11	5.68	8.3	51.25	67.48
Arab Light	68.91	74.68	5.77	8.4	51.43	68.05
Basrah Light	67.06	72.83	5.77	8.6	50.61	66.28
Bonny Light	72.75	77.73	4.98	6.8	53.10	70.86
Es Sider	70.43	75.25	4.82	6.8	51.21	68.79
Girassol	71.80	76.75	4.95	6.9	52.83	70.41
Iran Heavy	66.56	72.15	5.59	8.4	51.01	65.95
Kuwait Export	66.99	72.55	5.56	8.3	50.65	66.09
Qatar Marine	67.63	73.36	5.73	8.5	52.14	66.93
Merey	60.24	68.22	7.98	13.2	45.80	60.60
Murban	70.97	76.71	5.74	8.1	54.22	69.89
Oriente	65.37	70.39	5.02	7.7	48.16	64.29
Rabi Light	70.61	75.88	5.27	7.5	51.71	68.92
Sahara Blend	72.13	77.25	5.12	7.1	52.51	70.57
Zafiro	71.43	76.68	5.25	7.3	52.37	69.86
Other Crudes						
Dated Brent	71.58	76.85	5.27	7.4	52.77	69.89
Dubai	68.29	74.20	5.91	8.7	52.34	66.99
Isthmus	68.10	73.03	4.93	7.2	53.71	67.91
LLS	69.46	75.21	5.75	8.3	52.77	68.57
Mars	66.52	71.38	4.86	7.3	49.16	65.15
Minas	63.53	68.26	4.73	7.4	48.75	62.09
Urals	69.16	75.23	6.07	8.8	51.43	68.13
WTI	66.32	69.89	3.57	5.4	50.92	65.07
Differentials						
Brent/WTI	5.26	6.96	1.70	-	1.85	4.82
Brent/LLS	2.12	1.64	-0.48	-	0.00	1.33
Brent/Dubai	3.29	2.65	-0.64	-	0.43	2.91

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

### The oil futures market

**Crude oil futures** swelled to their highest value since late 2014, with ICE Brent ending the month significantly higher above the \$75/b level. NYMEX WTI also increased sharply, albeit at a slower pace than Brent, due to higher US oil production and inventories, as well as a strengthening US dollar (USD). The oil market was again underpinned over the month by fears of potential disruption to oil flows due to escalating geopolitical tensions, concerns about Venezuela's crude production slipping further and with bullish drawdowns in US crude inventories.

Crude oil futures surged to their highest values in almost four years early in the month, amid geopolitical tensions,. Strong conformity from OPEC and participating non-OPEC producing countries in terms of the production adjustments through the 'Declaration of Cooperation' also continued to support the oil market. By the end of the month, crude oil futures drifted lower, on expectations of some supply volumes returning to the market, as well as a surprisingly bearish read on weekly US oil stock numbers.

**ICE Brent** was \$5.24, or 7.3%, higher to average \$77.01/b in May. **NYMEX WTI** also gained \$3.66, or 5.5%, to average \$69.98/b. Y-t-d, ICE Brent was \$16.47, or 30.6%, higher at \$70.22/b, while NYMEX WTI rose by \$14.12, or 27.7%, to \$65.09/b, compared with the same period in 2017.

In line with the improvements in crude oil futures, **DME Oman** also rose by a sharp \$6.12, or 8.9%, to settle at \$74.60/b in May. Y-t-d, DME Oman was up \$14.81, or 28.2%, to stand at \$67.35/b, compared with the same period in 2017.

In June, crude oil futures prices slipped in the second week. On 11 June, ICE Brent stood at \$76.46/b and NYMEX WTI at \$66.10/b.

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

			Chang	ge	Year-to-date		
	<u>Apr 18</u>	<u>May 18</u>	May/Apr	<u>%</u>	<u>2017</u>	<u>2018</u>	
NYMEX WTI	66.33	69.98	3.66	5.5	50.97	65.09	
ICE Brent	71.76	77.01	5.24	7.3	53.75	70.22	
DME Oman	68.49	74.60	6.12	8.9	52.54	67.35	
Transatlantic spread (ICE Brent-NYMEX WTI)	5.44	7.02	1.59	29.2	2.78	5.13	

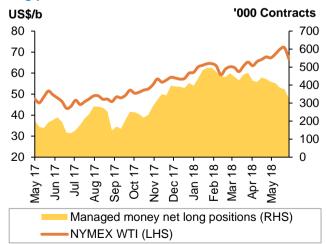
Note: Totals may not add up due to independent rounding.

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

Despite the surge in crude oil futures prices, **speculative net length positions** again ended the month lower, following a drop in April.

Speculators cut combined futures and options net length positions in **NYMEX WTI** by 93,812 contracts, or 22.5%, compared to the level at the beginning of the month. The level stood at 324,235 contracts on 29 May, according to data from the *US Commodity Futures Trading Commission (CFTC)*.

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



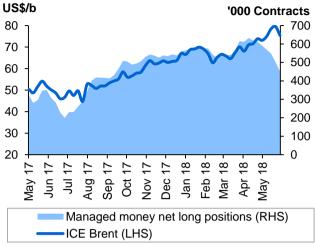
Sources: CFTC, CME Group and OPEC Secretariat.

In the **ICE Brent** market, hedge funds and money managers reduced their combined futures and options net long positions from a high level of 591,457 lots at the beginning of the month to 451,996 contracts on 29 May, according to the *Intercontinental Exchange (ICE)*. The overall drop was 139,461 contracts, or 23.6%.

The **long-to-short ratio** in ICE Brent speculative positions more than halved, from 17:1 to 6:1. In NYMEX WTI, the ratio also decreased sharply to 7:1, from 13:1.

The total futures and options open interest volume on the two exchanges rose by 31,389 contracts from the week ending 1 May to stand at 6.8 million contracts on 29 May.

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



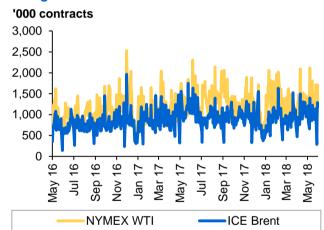
Sources: Intercontinental Exchange and OPEC Secretariat.

The daily average traded volume for NYMEX WTI contracts increased by 74,653 lots, or 5.6%, to 1,406,852 contracts, while that for ICE Brent was 20,877 contracts higher, up by 2.1%, at 1,017,011 lots.

The daily aggregate traded volume for both crude oil futures markets increased by 95,530 contracts to 2.4 million futures contracts, or about 2.4 billion b/d of crude oil.

The **total traded volume** in NYMEX WTI was 10.6% higher at 31 million contracts, while ICE Brent was 11.8% higher at 23.4 million contracts.

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



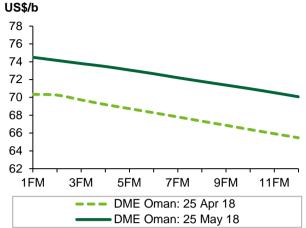
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

### The futures market structure

The **Dubai** market structure moved deeper into backwardation over the month of May on healthy Asian summer demand and resilient product cracks. Buying interest and seasonality were evident in the market structure.

Despite **Brent's** exposure to European and Asian markets, as well as its current greater geopolitical sensitivity, its backwardation weakened significantly to flatten over the month. Brent continues to receive support from Venezuela's ongoing production declines, as well as threats of global trade restrictions. The most likely explanation for the weakening market structure is linked to a sell-off in crude futures from the managed money group, which typically hold their investments at the frontend of the curve.

**Graph 1 - 5: DME Oman forward curves** 



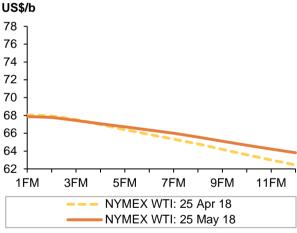
Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

In the US, the **WTI** backwardation remained at the same level, under pressure from higher crude inventories, as well as increasing US crude oil production.

Regarding the **M1/M3 structure**, the M1/M3 North Sea Brent \$1.28/b backwardation in April flipped to a mild contango of 1¢, down \$1.29. The Dubai M1 83¢/b premium to M3 increased to a \$1.18/b premium, a gain of 35¢. In the US, WTl's backwardation of 28¢/b was almost unchanged, as the M1-M3 spread widened by 3¢ to 31¢/b.

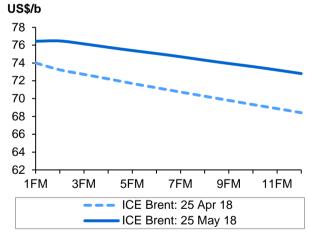
**Graph 1 - 6: NYMEX WTI forward curves** 



Note: FM = future month.

Sources: CME Group and OPEC Secretariat.

Graph 1 - 7: ICE Brent forward curves



Note: FM = future month.

Sources: Intercontinental Exchange and OPEC Secretariat.

The **spread between the NYMEX WTI and ICE Brent** benchmarks widened further in May to \$7/b, it widest in three years. Toward the end of May, the lack of pipeline capacity from the Permian Basin weighed on WTI prices and caused bigger discounts relative to Brent. The discount of WTI to Brent was at its deepest since March 2015, helping to incentivize US crude oil exports and boost coastal crude grades, in particular. Meanwhile, rising concerns over potential disruptions due to geopolitical tensions supported the global benchmark Brent.

The first-month ICE Brent/NYMEX WTI spread widened \$1.59 m-o-m, to \$7.02/b in May. This was the largest monthly change since August 2014.

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

		<u>1FM</u>	<u>2FM</u>	<u>3FM</u>	<u>6FM</u>	<u>12FM</u>	<u>12FM-1FM</u>
NYMEX WTI	25 Apr 18	68.05	67.92	67.53	65.87	62.44	-5.61
	25 May 18	67.88	67.78	67.45	66.36	63.82	-4.06
	Change	-0.17	-0.14	-0.08	0.49	1.38	1.55
ICE Brent	25 Apr 18	74.00	73.23	72.72	71.22	68.42	-5.58
	25 May 18	76.44	76.47	76.14	75.06	72.81	-3.63
	Change	2.44	3.24	3.42	3.84	4.39	1.95
DME Oman	25 Apr 18	70.35	70.26	69.72	68.28	65.47	-4.88
	25 May 18	74.50	74.15	73.80	72.66	70.07	-4.43
	Change	4.15	3.89	4.08	4.38	4.60	0.45

*Note: FM= future month.* 

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

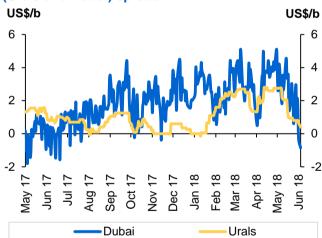
# The light sweet/medium sour crude spread

Apart from the USGC, all sour crudes changed course this month and revived relative to sweet crudes. The sweet/sour differentials narrowed in Europe and Asia, while in the USGC the spread widened.

In **Europe**, the light sweet North Sea Brent premium to Urals medium sour crude eased from its record high. The spread decreased by 80¢ in May, to an advantage for Urals of \$1.62/b. Urals differentials to Dated Brent improved over the month on the back of record low exports of Russian crude oil in the region, combined with active arbitrage shipments of North Sea Forties to Asia and improved demand after refinery maintenance ended.

In **Asia**, the Tapis premium over Dubai narrowed as domestic light sweet crudes came under pressure from alternative supplies from the US. The Dated Brent/Dubai spread narrowed to \$2.65/b in May, encouraging the flow of west-east arbitrage for Atlantic-Basin crudes. The Tapis/Dubai spread narrowed by 47¢, to \$4.75/b in May. The Dated Brent/Dubai spread decreased by 64¢ to \$2.65/b in May, compared to April's differential of \$3.29/b.

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



Sources: Argus Media, OPEC Secretariat and Platts.

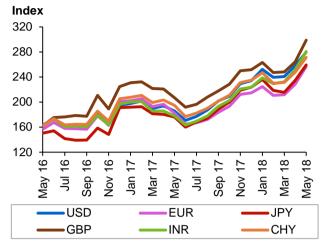
In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars in May increased by 89¢ to \$3.83/b. Meanwhile, both sour Mars and LLS differentials relative to WTI futures firmed significantly by more than \$1.50/b as coastal grades have been given a boost by WTI's discount to Brent, which hit as much as \$11/b in May, helping incentivize US crude oil exports.

# Impact of US dollar and inflation on oil prices

On average, the **US dollar (USD)** generally advanced during the month of May confirming the appreciating trend started in mid-April, in which the dollar has either recovered or even surpassed the losses seen in the first quarter.

With a further acceleration in the US economy in 2Q18, expectations for a faster pace of interest rate hikes by the US Federal Reserve have increased significantly, thereby supporting the currency. Besides, the deceleration in the economies of major currency counterparts also played a part. Against the euro, the dollar increased by 3.9%, partly on the expectation of a slower tapering than previously anticipated in view of the lacklustre economic performance of the Euro-zone at the beginning of the year. This has been compounded by the uncertainties related to the formation of the new Italian government. Meanwhile, the dollar rose on average by 2.9% against the Swiss franc.

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



Sources: IMF and OPEC Secretariat.

Against the Japanese yen the US dollar rose by 2%, partly due to the underperformance of the Japanese economy at the beginning of the year. It suggests that there is little change in sight for the Bank of Japan asset purchase programme. Additionally, safe-haven demand has been limited with the prospect of talks between the US and North Korea in the second week of June. Against the pound sterling the US dollar advanced by 4.2%, given that the Bank of England is expected to delay previously expected interest rate hikes in view of a slowing economy in the 1Q18 and April inflation showing its lowest increase in a year.

On average, the US dollar advanced against the Chinese yuan in April by 1.2%. The dollar advanced by 2.9% m-o-m against the Indian rupee, in spite of expectations of an increase in interest rates that materialized at the beginning of June.

Against commodity exporters' currencies, the dollar advanced by 6.7% m-o-m against the Brazilian real – down by 10.5% y-t-d – partly due to the effect of a truck drivers' strike that paralyzed the country for one week, and political uncertainties due to the upcoming presidential elections in October. Against the Russian ruble it increased by 3.0% – down 6.2% y-t-d – partly as a result of sanctions imposed by the US government on Russian companies in April. The currencies of Argentina and Turkey have been particularly hit this year. In May the US dollar advanced on average by 17% m-o-m against the Argentinian peso – up 36% y-t-d – which has forced central bank intervention, including a sharp rise in the main policy rate beginning at the end of April, from 27.2% to 40% in various steps, and a request of a stand-by facility to the International Monetary Fund (IMF), which has recently been approved. Against the Turkish lira, the dollar advanced by 8.9% in May – up 14.7% y-t-d – which triggered central bank interest rate increases from 13.5% to 17.75% at the end of May.

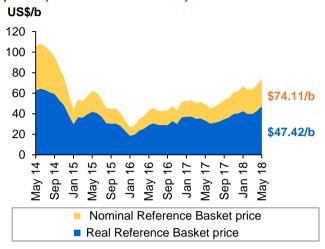
Against NAFTA member currencies, the US dollar increased, advancing by 1.1% against the Canadian dollar, while against the Mexican Peso it rose by 6.2%, due to the uncertainties regarding the outcome of NAFTA talks, the upcoming Mexican elections and the general strengthening of the dollar.

In **nominal terms**, the price of the ORB increased by \$5.68, or 8.3%, from \$68.43/b in April to \$74.11/b in May.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to \$47.42/b in May, from \$42.72/b<sup>1</sup> (base June 2001=100) in the previous month.

Over the same period, the **USD** increased by 2.7% against the import-weighted modified Geneva I + USD basket<sup>2</sup>, while inflation increased by 0.2% m-o-m.

Graph 1 - 10: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price<sup>2</sup> (base June 2001 = 100)



Source: OPEC Secretariat.

<sup>&</sup>lt;sup>1</sup> The number has been adjusted from the previous month based on the latest inflation data.

<sup>&</sup>lt;sup>2</sup> The "Modified Geneva I + USD Basket" includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to merchandise imports by OPEC Member Countries from the countries in the basket.

# **Commodity Markets**

Energy prices increased in May led by coal and crude oil, while natural gas prices were mixed. In the group of non-energy commodities, metal prices were mixed with aluminium and nickel supported by US sanctions on Russian companies and inventory declines, while copper and zinc witnessed declines. Gold prices weakened substantially amid expectations that a faster pace of interest rate rises from the US Federal Reserve would be required.

# Trends in selected commodity markets

**Average energy prices** in May increased by around 6.2%, with higher crude oil and coal prices leading the gains. The index is up by 27.6% during the first five months of 2018, compared to the same period last year.

Table 2 - 1: Commodity price data

Commodity	Unit	Мо	onthly aver	ages	% Change	Yea	Year-to-date	
Commodity	Offic	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May 18/Apr 18	<u>2017</u>	<u>2018</u>	
Energy*		81.0	87.6	93.1	6.2	67.0	85.5	
Coal, Australia	US\$/mt	95.9	94.2	105.4	11.9	82.3	100.4	
Crude oil, average	US\$/b	64.2	68.8	73.4	6.7	52.8	65.7	
Natural gas, US	US\$/mbtu	2.7	2.8	2.8	-0.1	3.0	3.0	
Natural gas, Europe	US\$/mbtu	7.0	7.8	7.2	-7.9	5.6	7.3	
Non-energy*		88.0	89.7	89.8	0.1	84.0	88.7	
Base metal*		92.9	96.1	96.4	0.4	80.3	95.8	
Precious metals*		101.6	102.3	100.1	-2.1	96.8	101.8	

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

Source: World Bank, Commodity price data.

In May, the **Henry Hub natural gas index** was slightly down 1¢, or 0.1%, at \$2.79/million British thermal units (mmbtu), compared to the previous month. Prices were stable during the month, with the expectation of further production rises counterbalancing the effect of lower than average inventory levels. The US EIA said utilities added 96 billion cubic feet (bcf) to working gas underground storage during the week ending 25 May. The median analysis expectation was for a 97 bcf withdrawal. The build left total working gas in underground storage at 1,725 bcf, which was 22.5% lower than the previous five-year average.

**Natural gas** import prices in Europe decreased in May, with average prices down by 7.9% to \$7.2/mmbtu. However, spot prices rose on the back of higher coal prices. Natural gas inventory levels for European Union member states were around 38% full at the end of May – lower than last year's level of 40.3% – but up from 25.6% in April, according to *Gas Infrastructure Europe*. Natural gas imports to China increased by 8.6% in May from the previous month. They are 36.4% higher during the first five months of this year.

Thermal coal prices increased to an average of \$105.4/Mt in May or 11.1% m-o-m. In May, a heatwave in China saw above average temperatures, which increased electricity demand. To cater for increasing electricity consumption, thermal power output has been raised significantly in 2018. During the month of April, thermal power output increased by 7.3% y-o-y, and it is 7.1% higher for the January-April period, compared to the same period in 2017. In addition, the increasing thermal power demand also covered for the fall in hydropower generation, which fell by 2.6% in April. It is up just 1.3% y-o-y in the January-April period, due to low reservoir levels. These factors combined have spurred coal usage, driving prices up since the end of April. In response, China's government has restricted imports above certain price thresholds, while promoting higher coal production levels. In May, import volumes were flat at 22.3 million metric tonnes. Compared to last year, imports in the January-May period are up by 8.2%.

40

20



17

Sep

\ \ \

Gold

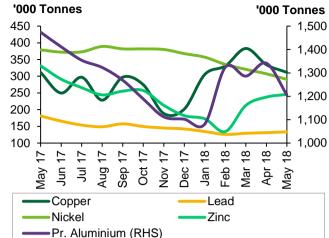
17

 $\exists$ 

May

Mar

Graph 2 - 2: Inventories at the LME



Source: World Bank, Commodity price data.

Jan

Base vear 2010 = 100

16

. No

HH natural gas

Energy

Food

Jul

Sources: London Metal Exchange and Thomson Reuters.

Average base metal prices increased by 0.4% in May, led by a 2% increase in aluminium prices, which added to the previous month rise of 9%, as a result of sanctions imposed by the US government on the world's second largest aluminium producing company, Rusal, in April. The expectation of a potential relaxation of the measures – should key company shareholders reduce their stakes, and the extension of the delaine for the implementation the sanctions have prevented further spikes. Higher aluminium exports from China - increasing by 7.5% in May to 485 thousand tonnes, also helped to keep prices in check. This year Chinese's exports are higher by 13% y-o-y.

40

20

9

May

Mar

Jan

Non-energy

Base metals

**Nickel** rose 3.1% in May, after a 4.1% increase the previous month, on the expectation of sanctions on major producer Norilsk, although these have not materialised, as well as due to falling stocks on both the London Metal Exchange and the Shanghai Futures Exchange designated warehouses, which suggests a pick-up in demand.

In general, however, **metal prices** were weakened by decelerating global manufacturing prospects mainly due to slowdowns in the Euro-zone, Japan, and Brazil. The JP Morgan global manufacturing Purchasing Managers' Index (PMI) declined to 53.1, a nine-month low. In the world's largest metal consumer, China, the Caixin manufacturing PMI was unchanged from the previous month at 51.1.

**Copper prices** were weak during most of the month, down by 0.8% m-o-m, in response to the weakening trend in manufacturing. However, at the beginning of June the prospect of another strike at the Chile's Escondida mine – the largest copper mine in the world – prompted a price jump of around 7%.

In the group of **precious metals**, **gold prices** declined on average by 2.3%, on a firmer outlook for interest rate increases by the US Federal Reserve. Speculators have sharply reduced their bets on gold price increases this year. Meanwhile, **platinum prices** declined by 2.1%, while silver prices were down by 0.9%.

### Investment flows into commodities

**Open interest (OI)** increased in May for selected US commodity futures markets, such as crude oil and natural gas, while it declined for copper and precious metals. Meanwhile, in monthly average terms, speculative net length positions increased for natural gas and copper, but decreased for precious metals and crude oil.

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

	Open ii	nterest				
	<u>Apr 18</u>	<u>May 18</u>	<u>Apr 18</u>	<u>% OI</u>	<u>May 18</u>	<u>% OI</u>
Crude oil	2,550	2,657	424	17	385	14
Natural gas	1,461	1,466	135	9	144	10
Precious metals	721	702	99	14	14	2
Copper	256	254	20	8	28	11
Total	4,989	5,079	957	55	959	43

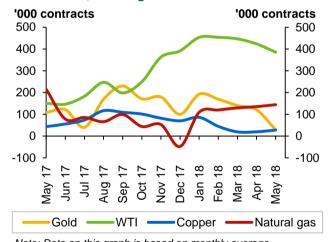
Note: Data on this table is based on monthly average. Source: US Commodity Futures Trading Commission.

**Henry Hub's natural gas OI** increased by 0.3% m-o-m in May. Money managers' average net long positions increased by 6.6% m-o-m to 144,361 contracts.

**Copper's OI** decreased by 1.0% m-o-m in May. Money managers increased their net long positions by 39.6% m-o-m to 27,566 contracts, mainly due to a drop in inventories, and the prospect of a strike at Chile's Escondida mine.

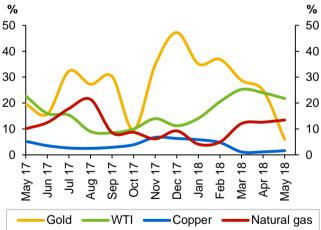
**Precious metals' OI** decreased by 2.6% m-o-m in May. Money managers decreased their bullish bets by 85.9% during the month to 13,979 contracts, mainly as a result of rising interest rates in USD.

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



Note: Data on this graph is based on monthly average. Source: US Commodity Futures Trading Commission.

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



Note: Data on this graph is based on monthly average. Source: US Commodity Futures Trading Commission.

# **World Economy**

1Q18 growth in advanced economies confirmed a deceleration and while a pick up is expected to compensate for the shortfall in growth from the beginning of the year, challenges to keep full-year growth at last year's level have increased. Some lead and sentiment indicators are indeed pointing to the moderation of last year's high growth dynamic. Positively, US fiscal stimulus will start to lift US and global growth during the remainder of the year. Some better development is also foreseen in Japan and the Euro-zone. However, China and India are expected to experience slowdowns from strong 1Q18. While numerous challenges remain and the downside risk to global growth has increased, a high growth level of 3.8% is forecast to be maintained in 2018, the same as in 2017 and unchanged from the previous month.

The OECD GDP growth forecast remains at 2.4% in 2018, after growth of 2.5% in 2017. After some softening of the growth trend in 1Q18, strong growth in the US is forecast to continue, mainly supported by fiscal stimulus measures. The US economy is expected to maintain a strong growth level of 2.7% in 2018, compared to 2.3% in 2017. However, tighter monetary policies and the most recent trade-related initiatives may have a negative impact on the US economy, but this remains to be seen. Euro-zone growth is unchanged and continues at a strong level of 2.2% in 2018, slowing down somewhat from 2.5% in 2017. After a 1Q18 decline, Japan's 2018 forecast was revised down to 1.2% from 1.5%, showing an even larger gap with 2017 growth, when GDP growth stood at 1.7%.

In the emerging economies, Chinese growth is forecast to slow slightly, given its maturing economy. China's growth is forecast at 6.5% in 2018 compared to 6.9% in 2017, unchanged from the previous month. India's 2018 forecast is unchanged at 7.3%, following 2017 GDP growth of 6.3%. Amid recent slowing activity, growth in Brazil was revised down to 1.9% in 2018, following growth of 1.0% in 2017. Russia saw an unchanged GDP growth forecast at 1.8% in 2018, following growth of 1.5% in 2017.

Main areas of concern include political uncertainties in combination with trade related issues and the upcoming monetary policy decisions in the US and the Euro-zone, together with financial tightening in China. Particularly trade related developments warrant close monitoring in the near-term.

Table 3 - 1: Economic growth rate and revision, 2017-2018\*, %

					Euro-					
	World	OECD	บร	lapan	zone	UK	China	India	Brazil	Russia
2017	3.8	2.5	2.3	1.7	2.5	1.8	6.9	6.3	1.0	1.5
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018	3.8	2.4	2.7	1.2	2.2	1.4	6.5	7.3	1.9	1.8
Change from previous month	0.0	0.0	0.0	-0.3	0.0	-0.1	0.0	0.0	-0.2	0.0

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

# **OECD**

### **OECD Americas**

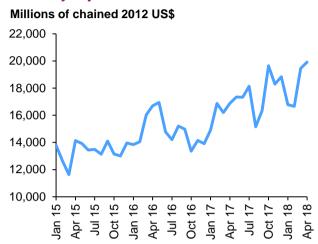
#### US

**US 1Q18 GDP growth** was reported at an even lower level in the second of three GDP growth publications. The second estimate by the Bureau of Economic Analysis shows growth of 2.2% quarter-on-quarter (q-o-q) at a seasonally adjusted annualized rate (SAAR), which compares to 2.3% in the first estimate and 2.9% q-o-q SAAR in 4Q17. This 1Q18 slowdown is forecast to be temporary, as 2Q18 growth is estimated to probably moving up to even 4%, based on currently available indicators. This pick-up will be mainly supported by fiscal stimulus measures, the Tax Cuts and Jobs Act, as well as the Bipartisan Budget Act.

While the 2Q18 should be relatively well supported by the stimulus effects, it remains to be seen how the 2H18 will materialise, given rising trade tensions with neighbouring countries, as well as the EU, China, Japan and others. These trade related challenges have come to the forefront during the latest G7 summit in Canada. Strong growth in the 2Q18 in combination with well supported inflation may very well lead the Fed to raise interest rates. While at least two more rate-hikes are currently priced in by the market, indications of a faster hiking path may dampen growth going forward.

Other uncertainties include the rising budget deficit and its impact on the federal financial situation. Investments are expected to be an important driver for US growth in 2018 and a considerable portion will also be related to the energy sector. Besides the support of investments in the oil-market, oil product trade may continue to support US economic development, subject to trade related initiatives. With the Atlantic spread widening, thereby making petroleum related product exports more attractive, GDP is also well supported from oil-market related angle. Consequently, oil-market related developments may have an important impact on near-term US Petroleum product exports stood at an all-time high in April, when products amounting to \$19.92 billion were exported. This translates to an 18% y-o-y increase.

Graph 3 - 1: US petroleum exports, seasonally adjusted



Sources: Census Bureau and Haver Analytics.

Importantly, **consumption** has slowed down in 1Q18, while investment has increased and constituted a major driver for growth. This rise in investment may already be the outcome of fiscal stimulus. Private household consumption expanded by only 1% q-o-q SAAR. Consequently, the GDP growth contribution was relatively small, at 0.7 percentage points. Strong support came from the increase of 7.2% q-o-q SAAR in private investments, contributing 1.2 percentage points to the overall growth number. With the ongoing strength in the labour market private household consumption should be well supported in the remainder of 2018 and should find its way back, constituting the major force in GDP growth.

Improvements in the **labour market** continued in May. Non-farm payrolls increased by 223,000, after a downwardly-revised figure of 159,000 in April. The unemployment rate fell to 3.8% in May from 3.9% in April, while the average hourly earnings growth for the private sector rose by 2.7% y-o-y, slightly above the April level of 2.6%, but still below the 2.8% in January. On a positive note, long-term unemployment numbers fell further to stand at 19.4% in May, compared to an already attractive level of 20.0% in April, indicating a continued structural shift in the labour market. The May number also was the lowest since August 2008, the month before Lehman Brothers went bankrupt. However, another important element in the labour market mix, the participation rate, fell by 0.1 pp again to stand at 62.7% in May, the fourth consecutive monthly decline.

The likely increase in federal debt and the rising budget deficit will be elements that require close monitoring, particularly in light of ongoing monetary tightening. A 25 bp key interest-rate increase is expected at the upcoming June rate setting meeting of the Fed. Given the pick-up in growth, the strong labour market and further rising **inflation**, a continuation of the gradual normalization of **monetary policies** seems likely in 2018. In this respect, inflation numbers remain supportive. Overall inflation stood at 2.4% in April, the same level as in March, and the important core inflation – excluding volatile items such as food and energy – remained steady for a second consecutive month at 2.1% y-o-y, compared to 1.9% in February and 1.8% in January. Additionally, the Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), rose to 2% in April, which is around the Fed's inflation target. Importantly, the PCE index, excluding food and energy, rose to 1.9% y-o-y, compared to 1.6% y-oy in February, almost at the Fed's target rate.

**Industrial production** increased in April, rising by 3.5% y-o-y, almost unchanged from March, when growth stood at a healthy 3.7% y-o-y on a seasonally adjusted base. Domestic demand held up well in April, with retail sales growing by 4.6% y-o-y compared to March growth of 5.1% y-o-y in a nominal and seasonally adjusted base.

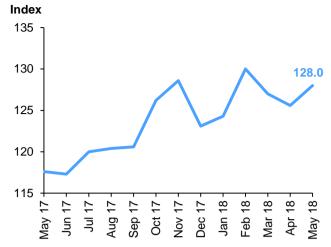
This strength was also reflected in **consumer sentiment**, according to the index published by the Conference Board, whose consumer confidence index was almost unchanged from a high level in May. The index stood at 128, compared the 128.7 in April.

May's **Purchasing Managers' Index** (PMI) indices, as provided by the Institute of Supply Management (ISM), also indicated ongoing support for the underlying economy. The manufacturing PMI rose to 58.7 in May, compared to 57.3 in April. The important index for the services sector rose as well, by almost two index points from 58.6, compared to 56.8 in April. However, both indices remain below the average 1Q18 level.

Although 1Q18 showed some deceleration after significant growth in the previous quarters, the underlying economic growth momentum is forecast to strongly pick up again in 2Q18. However, fiscal and monetary challenges remain, and the softening of some lead and business indicators will need to be closely monitored in the near-future.

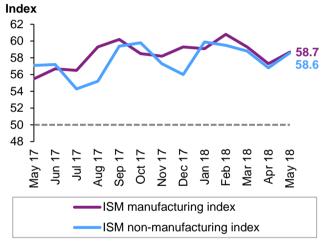
Taking this into consideration and as the forecast already shows a considerable growth trend in the current year, **GDP growth** expectations for 2018 remain at 2.7%, after growth of 2.3% in 2017.

Graph 3 - 2: US consumer confidence index



Sources: The Conference Board and Haver Analytics.

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



Sources: Institute for Supply Management and Haver Analytics.

#### Canada

Canada's growth trend has continued slowing down in 1Q18. The slow-down was across the board, withprivate household consumption particularly weakened at the beginning of the year. GDP growth stood at only 1.3% q-o-q SAAR, compared to 1.7% q-o-q in 4Q17. Final consumption expenditures slowed-down to 1.6% q-o-q SAAR in 1Q18, compared to 2.5% q-o-q SAAR in 4Q17. Trade related issues with the US remain an area that may impact sentiment in investment going forward. This remains to be seen, but with unresolved issues within the NAFTA negotiations and as recent trade related disputes between the two very much intertwined economies shows, developments in external trade with the US will need close monitoring as the uncertainty has clearly increased.

While Canada's Central Bank will be guided by the economic developments related to these trade related issues in the near future, ongoing high household debt and the sensitive currency relation to the US dollar will need to be considered within monetary policies. In the meantime, Canadian inflation held up well in April. Inflation rose by 2.2% y-o-y, compared to 2.3% in March. **Industrial production** continued expanding at a high level in March, rising by 4.2% y-o-y, after 4% y-o-y in February. As in previous months, it was the mining and oil sector with an increase of 6.6% y-o-y in activity, significantly supporting this trend after it showed almost no growth in January, when it rose by 0.5% y-o-y. Retail trade expanded again considerably at 4.1%

in March at a nominal seasonally-adjusted level, probably pointing at some ongoing recovery in private household consumption going into 2Q18. While some output numbers at the beginning of the year appear to have decelerated, the PMI index for manufacturing sees strong momentum. It points to an ongoing and improving dynamic in the near future as the index rose again to 56.2 in May, after an already elevated level of 55.5 in April.

Taking the 1Q18 weakness into consideration, the economic growth forecast for 2018 was slightly revised downwards. Canada's 2018 **GDP growth** was adjusted lower by 0.2 pp, to now stand at 2%, after growth of 3.0% in 2017.

### **OECD** Asia Pacific

### Japan

Japan's economy showed some weakness at the beginning of the year after the lead indicators had already signalled some softening in the 1Q18 GDP growth numbers. 1Q18 GDP fell by 0.6% q-o-q SAAR, more than expected. The largest negative impact came from a decline in private household spending, which declined by 0.3% q-o-q SAAR, while governmental spending increased by 0.4% q-o-q SAAR, highlighting also the fiscal support to promote growth. One reason for the sharp decline in private household spending may have been the sharp rise in prices, particularly of fresh food, at the beginning of the year due to bad weather, which was driving up food inflation to relatively high levels of 3.1% y-o-y in January and 3.0% y-o-y in February. This is to be seen as a temporary phenomenon, and growth is likely to recover over the remainder of the year. However, numerous uncertainties remain. Some weakness in exports also negatively impacted 1Q18 growth, which stood at only 2.6% q-o-q SAAR, coming down from 9.2% q-o-q SAAR in 4Q17. Exports in April have already picked up significantly, pointing to a recovery. Positively, wage growth increased again, while inflation retraced slightly, thus boosting real income growth. Negatively, exports decelerated again in March, a trend that has continued since February. This development will need to be monitored in the near term.

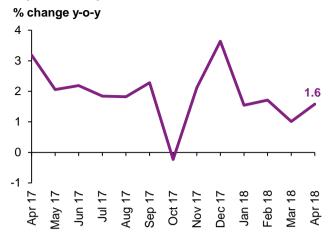
The **Bank of Japan** (**BoJ**) will most probably confirm a continuation of its accommodative monetary policies at its upcoming June meeting. So far it has highlighted that it will continue its monetary stimulus with quantitative and qualitative monetary easing (QQE) measures with Yield Curve Control for as long as necessary. It is expected to keep the short-term interest rate at minus 0.1% and the cap on 10-year bond yields at "around zero" and to also continue to buy assets at a pace of ¥80 trillion a year. It will continue expanding the monetary base until the y-o-y rate of increase in the observed consumer price index (CPI) – all items less fresh food – exceeds 2% and then remains above this target in a stable manner.

After a considerable increase in **inflation in 1Q18**, when it stood at 1.3% y-o-y, the April number was at only 0.6% y-o-y. The exceptional rise of food and beverage prices in 1Q18 was the main trigger of this sharp difference, as the abnormally high prices retraced again. Significant support still came from rising energy prices, a generally healthy development for the Japanese economy. As the labour market shortage has continued, inflation was, to some extent, also supported by wage growth expectations. In March, monthly earnings rose by a very high level of 2.2% y-o-y after a rise of 0.4% y-o-y in February. In April, monthly earnings rose by 0.7% y-o-y, still leading to rising real income, given the low April inflation. Core inflation, which excludes food and energy and is more wage-dependent, declined to 0.3% y-o-y in April, compared to 0.4% y-o-y in March. Given the tightness in the labour market, the unemployment rate remained at an ultra-low level of only 2.5% y-o-y in April.

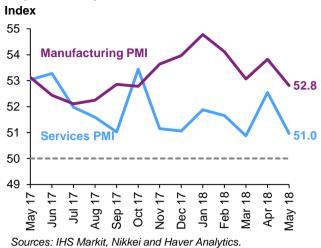
**Japanese exports** recovered from their sluggish expansion over the past months to rise in April by 7.8% y-o-y. And while this is below last year's average of 11.8% growth, it constitutes a strong pick up from March and February, which saw growth of 2.1% y-o-y and 1.8% y-o-y, respectively. After a March recovery in industrial production, growth again faltered in April and stood at only 1.4% y-o-y, compared to 3.8% y-o-y in March and 2.5% y-o-y in February. Positively, manufacturing orders continued with a strong rise, at 10.0% y-o-y in April, after a March decline of 1.5% y-o-y, indicating a recovery into 2Q18.

**Domestic retail demand** remained sluggish in April, increasing by only 1.6% y-o-y, following low growth of 1.0% y-o-y in March. With further real income growth and a likely appreciating inflation level again, this may rise further in the coming months.

Graph 3 - 4: Japanese retail trade



Graph 3 - 5: Japanese Markit/Nikkei PMIs



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

The latest **PMI** numbers confirmed some deceleration in both manufacturing and services. The manufacturing PMI moved down to stand at 52.8 in May, compared to 53.8 in April. This marks the lowest level this year. The services sector PMI retracted as well to stand at 51.0 in May, compared to 52.5 in April. While a recovery from the GDP growth decline in the 2H18 is expected, the near-term development of the PMI indicators will warrant close monitoring.

Taking the decline of 1Q18 **GDP growth** into consideration, the 2018 GDP growth forecast was changed to 1.2% from 1.5% previously, and a recovery of economic growth is expected in the remainder of the year. This compares to a very strong growth rate of 1.7% in 2017. Some challenges in the economy remain, and given the tight labour market situation and high capacity utilization rates, further upside seems limited for now.

### South Korea

While political developments on the Korean Peninsula seem to be improving, numerous uncertainties remain. With limited visibility on future development, it is still unclear how this will impact economic growth. A move towards easing tensions on the Peninsula should have a positive impact on economic growth in the medium term, and while some recent indicators have pointed to some softening in the growth dynamic, 1Q18 GDP numbers turned out considerably stronger than expected. The latest GDP growth update showed growth of 2.8% y-o-y, translating to 4.1% q-o-q SAAR. Governmental consumption was particularly high, growing by 8.9% q-o-q SAAR, while private consumption increased by 2.8% y-o-y SAAR. Investment in the economy also expanded considerably with gross capital formation growing by 6.4% q-o-q SAAR, probably a positive impact from the most recent decline of political tensions in the region. Interestingly, the latest PMI number for the manufacturing sector showed a slowing trend, standing at 49.5 in May, lower than the level of 50.5 in April, which still indicated an expansion in the economy.

Some slight improvement in the economy has already been taken into consideration as domestic developments show more optimism, and external trade is forecast to pick up over the year. However, the prospect of increased trade protectionism could potentially pose some headwinds to South Korea's economy

Hence, South Korea's 2018 GDP growth forecast remains at 2.7%, after growth of 3.1% y-o-y for 2017.

# **OECD Europe**

### Euro-zone

The latest release of 1Q18 GDP growth levels by Eurostat, the EU's statistical office, confirmed a significant slow-down in the GDP growth as 1Q18 GDP growth decelerated to 1.5% q-o-q SAAR. Public spending decelerated sharply, rising by only 0.1% q-o-q SAAR. On a positive note, private household consumption held up well, moving up by 2% q-o-q SAAR, a healthy level and in line with average growth levels over the past years. Additionally, investment rose significantly with gross capital formation rising by 5.2% q-o-q SAAR. A large negative impact, however, came from external trade, which fell by 1.6% q-o-q SAAR, a sharp drop from 9.1% q-o-q SAAR in 4Q17 and only the second decline in exports over the past nine years. This reflects further challenging developments with regard to global trade. Overall, growth is expected to remain solid in most of the Euro-zone economies. With numerous challenges to economic development remaining, policy and banking sector-related issues are at the forefront. Moreover, the growing uncertainty amid the possible rise in trade protectionism, low income growth and the ongoing high sovereign debt levels across the region may also weigh on future growth levels.

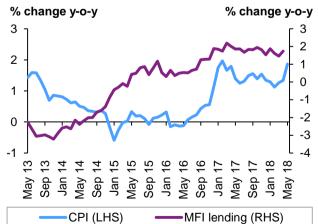
After most recent comments by two influential ECB board members, monetary stimulus is expected to be reduced gradually in 2018, also supported by rising inflation and a continued solid recovery. A sharp tapering is not anticipated as long as inflation remains relatively below the ECBs target rate of around 2% and monetary stimulus is forecast to continue to be an important element in the Euro-zone's economic upswing, while probably at a lower level. Sovereign debt levels remain high across the Euro-zone, and particularly Italy, with the third highest sovereign debt level in the world will need to be carefully monitored. The political situation in Italy has improved with a new – albeit euro-sceptic – government in place after months of uncertainty.

The improvements in the **labour market** continued in April. The unemployment rate fell to 8.5%, compared to 8.6% in March and February. Consumer confidence remained almost unchanged in May, but fell slightly to balance the European Commission's consumer confidence indicator, standing at 0.2 in May, comparing to 0.3 in April and clearly below this year's peak-level January of 1.4. **Retail sales** rose again and moved to 2.9% y-o-y growth in April, compared to 2.2% y-o-y in March. **Industrial production** grew by 3% y-o-y in March, a healthy level after already solid 2.7% y-o-y in February.

Inflation recovered as it edged towards the ECB envisaged 2% level, now standing at 1.9% y-o-y in May, a strong move from 1.2% y-o-y in April, a situation that will probably impact the **ECB's monetary policy**, also in combination with the expected pick-up in the Euro-zone's economy. **Core inflation** – that is, the CPI, excluding energy, and food – picked up as well, standing at 1.3% y-o-y in May, after 1.1% in April. Therefore, all inflation indicators are moving gradually towards the ECB's approximate 2% inflation target.

Thus far, the ECB continues quantitative easing (QE) purchases of €30 billion, which will run at least until September 2018, and could be continued beyond that time, if necessary. The main policy rate stands at 0%, and the rate for deposit facilities at -0.4%. Some areas of the Euro-zone's banking sector remain weak, and the growth dynamic of the liquidity line has remained sluggish in the past months based on the latest available data. The lending of financial intermediaries to the private sector picked up again in April, when it rose by 1.7% y-o-y, compared to 1.5% y-o-y in March. While lending activity remains muted and while inflation remains low and the extremely low interest rates are eating into households' wealth levels, the stimulus is obviously becoming less effective.

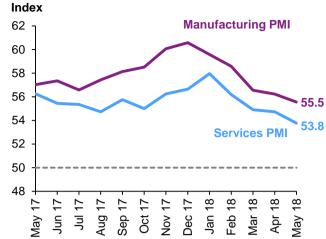
Graph 3 - 6: Euro-zone CPI and lending activity



Sources: Statistical Office of the European Communities, European Central Bank and Haver Analytics. Additionally, the Euro-zone's latest **PMI** indicators generally pointed downwards. The manufacturing PMI fell in May to stand at 55.5, compared to April's 56.2. The important PMI for the services sector, which constitutes the largest sector in the Euro-zone, fell to 53.8 in May, compared to 54.7 in April.

Given that the most recent weakness of growth momentum in the Euro-zone has already been anticipated in the numbers, the 2018 **GDP growth** forecast remains at 2.2%. This compares to 2017 growth of 2.5%. Political uncertainties, Brexit procedures, weakness in the banking sector, as well as monetary policies remain important factors to monitor.

**Graph 3 - 7: Euro-zone IHS Markit PMIs** 



Sources: IHS Markit and Haver Analytics.

### UK

Brexit still looms large over the UK's economy and is not expected to change in the near-term. Most significantly, the House of Commons will vote on an amendment by the House of Lords. The most important issue may be an amendment that sets a deadline of November 30 for when the government must agree — and legislate for — the withdrawal agreement with the EU. If the government does not meet a 30 November deadline, it would need to follow any direction approved by a Commons resolution, thereby giving Parliament a larger influence in the ongoing Brexit dealings.

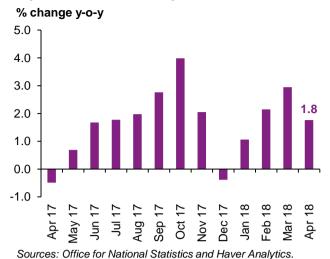
After the release of the latest **1Q18 GDP** growth numbers of only 0.4% q-o-q SAAR, it is clear that Brexit is having a considerable negative effect on the UK's economy. Notably, exports continued to decline on a quarterly base, falling by 2% q-o-q SAAR, after a decline of 3.4% q-o-q SAAR in 4Q17. This comes despite the relative weakness of the pound and may also be impacted not only by the uncertainties of Brexit, but also the global rise of protectionism. Therefore, the decision to raise interest rates by the Bank of England may be postponed further, as inflation is coming down again. It stood at 2.4% y-o-y in April, compared to 2.4% in March, the lowest level in more than a year.

The unemployment rate remained surprisingly low, 4.1% in February, the same level as in January, while it is expected that the trend will reverse in the coming months. Wage growth has held up relatively well over the past months, but is slowing down too. Average weekly earnings rose by 2.3% y-o-y in March on a nominal base, the same level as in February, but this marks the lowest level since July 2016 and with inflation around the same level, real income growth stood at 0.

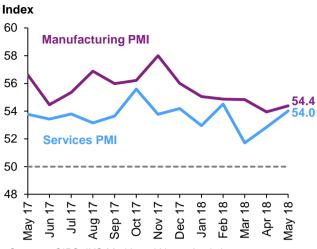
**Industrial production** retracted as well, growing only by 1.9% y-o-y in April, after it had already recovered somewhat in March, growing by 2.9% y-o-y. In line with the sluggish export growth in the GDP, April's export growth slowed down sharply further, as it declined by 7.5% y-o-y. Retail trade declined as well in value terms of the non-seasonally adjusted base as it rose only by 1.3% y-o-y in April, compared to 4.8% y-o-y in March.

The most recent **PMI** lead indicators point at some pick-up in the near future of this slow-down as the PMI for manufacturing increased to a considerable level of 54.4 in May, compared to 53.9 in April. The very important services sector, which constitutes the majority of the UK's economy, rose to 54 in May, after it stood at 52.8 in April.

Graph 3 - 8: UK industrial production



Graph 3 - 9: UK IHS Markit PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

Despite some of the slow-down may be temporary as indicated by the PMI, just by taking the 1Q18 GDP growth numbers into consideration, **GDP growth** was revised down to 1.4% from 1.5% previously. This comes after 2017 GDP growth of 1.8%.

# Non-OECD

### **BRICs**

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2017-2018\*

	GDP growth rate, %		Consumer index % change	ζ,	Current a balan US\$ I	ce,	Governn fiscal bala % of Gl	ance,	Net public % of G	•
	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
Brazil	1.0	1.9	3.4	3.3	-9.8	-35.1	-8.0	-7.0	74.0	78.5
Russia	1.5	1.8	3.7	3.5	35.2	51.2	-1.4	-0.9	11.4	11.5
India	6.3	7.3	3.3	4.9	-39.1	-60.1	-3.5	-3.5	49.9	49.3
China	6.9	6.5	1.5	2.4	164.9	184.7	-3.7	-3.5	16.3	18.3

Note: \* 2018 = Forecast.

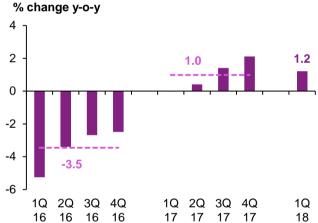
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

### **Brazil**

The pace of **growth in the Brazilian economy** slowed in 1Q18 to 1.2% y-o-y, after registering growth of 2.1% and 1.4% in 4Q17 and 3Q17, respectively.

As for the **GDP component**, private consumption growth accelerated in 1Q18, growing by 2.8% y-o-y, up from 2.6% in 4Q17. However, growth in Gross Fixed Capital Formation (GFCF) decelerated to 3.5% y-o-y in 1Q18, down from 3.8% in the previous quarter. In addition, exports posted slower growth of 6.0% y-o-y in 1Q18, down from 9.1% in 4Q17. The slowdown in exports was more than the minor drop in the growth of imports, which grew by 7.7% y-o-y in 1Q18 versus 8.1% in 4Q17. Moreover, government consumption in 1Q18 contracted by 0.8% y-o-y versus a 0.4% drop in the previous quarter.

Graph 3 - 10: Brazil's GDP growth

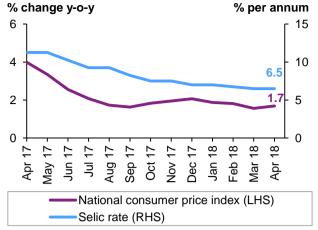


Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

In May, **exports** from Brazil declined by 2.8% y-o-y on the back of lower exports of manufactured goods and semi-manufactured goods, whereas exports of primary goods increased by nearly 13% y-o-y. While exports to China rose by around 27%, exports to the US, EU, Argentina and Mexico slumped by 28%, 6%, 19%, and 28%, respectively. **Imports**, on the other hand, went up by 9.3% y-o-y in May 2018. As a result, the **trade surplus** narrowed by 22% in May 2018 from the previous year. The nationwide truckers' strikes negatively affected Brazil's trade surplus in May, registering around \$6.0 billion compared to \$7.6 billion in May 2017.

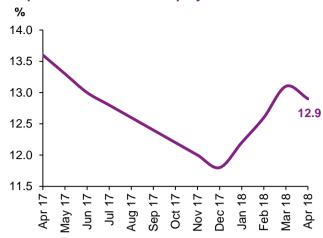
**Inflation** edged up in April to 1.7% y-o-y, from March's 1.6%. The central bank also held its benchmark interest rate unchanged at 6.5% in April. The **unemployment rate** fell to 12.9% in April, from 13.1% in March. The streak of falling unemployment that started in March 2017 was interrupted at the beginning of 2018, when it increased to 12.2% in January, up from 11.8% a month earlier. In the following two months, February and March 2018, the unemployment rate formed an upward trend, rising to 12.6% and 13.1%, respectively.

Graph 3 - 11: Brazil's inflation vs. interest rate



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

Graph 3 - 12: Brazil's unemployment rate



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

The consumer confidence index fell in May to 86.9, from April's 88.1.

In May 2018, the **IHS Markit Brazil manufacturing PMI** dropped to 50.7, from 52.3 in April, reflecting a broad-based slowdown. A combination of currency depreciation, political instability and surging commodity prices have all contributed to the recent weakness. Manufacturers signalled the weakest rise in new orders and production for 15 months. Rises in input costs negatively affected the manufacturers' input buying and employment. Truckers' protests against fuel prices could curtail any upcoming rebound in manufacturing sector growth. Market expectations do not rule out the possibility of a contraction in the manufacturing sector in June.

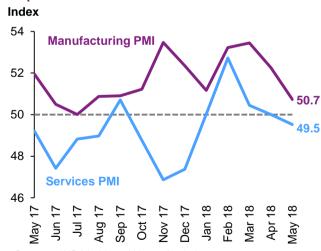
The services sector contracted in May for the first time this year, according to the **IHS Markit Brazil services business activity index**. The index posted 49.5 in May, down from 50.0 in April, indicating a marginal reduction. Weak demand, client defaults and challenging market conditions were reported by surveyed firms as the trigger behind the moderation.

**Graph 3 - 13: Brazil's consumer confidence index** 



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3 - 14: Brazil's IHS Markit PMIs



Sources: IHS Markit and Haver Analytics.

The economic recovery in Brazil is turning out to be slower than expected with a series of downbeat data releases confirming slower-than-expected GDP growth in 1Q18 and less encouraging signals for 2Q18, especially in May. Some economic indicators in April reflected a moderation of the broad-based rebound noticed earlier in 2018. Improvements in business conditions of the manufacturing and services sectors clearly softened in April and May. The latest survey results emphasized the significance of upcoming elections in October, citing hopes of political stability after the elections as a main source of optimism looking forward.

Brazil's GDP grew by 1.0% in 2017 and is expected to grow by 1.9% in 2018, respectively.

### Russia

The **GDP of Russia** posted growth of 1.3% y-o-y in 1Q18, according to *the Federal State Statistics* Service. Granular information on 1Q18 growth is not yet available. GDP grew by 0.9% y-o-y in 4Q17, after growing by more than 2% in 3Q17 and 2Q17. GDP growth in 2017 stood at 1.5% y-o-y.

GDP for the component, household consumption grew in 4Q17, the fastest pace since at 4.3% у-о-у, while government consumption saw a steady increase of steady at 0.4% y-o-y, during 2Q17-4Q17. The increase in GFCF was notably slower in 4Q17 at 0.4% y-o-y, down from 8.5% in the previous guarter. The trade surplus of Russia widened in March by nearly 22% y-o-y, rising from \$12.3 billion in March 2017 to \$15.0 billion in March 2018. Exports went up by approximately 18% in March, whereas imports ramped up by nearly 15% y-o-y.

% change y-o-y

3
2
-0.1
0
-1.5

Graph 3 - 15: Russia's GDP growth

Sources: Federal State Statistics Service and Haver Analytics.

1Q

17

2Q

17

3Q 4Q

17 17

1Q

18

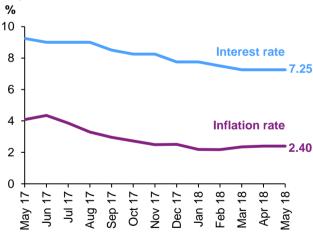
Following the 6.0% m-o-m depreciation in April, the **Russian ruble** depreciated by another 3.0% in May as a result of new US sanctions. On a y-o-y comparison, the ruble was 8.8% lower in May 2018 from its level a year earlier. Nevertheless, changes in consumer price inflation in May were less acute when compared to the ruble's depreciation. **Inflation** remained unchanged from the previous month to stand at 2.4% y-o-y. In the meantime, the central bank of Russia also kept its benchmark one-week repo rate unchanged at 7.25%.

-2

1Q 2Q

16 16

Graph 3 - 16: Russia's inflation vs. interest rate



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

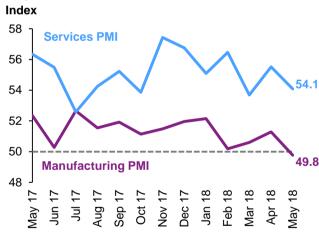
**Graph 3 - 17: Russia's IHS Markit PMIs** 

4Q

16

3Q

16



Sources: IHS Markit and Haver Analytics.

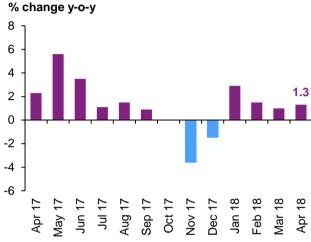
The **IHS Markit Russia manufacturing PMI** signals first deterioration in manufacturing business conditions since July 2016. The index dipped to 49.8 in May, down from 51.3 in April, driven by contractions in employment and stocks of purchases. Signs of weakening demand from foreign and domestic customers also started to emerge as rates of production and new orders moderated to multi-month lows. Exchange rate weakness drove up input costs at the fastest pace since September 2015. This led to a strong increase in output prices as firms tried to pass on the burdens of higher costs. Yet, business confidence remained robust in May.

**Industrial production** rose by 1.3% y-o-y in April, after increasing by 1.0% and 1.5% y-o-y in March and February, respectively, following its return to growth in January 2018 after two months of contraction.

The **IHS Markit Russia services business activity index** suggests strong growth in May. The index registered 54.1 in May, from 55.5 in April. It showed that rates of output and new order growth softened in May, though they remained steep. Employment in the sector grew at the slowest pace in 17 months. Input cost inflation was the second-fastest since August 2016, reportedly driven by higher wages and fuel costs.

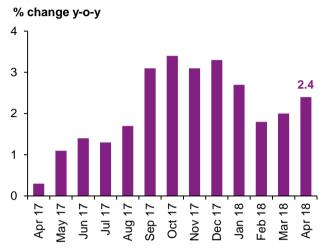
For the twelfth month in a row, **retail sales** continued their increasing streak in April, rising by 2.4% y-o-y, from 2.0% in March.

Graph 3 - 18: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 19: Russia's retail sales



Sources: Federal State Statistics Service and Haver Analytics.

**Russia's GDP growth** forecasts remain unchanged at 1.8% y-o-y for 2018. Recent deterioration in the geopolitical arena in the form of another round of economic sanctions by the US has reduced a potential of marked progress in the economic/trade relationships of Russia with the US and the European Union. In fact, it has transformed this element into a risk factor going forward, adding downside risk to current GDP forecasts.

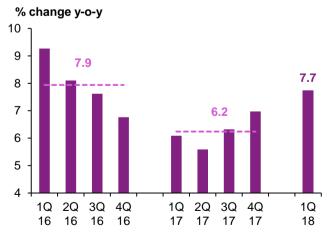
### India

The **Indian economy** ended 2017 in a strong position, with real GDP growth rising to 7.0% in 4Q17, up from an upwardly revised 6.3% in 3Q17. A cyclical recovery is forecast for 3Q18 and 4Q18 driven by investments as well as consumption. The average GDP growth in 1Q18 rose to 7.7%, indicating one of the fastest growing economies over the next two years.

However, accelerating core inflation led to the first rise in headline inflation in 2Q18, even as food inflation remained broadly unchanged. Expectations of a rate hike from the RBI have risen, following this and signs that inflationary pressures are likely to remain strong this year.

Oil-related risks have also risen over the past month. So, it is not surprising that investors' worries have re-emerged with crude trading in the high price range. Risks to the fiscal deficit and inflation are less pronounced.

Graph 3 - 20: India's GDP growth



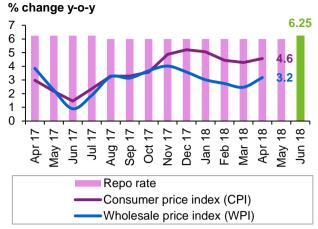
Sources: National Informatics Centre (NIC) and Haver Analytics.

A build-up of inflationary pressures re-emerged with input cost and output charge inflation at the highest rates since February due to the upswing in global oil prices. As a net importer of crude oil, this could potentially pressure India's recovery, particularly in private consumption. Indian inflation accelerated in April and will continue to pick up in the coming months.

India's **CPI inflation** rose to a three-month high of 4.6% in April 2018, up from 4.3% in March. Prices of housing, together with clothing and footwear, rose at a faster pace. In the meantime, food inflation was almost unchanged.

India's **WPI** inflation rose by 3.2% y-o-y in April 2018, after a 2.5% gain in March. It was the highest WPI since December 2017 as costs increased at a faster pace for manufactured products and fuel, while prices of food rebounded. On a monthly basis, WPI increased by 0.7 pp in April, compared to a 0.2 pp decrease in March.

Graph 3 - 21: Repo rate and inflation in India



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

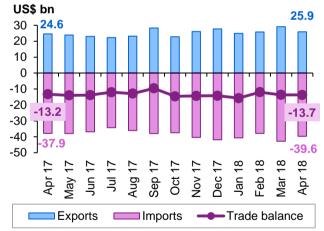
The Reserve Bank of India (RBI) finally decided for increasing its **repo rate** following June Monetary Policy Committee (MPC) meeting. The repo rate remained unchanged in April from the previous month at 6.0%, however there were some signs of the returning inflation risks. The RBI, therefore, is most likely to proceed with the new increasing rate during the 3Q18. The RBI hiked the repo rate by 25 basis points (bps) to 6.25%. It seems the MPC to sound hawkish, with a rising probability that they will vote for a pre-emptive 25 bps rate hike in June, to maintain financial stability and contain second-round inflationary impact from higher oil prices and a weaker rupee. Indicating hardening of the interest rate scenario, several major lenders have already raised their lending rates from 1 June 2018. Some of the banks have also increased the deposit rates.

India's **trade deficit** widened slightly to \$13.7 billion in April 2018 from \$13.3 billion the same time a year ago, and remained below market expectations of a \$15 billion gap.

**Merchandise exports** increased 5.2% y-o-y to \$25.91 billion in April, rebounding from a 0.7% drop in March.

**Merchandise imports** rose by 4.6% y-o-y to \$39.63 billion in April, lower than the 7.1% gain seen in March.

Graph 3 - 22: India's trade balance

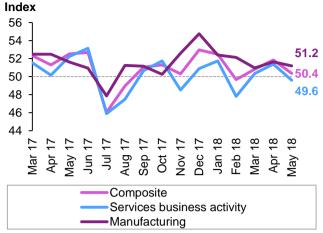


Sources: Ministry of Commerce and Industry and Haver Analytics.

The **Nikkei manufacturing PMI** in India fell to 51.2 in May 2018 from 51.6 in April. New orders and employment softened while sentiment weakened after reaching a nine-month high in April. At the same time, purchasing activity declined for the first time in seven months, albeit only fractionally. Meanwhile, new export orders grew the most since February amid reports of greater demand from international markets.

Indian **GDP** growth stood at 6.3% for 2017 and 7.3% for 2018. Domestic demand, together with the supportive macro policy and a fairly strong global backdrop, will lend support to the country's economy.

Graph 3 - 23: India's Nikkei PMIs

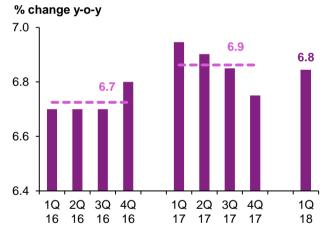


Sources: Nikkei, IHS Markit and Haver Analytics.

### China

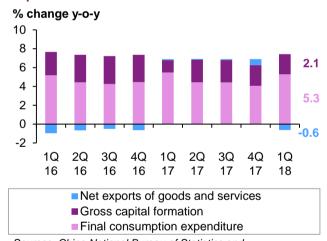
**China's** economic growth held up in April on better exports and resilient household consumption, but investment momentum weakened. It seems solid global demand momentum will continue to support China's exports in 2018, even though signs have emerged that global trade growth may have peaked. In the meantime, domestic demand has been quite resilient so far this year.

Graph 3 - 24: China's GDP growth



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

Graph 3 - 25: China's GDP breakdown



Sources: China National Bureau of Statistics and Haver Analytics.

The Chinese government has been trying to rebalance the country's economy away from investment and exports towards consumption and services. With strong government support, consumption has been rising steadily. In 1Q17, total retail sales recorded CN¥36.6 trillion y-o-y, an increase of 10.2%. China's growing middle class has high demand for better food services, which drives growth in the catering sector.

While US-China trade frictions could escalate, causing major economic impacts, it seems more likely that the tariff burden will be limited. But larger economic tensions and conflicts between the two are on the rise, with serious long-term implications, especially in the area of technology. Tariff burdens and thus short-term economic impacts will be relatively controlled.

Industrial profit growth is expected to remain stable in the coming month, but moderation remains likely in the 2H18. Easing China-US trade tensions will help to stabilize manufacturing production. However, the recovery in upstream heavy industry is unsustainable. The expected declining industrial inflation, the rising base effect and weakening domestic demand owing to subdued fiscal stimulus and a deleveraging campaign may drive down profit growth in the year ahead. Expected declining profit growth, along with the ongoing financial deleveraging campaign, will potentially increase corporate debt risk, particularly for private firms in heavy industries.

China's foreign exchange regulator issued new forward hedging rules, relaxing controls on the foreign exchange derivatives market. The new rules are an important step toward liberalizing China's foreign-exchange market and will help companies control foreign exchange risks better. Cash settlement of the forward contract allows market players to settle the contract with net cash rather than the physical delivery of the underlying currencies on the maturity date. This will give market players more flexibility and thus encourage participation in the foreign exchange forward market. In the past, regulators did not clearly specify that companies could use foreign exchange forwards to hedge risks for capital account transactions.

China's **trade surplus** narrowed to \$29 billion in April 2018 from \$36 billion in the same period a year ago.

**Exports** from China increased by 13% y-o-y, to \$200 billion in April 2018, recovering from a 2.7% decline in March. This figure was way above market forecasts of a 6.3% gain, which was supported by solid global demand.

**Imports** to China surged by 21.5% y-o-y to \$172 billion in April 2018, higher than the 14% rise of a month earlier and beating market expectations for a 16% increase.

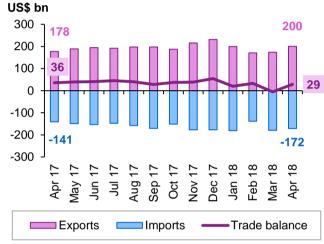
The trade surplus with the US, China's largest export market, widened to \$22 billion in April from \$15 billion in March.

China's **CPI inflation** fell to 1.8% y-o-y in April 2018 from 2.1% in the previous month. It was the lowest rate since January. The sharp slowdown was mainly due to food inflation. Compared to the previous month, CPI fell by 0.3 pp in April, lower than the forecast for a 0.1 pp drop.

China's **producer price index (PPI)** increased by 3.4% y-o-y in April 2018, following a 17-month low of a 3.1% rise in the previous month. The markets' expectation was at 3.5%. It was the twentieth straight monthly increase in PPI. The main reason due to the cost went up at a faster pace (4.5% in April from 4.1% in March) - extraction (6.1%), raw materials (5.7%) and processing (3.9%).

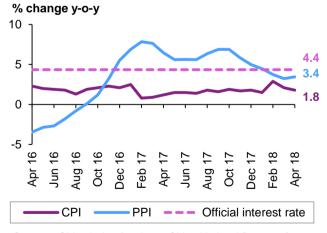
According to the People's Bank of China, the official interest rate remained steady at 4.4% per annum.

Graph 3 - 26: China's GDP breakdown



Sources: China Customs and Haver Analytics.

Graph 3 - 27: China's CPI and PPI



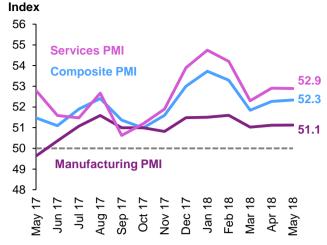
Sources: China Index Academy, China National Bureau of Statistics, Soufan and Haver Analytics.

In the meantime, the **cost of consumer goods** rose at a slower 0.1% (from 0.2% in a month earlier) - namely food production (0.1%), daily use goods (0.9%), and clothing (0.2%). At the same time, prices of consumer durable goods declined further (-0.6 pp, from -0.3 pp in the prior month).

The Caixin China services PMI remained unchanged from the previous month to stand at 52.9 in April. New orders rose at a faster pace, employment continued to rise and sentiment improved slightly. Meanwhile, input prices went up the least in seven months, leading to a softer rise in prices charged. Operating conditions of the service sector improved more significantly than the manufacturing sector.

The Caixin China manufacturing PMI stood at 51.1 in May. Growth in output and new orders picked up slightly, while new export orders fell further. Also, employment continued to decline amid efforts to reduce costs. This, in part, drove a further increase in outstanding workloads. Inflationary pressures intensified with both input costs and output charges rising at solid rates.

**Graph 3 - 28: China's Caixin PMIs** 



Sources: Caixin, IHS Markit and Haver Analytics.

According to the China Federation of Logistics and Purchasing, the official output PMI increased to 54.1 in May 2018 from 53.1 in April. New orders continued to grow (53.8 in May from 52.9 in April). Employment increased slightly by 49.1 in May from 49.0 in April. Meanwhile, new export orders rose to 51.2 in May from 50.7 in April. The services sector accounts for over half of China's economy, with rising wages giving consumers more spending power. Non-manufacturing PMI in China averaged 55.87% from 2007 until 2018, reaching an all-time high of 62.20% in May 2007 and a record low of 50.80% in December 2008.

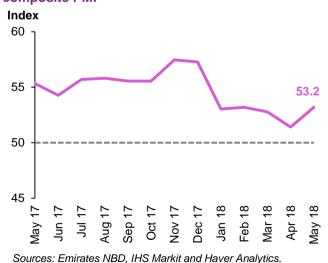
China's GDP growth for 2017 is forecast at 6.9% and was kept unchanged at 6.5% for 2018.

### **OPEC Member Countries**

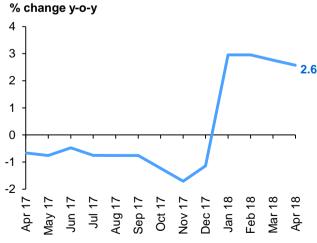
### Saudi Arabia

In Saudi Arabia, the Emirates NBD Saudi Arabia composite PMI rose to 53.2 in May, up from 51.4 in April, signalling a continued and faster expansion in the non-oil private sector's overall business conditions. The reading of April represents the lowest in the survey's history, whereas May's reading is the highest so far this year. Survey data suggested that an increase in new orders led to higher output requirements, whilst some firms noted that promotional activity had resulted in more new business. Inflows of new orders from abroad deteriorated for the fourth month in a row.

Graph 3 - 29: Saudi Arabia's Emirates NBD composite PMI



Graph 3 - 30: Saudi Arabia's inflation



Sources: General Authority for Statistics and Haver Analytics.

**Inflation** eased slightly from 2.8% y-o-y in March to 2.6% in April. Input price pressures faced by companies eased as a result of softer purchase prices and staff cost inflation. Following the first recorded contraction in stocks of purchases in April, May data signalled a return to growth. The overall level of positive sentiment at non-oil private sector firms remained elevated, signalling strong optimism towards future growth prospects. The non-oil and gas sector in Saudi Arabia grew by 1.0% y-o-y in 2017, faster than 2016's 0.2%.

### **Nigeria**

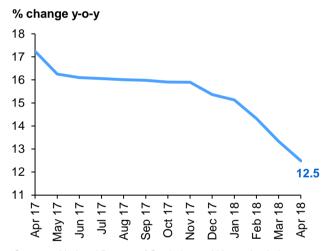
In **Nigeria**, **GDP** posted the second consecutive quarter of no less than 2.0% growth in 1Q18. GDP increased by 2.0% y-o-y in 1Q18, down from 2.1% in 4Q17. The non-oil sector grew by 0.7% in 1Q18, following the 1.5% rise in the previous quarter. The oil sector advanced by 14.7% y-o-y in 1Q18, up from 11.2% in 4Q17. GDP grew by 1.9% y-o-y in 4Q17, signalling the highest rate of growth since 4Q15. This brings the full 2017 growth rate to 0.8% y-o-y.

The **Stanbic IBTC Bank Nigeria PMI** continued posting strong readings for the seventh consecutive month in May, suggesting solid improvements in the private sector business conditions. The index rose to a new survey high in May at 59.1, up from April's 58.1. Surveyed firms suggested that output levels continue to rise as new orders from their clients remain healthy as well. The May PMI reading also shows a more gradual rise in prices as the output prices sub-index recorded a reading of 52.6, up from 50.6 in April. Output and new orders increased at the fastest rates on record in May. Firms frequently linked the improvements to robust domestic client demand and business investment. Despite robust domestic demand for Nigerian-produced goods and services, new export orders deteriorated in the latest survey. The contraction was the first recorded since February and followed a marked improvement in April.

Graph 3 - 31: Nigeria's Stanbic IBTC Bank composite PMI



**Graph 3 - 32: Nigeria's inflation** 



Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics. Sources: National Bureau of Statistics and Haver Analytics.

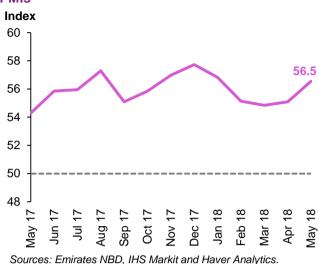
The increase in **consumer price inflation** continued to ease in April, falling to below 13.0% for the first time since February 2016. Inflation registered 12.5% y-o-y in April, down from 13.3% in March.

# The United Arab Emirates (UAE)

In the **UAE**, expansion in the country's non-oil private sector continued and accelerated in May 2018 to a four-month high, according to the **Emirates NBD UAE PMI**. The index rose to 56.5 in May from 55.1 in April. This improvement partly reflects an upturn in output, new orders and employment growth. In addition, the survey showed that business confidence hit a series-record high in May, which is linked to robust market conditions and Expo 2020.

Graph 3 - 33: UAE's Emirates NBD composite PMIs







Sources: National Bureau of Statistics and Haver Analytics.

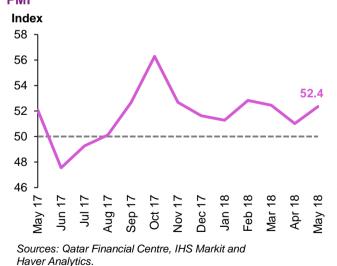
**Inflation** increased in April by 3.5% y-o-y, up from March's 3.4% y-o-y, which was lower than February's 4.5% y-o-y and January's highest rate since August 2015 of 4.8%. Prices increased in the categories of transportation, textiles and clothing, as well as communications, whereas prices of housing, water, electricity and gas had larger drops in April as compared to March.

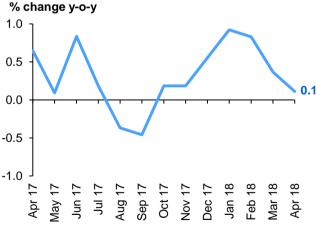
#### **Qatar**

In **Qatar**, the non-hydrocarbon private sector showed accelerated growth in May, according to **Qatar Financial Centre PMI**. The index rose to 52.4 in May, up from 51.0 in April, indicating a solid expansion that is above the series average. Improvements in new orders and output were the main factors behind the latest reading of the index. Higher domestic demand outweighed some deceleration in export demand. Thus, firms hired additional staff in May, with the job creation rate hitting a seven-month high. The survey also showed that input cost pressures sharpened as a result of higher purchase prices and staff cost inflation.

Graph 3 - 35: Qatar's Financial Centre composite PMI

Graph 3 - 36: Qatar's inflation





Sources: Ministry of Development Planning and Statistics and Haver Analytics.

**Inflation** posted 0.1% y-o-y in April from 0.3% a month earlier. Prices of food and beverages, clothing, housing, water, electricity and gas, as well as transportation were lower in April.

### Other Asia

### Malaysia

In **Malaysia**, **GDP** grew by 5.4% y-o-y in 1Q18, its slowest since 4Q16, despite the surge in net exports of goods and services by more than 62% y-o-y due to the contraction in imports by 2.0% y-o-y in 1Q18. GFCF and public consumption expenditure had decelerated growth in 1Q18. GFCF barely grew by just 0.1% y-o-y in 1Q18, after posting a 4.3% y-o-y increase in the previous quarter. Similarly, public consumption advanced by only 0.4% y-o-y in 1Q18, down from 6.8% y-o-y in 4Q17. Private consumption growth had a marginal drop from 7.0% y-o-y in 4Q17 to 6.9% in 1Q18.

The country's manufacturing sector showed signs of further deterioration in May, with the **Nikkei Malaysia manufacturing PMI** falling to an 11-month low of 47.6, down from April's 48.6. The survey showed faster contractions in production and new orders, while input cost inflation eased to its lowest since October 2016. The fall in new orders was the sharpest since December 2016. The survey indicated that hopes amongst manufacturers that the new government will spur business activity has supported strong projections for production in the next 12 months.

#### Indonesia

In **Indonesia**, the manufacturing sector experienced its strongest rise in new orders during May 2018 since July 2014 alongside solid growth in production and buying activity that was accompanied by intensified inflationary pressures driven by sustained pressure on the Indonesian rupiah, as suggested by the **Nikkei Indonesia manufacturing PMI** survey. The index rose to 51.7 in May from 51.6 in April.

**GDP** grew by 5.1% y-o-y in 1Q18, slightly higher than the 5.0% in 1Q17, yet somewhat lower than the 5.2% y-o-y in 4Q17. In 1Q18, household consumption rose by 5.0% y-o-y, similar to the previous quarter, whereas growth in government consumption notably slowed to 2.7% y-o-y in 1Q18 vs 3.8% in 4Q17. GFCF showed faster growth of 8.0% y-o-y in 1Q18 from 7.3% in the previous quarter. Imports had a larger increase than exports in 1Q18. Exports went up by 6.2% y-o-y, while imports increased by 12.8% y-o-y.

### **Africa**

### South Africa

In **South Africa**, the **trade surplus** dropped in April 2018 to 1.1 billion rand, from 9.3 billion rand in March. The country's trade balance in the first four months of 2018 points to a deficit of 17.6 billion rand. Comparing with the previous year, the trade surplus of April 2018 is notably lower than the 9.0 billion rand registered in April 2017. **Exports** went down by 9.8% m-o-m on the back of lower exports of vehicles and transport equipment, base metals, mineral products, precious metals and stones, and chemical products. China was the top trading partner of South Africa in April, being the destination of nearly 10% of total exports. On the other hand, **imports** went down by 1.6% m-o-m in April as a result of decreased imports of base metals, textiles, chemical products, and vehicles and transport equipment. China is once again the number one supplier of imports to South Africa with a share of more than 16% of total imports of South Africa in April.

The **South African rand** depreciated for the second month in a row in May, by 3.7% m-o-m, after losing 2.1% of its value to the dollar in April. Inflation edged up in April, posting 4.3% y-o-y, up from 3.7% in the previous month. Business conditions in South Africa's private sector remained unchanged in May as signalled by the latest **Standard Bank South Africa PMI**. The index registered 50.0 in May, down from 50.4 in April, as a result of output contraction which weighed on the overall PMI. The index survey showed an increase in new orders, stock levels and employment in May. The 1Q18 PMI average stood at 50.5 vs 50.8 in 1Q17.

**GDP grew** by 2.0% y-o-y in 4Q17, signalling the fastest growth rate since 1Q15. Higher expansion in private consumption expenditures was the main driver of improved GDP growth in 4Q17. Private consumption accelerated by 2.9% y-o-y in 4Q17, up from 2.7% in 3Q17, whereas public consumption increased by 0.4% y-o-y in 4Q17 from 0.5% in the previous guarter. For the year of 2017, GDP grew by 1.2% over 2016.

### **Latin America**

### Chile

In **Chile**, **GDP** posted the fastest rate of growth in 1Q18 since 2Q13, increasing by 4.2% y-o-y in 1Q18 due to higher increases in private consumption, GFCF and exports. Private consumption growth accelerated from 3.0% y-o-y in 4Q17 to 3.9% in 1Q18. GFCF posted a similar rise of 3.6% y-o-y in 1Q18 to the prior quarter, and exports jumped from 2.5% y-o-y in 4Q17 to 7.2% in 1Q18. Imports, on the other hand, went up by 7.0% y-o-y in 1Q18, up from 6.7% in the previous three months.

The central bank held its benchmark **interest rate** at 2.5% in early May, citing an expectation of low inflation throughout most of 2018. The central bank also expects inflation to gradually rise in 2019 to reach the bank's target of 3.0%.

Annual **consumer price inflation** increased to 1.9% y-o-y in April, from 1.8% y-o-y in March. Inflation expectations also showed no significant changes. Growth in economic activity in 1Q18 was generally better than during the previous period. Sharp increases were reported in mining activities in addition to better performance in construction investment. Both consumer and business confidence were positive in May.

The **central bank's economic expectations survey** of April pointed to GDP growth of around 3.5% for both 2018 and 2019.

# **Transition region**

# **Czech Republic**

In the **Czech Republic**, **GDP** growth decelerated in 1Q18 to 3.7% y-o-y from 5.5% in the previous quarter, which was a result of a slower rise in household consumption and exports. Household consumption went up by 3.8% y-o-y in 1Q18 vs 4.3% in 4Q17. Exports increased by 2.6% y-o-y in 1Q18 vs 7.6% in 4Q17. Government consumption growth, however, accelerated to 3.8% y-o-y in 1Q18, up from 1.5% in 4Q17, and import growth dropped to 4.7% y-o-y in 1Q18, from 8.1% in 4Q17. In 2017, the economy grew by 4.3% y-o-y. Household consumption growth accelerated to 4.5% y-o-y in 4Q17, up from 4.1% in 3Q17. GFCF also expanded by a higher rate in 4Q17 of 7.3% y-o-y versus 6.3% in the previous quarter.

The manufacturing sector remained in growth territory in May despite showing signs of relative weakness when compared to the previous few months, according to the **IHS Markit Czech Republic manufacturing PMI**. The index registered 56.5 in May, down from 57.2 in April and 57.3 in March, indicating the weakest manufacturing growth since August 2017. This came on the back of a slower rise in production over nine months and a softening rate of employment that reached its slowest since October 2016. Business expectations for output in the year ahead remained robust in May, despite the degree of confidence dipping to a 17-month low. Surveyed firms linked optimism to more favourable market conditions.

# World Oil Demand

World oil demand is estimated to have grown by 1.65 mb/d in 2017, unchanged from the previous month's assessment, to stand at 97.20 mb/d. Oil demand in the OECD region grew by more than 0.5 mb/d, led by OECD Europe. In the non-OECD region, China dominated oil demand growth, followed by Other Asia.

World oil demand in 2018 is forecast to grow by 1.65 mb/d, broadly unchanged from the previous month's assessment, to stand at 98.85 mb/d. Upward revisions in the OECD were offset by downward revisions in the non-OECD region. Oil demand growth in the OECD region was revised higher by around 0.02 mb/d in in 2018, due to better-than-expected data from the US. New ethane capacity additions during 1Q18 supported petrochemical feedstock demand, especially light distillates, which led to an upward adjustment for OECD Americas by 0.07 mb/d in 1Q18. In the non-OECD region, oil demand growth in 2018 was adjusted lower by around 0.02 mb/d. Positive upward revisions in Other Asia and China in 1Q18 and 2Q18, were offset by downward revisions in Latin America and the Middle East. In Other Asia, better-than-expected oil demand data resulted in an upward revision of around 0.05 mb/d during 1Q18. Additionally, oil demand growth in China continued its positive trend in April 2018, with aviation fuels and petrochemical feedstocks posting solid gains, leading to the upward adjustment of 0.02 mb/d in 2Q18. On the other hand, oil demand growth was revised down in the Middle East by 0.02 mb/d in 2018, mainly on slower-than-expected oil demand in the region, largely due to subsidy reductions and substitution programmes. In Latin America, oil demand growth was revised lower by around 0.01 mb/d, mainly reflecting recent economic projections in the region.

# World oil demand in 2017

**World oil demand** grew by 1.65 mb/d in 2017, unchanged from the previous month's assessment, to average 97.20 mb/d. Oil demand in the OECD region grew by more than 0.5 mb/d, led by OECD Europe. In the non-OECD, China dominated oil demand growth, followed by Other Asia.

Table 4 - 1: World oil demand in 2017, mb/d

							Change 2	017/16
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>Growth</u>	<u>%</u>
Americas	24.74	24.47	24.96	24.98	25.09	24.88	0.14	0.55
of which US	20.00	19.83	20.31	20.23	20.38	20.19	0.19	0.95
Europe	14.04	13.95	14.33	14.76	14.44	14.37	0.33	2.36
Asia Pacific	8.12	8.56	7.76	7.90	8.43	8.16	0.04	0.53
Total OECD	46.90	46.98	47.05	47.64	47.96	47.41	0.51	1.09
Other Asia	12.85	12.87	13.30	12.95	13.52	13.16	0.31	2.38
of which India	4.39	4.43	4.42	4.20	4.81	4.47	0.08	1.79
Latin America	6.47	6.26	6.49	6.80	6.46	6.51	0.04	0.57
Middle East	8.09	8.23	8.03	8.55	7.88	8.17	0.08	0.96
Africa	4.10	4.25	4.19	4.14	4.24	4.20	0.11	2.63
Total DCs	31.51	31.60	32.01	32.44	32.11	32.04	0.53	1.68
FSU	4.63	4.56	4.39	4.77	5.10	4.70	0.07	1.58
Other Europe	0.70	0.71	0.67	0.70	0.79	0.72	0.02	3.16
China	11.80	11.88	12.40	12.30	12.70	12.32	0.52	4.41
Total "Other regions"	17.13	17.14	17.46	17.77	18.59	17.74	0.62	3.59
Total world	95.54	95.73	96.52	97.85	98.65	97.20	1.65	1.73
Previous estimate	95.54	95.73	96.52	97.85	98.65	97.20	1.65	1.73
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

Source: OPEC Secretariat.

# World oil demand in 2018

Table 4 - 2: World oil demand in 2018\*, mb/d

							Change 2	018/17
	<u>2017</u>	<u>1Q18</u>	<u> 2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	<u>Growth</u>	<u>%</u>
Americas	24.88	24.91	25.17	25.22	25.35	25.16	0.29	1.15
of which US	20.19	20.36	20.53	20.47	20.58	20.48	0.30	1.46
Europe	14.37	14.07	14.41	14.86	14.52	14.47	0.10	0.68
Asia Pacific	8.16	8.62	7.77	7.88	8.44	8.18	0.01	0.17
Total OECD	47.41	47.61	47.35	47.96	48.31	47.81	0.40	0.84
Other Asia	13.16	13.40	13.69	13.33	13.89	13.58	0.42	3.18
of which India	4.47	4.75	4.66	4.32	4.97	4.67	0.21	4.66
Latin America	6.51	6.37	6.58	6.89	6.55	6.60	0.09	1.39
Middle East	8.17	8.21	8.10	8.63	7.97	8.23	0.06	0.69
Africa	4.20	4.36	4.33	4.27	4.38	4.33	0.13	3.11
Total DCs	32.04	32.33	32.69	33.13	32.79	32.74	0.70	2.17
FSU	4.70	4.66	4.50	4.89	5.21	4.82	0.12	2.45
Other Europe	0.72	0.73	0.69	0.73	0.82	0.74	0.03	3.48
China	12.32	12.28	12.84	12.71	13.12	12.74	0.42	3.40
Total "Other regions"	17.74	17.68	18.03	18.33	19.15	18.30	0.56	3.15
Total world	97.20	97.61	98.07	99.42	100.25	98.85	1.65	1.70
Previous estimate	97.20	97.55	98.08	99.44	100.28	98.85	1.65	1.70
Revision	0.00	0.06	-0.01	-0.02	-0.02	0.00	0.00	0.00

Note: \* 2018 = Forecast.

Totals may not add up due to independent rounding.

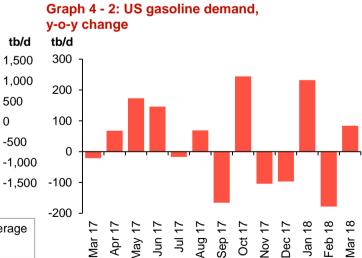
Source: OPEC Secretariat.

# **OECD**

# **OECD Americas**

Graph 4 - 1: OECD Americas oil demand, y-o-y change tb/d tb/d 1,500 1,500 1,000 1,000 500 500 0 -500 -500 -1,000 -1,000 -1,500 Ö Historical range Historical average 2017 2018

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



Source: US Energy Information Administration.

#### US

**US oil demand** saw strong growth of 0.53 mb/d, or 2.6%, y-o-y in March 2018, recording the second monthly y-o-y growth so far for the current year.

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

		Change 2018/17				
	<u>Mar 18</u>	<u>Mar 17</u>	<u>tb/d</u>	<u>%</u>		
LPG	2,977	2,509	468	18.7		
Naphtha	213	253	-40	-15.8		
Gasoline	9,446	9,362	84	0.9		
Jet/kerosene	1,719	1,671	48	2.9		
Diesel oil	4,169	4,154	15	0.4		
Fuel oil	223	362	-139	-38.4		
Other products	2,117	2,027	89	4.4		
Total	20,864	20,338	525	2.6		

Sources: US Energy Information Administration and OPEC Secretariat.

Oil demand growth for March was supported by strong LPG/NGLs and jet fuel requirements, while gasoline demand was also positive for another month. The growing middle distillate demand is in line with previous expectations and follows strong performances in January and February 2018.

The recent upward trend in diesel oil demand in 1Q18 occurred alongside the rising industrial production index. The index showed a rise of 3.8 pp above last year's levels with significant progress in almost all sectors. Furthermore, the truck transportation of freight indicator, an estimator of trucking activities by *the US Bureau of Labour Statistics*, soared during the month of March 2017 by 9.6 pp, y-o-y. Additionally, housing starts index showed significant increases, adding 10.4 pp y-o-y.

Overall, most of the major indicators relating to transportation, industry and construction saw a positive trend providing support to the product. Jet fuel demand continued its strong upward trend, recording a rise of 0.05 mb/d, or 2.9%, y-o-y. The solid gains in US domestic airline activities and airline market, which is the largest in the world, as well as the gains in the airline passenger services index, which measures international flights from the US, were in line with the strong jet fuel demand.

Gasoline demand remained positive, rising by 84 tb/d y-o-y. Vehicle sales are on a declining trend in 2018, with data for March decreasing by almost 12% y-o-y; yet there was growth in miles driven, y-o-y, despite higher retail prices and the continuing improvements in vehicle fleet efficiency. Retail gasoline prices were at US\$2.71/gal compared with US\$2.44/gal in March 2017.

1Q18 indicates solid growth of around 0.7 mb/d in US oil demand, with LPG/NGLs, gas/diesel oil and jet fuel accounting for the lion's share of that growth.

Preliminary April and May 2018 figures, which are based on weekly reports, suggest further steady increases in oil demand growth, with industrial fuels—namely gas/diesel oil and petrochemical feedstocks—accounting for the bulk of these increases.

#### **Mexico**

In **Mexico**, oil demand continued to decline in April, dominated by substantial decreases in the demand for gasoline, gas/diesel oil and residual fuel oil, and partly offset by increases in the demand for LPG, naphtha and jet/kerosene.

#### Canada

The latest March 2018 data showed strong overall declines in **Canadian oil demand**. Diesel oil demand rose, while requirements for all other petroleum categories declined sharply, notably LPG, naphtha and gasoline.

Going forward, the 2018 OECD America oil demand is now projected to be unchanged from last month. The expected positive US oil demand growth is conditional on several factors, such as the economy, the degree of substitution with other commodities and the oil price environment. Potential and risks are estimated to be balanced to the upside and downside, as compared to last month's publication.

**OECD Americas oil demand** grew by 0.14 mb/d y-o-y in 2017. 2018 OECD Americas oil demand is projected to grow by 0.29 mb/d y-o-y.

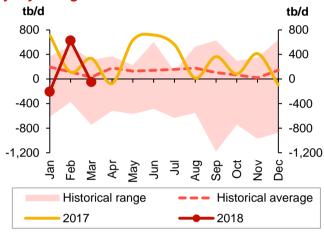
# **OECD Europe**

Initial indicators for oil demand growth in April indicate an increasing momentum in **OECD Europe oil demand** following a bullish February and an overall solid 1Q18.

The main reasons behind these positive developments are continuing strong industrial activities in the main oil consuming countries in the region, such as **Germany, France**, the **UK, Turkey** and **Spain**, in addition to firm growth in oil requirements in several other countries.

However, March oil demand remained slightly negative y-o-y, largely due to falling oil demand in Germany, Italy and Turkey. Losses have largely been offset by healthy oil demand in France, the UK, Spain and Netherlands.

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



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

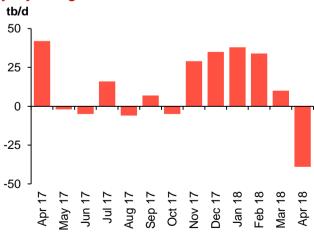
In **Germany**, heavy declines in LPG and naphtha requirements during March contributed to negative overall oil demand in the country. LPG weakened by around 32% and naphtha by 23%, y-o-y. Both petroleum product categories were largely pulled down by lower petrochemical demand. The projection for oil demand growth in Germany this year remained as per last month's report, with small y-o-y growth and strongly dependent on the overall all economic performance in the country, particularly the industrial sector, in addition to weather conditions during 4Q18.

The latest available data for **Turkey** showed lower-than-expected oil requirements, as oil demand growth was slower than projected as a result of losses in middle distillates and LPG requirements, mainly due to slower activities in the industrial sector.

Preliminary April 2018 **Big 4**<sup>3</sup> **total oil demand** data indicates solid growth in oil requirements y-o-y, with the UK being the only country declining. The European oil demand outlook for 2018 remains balanced going forward with the overall economic performance being the major factor impacting 2018 oil demand in the region.

**European oil demand** grew by a solid 0.33 mb/d y-o-y in 2017, while oil demand in 2018 is projected to increase by 0.10 mb/d y-o-y.

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



Sources: Joint Organisations Data Initiative, UK Department of Energy Climate and Change and OPEC Secretariat.

<sup>&</sup>lt;sup>3</sup> Refers to Germany, France, Italy and the UK.

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

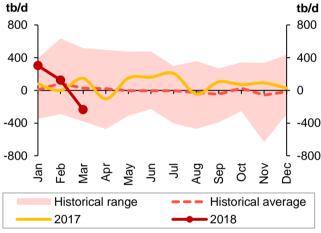
		Change 2018/17				
	<u>Apr 18</u>	<u>Apr 17</u>	tb/d	<u>%</u>		
LPG	523	478	45	9.4		
Naphtha	653	678	-25	-3.7		
Gasoline	1,130	1,113	17	1.6		
Jet/kerosene	817	801	16	2.0		
Diesel oil	3,296	3,197	99	3.1		
Fuel oil	225	236	-11	-4.5		
Other products	594	628	-34	-5.4		
Total	7,239	7,131	108	1.5		

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

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

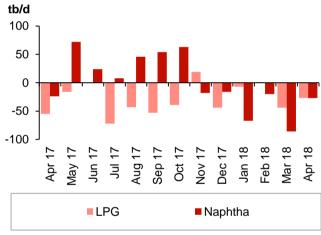
### **OECD Asia Pacific**

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



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

# **Japan**

April 2018 **Japanese oil demand** decreased sharply by 0.2 mb/d, or 5.3% y-o-y, continuing its y-o-y declining trend in 2018.

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

		Change 2018/17				
	<u>Apr 18</u>	<u>Apr 17</u>	tb/d	<u>%</u>		
LPG	396	423	-27	-6.3		
Naphtha	764	791	-27	-3.4		
Gasoline	854	863	-9	-1.1		
Jet/kerosene	367	436	-69	-15.8		
Diesel oil	755	751	4	0.5		
Fuel oil	254	297	-43	-14.4		
Other products	313	349	-36	-10.3		
Total	3,703	3,910	-207	-5.3		

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

Requirements declined in most product categories, with the exception of diesel oil, which grew marginally in line with improving industrial production. Notable decreases were witnessed in transportation and industrial fuels. Requirements for direct use-related petroleum product categories (residual fuel oil and crude) declined further, as a result of substitution with natural gas and coal, amid milder weather conditions.

Heating degree days (HDD) – a quantitative index which reflects heating energy requirements to heat houses and businesses – were lower by 25% y-o-y. Additionally, the start of the Ohi 3 and Genkai 3 nuclear reactors during the month of March has also reduced demand for power generation fuels. Petrochemical feedstocks, LPG and naphtha, dropped y-o-y amid weaker cracking margins.

Similar to recent historical trends, Japanese oil demand growth remains negative on a y-t-d basis. Sluggish oil demand can be attributed to direct and indirect substitution programmes in several industrial sectors, the demographically aging population, and increasing efficiency gains in most economic sectors, especially the transportation sector.

### South Korea

In **South Korea**, the latest available March 2018 data showed declining oil demand, y-o-y, for the first month in 2018.

Demand for most of the petroleum product categories fell, with the exception of LPG, diesel oil for the road transportation sector and jet/kerosene. Rising demand for petrochemical products, primarily naphtha and LPG, and those used in the transportation sector, specifically gasoline and diesel oil, only partially offset the declines in other product categories.

Naphtha demand declined by more than 80 tb/d, for the first time since early 2017 as cracker operators opted for LPG as feedstock. Demand for LPG was higher by 42 tb/d y-o-y. Diesel oil requirements weakened by 9 tb/d y-o-y, in line with the South Korean IHS Markit manufacturing PMI falling into negative territory, at 49.1 in March.

Nevertheless, the outlook for South Korean oil demand during 2018 is projected to be firm, providing support to OECD Asia Pacific overall and moderating the impact of expected weakness of Japanese oil demand performance.

Support is anticipated also from solid **Australian oil demand**, which has shown strong growth in March 2018, y-o-y, as a result of healthy industrial and mining activities.

Overall OECD Asia Pacific oil demand is expected to benefit from healthy petrochemical sectors in the region, as well as positive developments in the industrial sectors of several countries. Some downside risks remain, mostly due to fuel substitution and efficiency gains.

**Asia Pacific oil demand** increased by 44 tb/d y-o-y in 2017. Oil demand in 2018 is projected to increase by a marginal 13 tb/d y-o-y.

# Non-OECD

### China

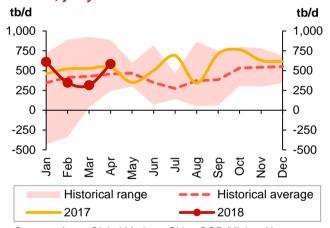
Growth in **Chinese oil demand** in April 2018 accelerated further and increased by 0.58 mb/d, or 5% y-o-y. Oil demand growth was determined by rising jet/kerosene, LPG, and gasoline usage, while fuel oil demand shrunk, thereby capping gains. In line with increasing air traffic statistics, jet/kerosene demand grew by a strong 0.18 mb/d or 7%, y-o-y.

According to the Chinese National Bureau of Statistics, passenger traffic has been rising constantly over the last decade and the month of April was no exception. Passenger traffic rose by more than 15% y-o-y and cargo traffic also posted gains of more than 5% y-o-y.

For LPG, the increase in demand is a result of the strength of the petrochemical industry, as Propane Dehydrogenation (PDH) plants returned from maintenance, along with high propylene margins on the back of strong demand. As such, LPG continued to rise, adding 0.23 mb/d, or more than 14%, y-o-y.

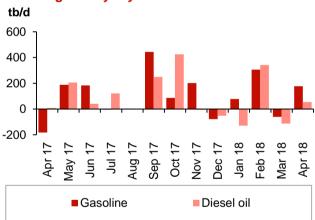
Gasoline demand growth was higher in volume terms. Steady economic momentum caused sales of trucks, buses and passenger cars to increase by around 12% y-o-y during April according to the China Association of Automobile Manufacturer and Haver Analytics. The total number of units sold so far in 2018 is close to 10 million units. In April 2018, sales of passenger cars accounted for more than 2.1 million of the 2.45 million vehicles sold. China's commercial vehicle sales increased by around 13% y-o-y, providing support to automotive diesel demand.

Graph 4 - 7: Changes in Chinese apparent oil demand, y-o-y



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

Graph 4 - 8: Chinese diesel oil and gasoline demand growth y-o-y



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

Going forward, the overall outlook for the remainder of 2018 is balanced. Economic activities are anticipated to be the largest supporter of growth for middle and heavy distillates, where petrochemical margins and expansions in PDH plants, are projected to promote demand for light distillates. The implementation of measures against air pollution in major cities and substitution with other fuels, such as gas, are anticipated to cap oil demand growth going forward.

**Chinese oil demand** is estimated to have grown by 0.52 mb/d y-o-y in 2017, while oil demand in 2018 is projected to increase by 0.42 mb/d.

### Other Asia

#### India

In April, oil consumption in India recorded growth of over 0.2 mb/d, impacted by a high baseline of comparison. Total consumption also remains at near-record levels, hitting 4.95 mb/d with naphtha and diesel oil consumption at, or also near, recordhigh consumption levels. LPG and gasoline grew by 13% and 9% y-o-y respectively. LPG demand picked up compared to last year, registering around 87 tb/d as demand for subsidized LPG continues to support consumption. Gasoline demand continues to show solid momentum, rising by 55 tb/d y-o-y to remain above 0.6 mb/d. This was largely supported by passenger car sales data which shows an increase of around 7.5% from the same month last year, driven by healthy sales of SUVs. Two-wheeler sales recorded double-digit growth, adding around 17% y-o-y, driven by a more than 19% increase y-o-y in sales of motorcycles.

Graph 4 - 9: Indian gasoline demand, y-o-y change tb/d 140 120 100 80 60 40 20 0 -20 Jun 17 Oct 17 **Nov 17** Dec. Jan , Feb, Apr Mar

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

Diesel oil demand also increased to reach 1.79 mb/d, nearly 0.2 mb/d below the historically high levels recorded in November 2017. Diesel oil demand was higher by 50 tb/d, or 3% y-o-y, supported by steady momentum in manufacturing activities as well as a robust rise in commercial vehicle sales, which were up by more than 75% y-o-y, largely as a result of a low baseline impact.

Fuel oil demand declined for the first time in 2018, shedding around 21 tb/d, or 9%, y-o-y. This decline was a result of lower-than-anticipated consumption in the power sectors and came despite increased bunkering activities in the country.

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

			Change 2018/17				
	<u>Apr 18</u>	<u>Apr 17</u>	tb/d	<u>%</u>			
LPG	755	668	87	12.9			
Naphtha	367	346	22	6.2			
Gasoline	648	593	55	9.3			
Jet/kerosene	284	267	16	6.1			
Diesel oil	1,785	1,735	50	2.9			
Fuel oil	225	246	-21	-8.6			
Other products	882	880	2	0.3			
Total	4,947	4,736	211	4.4			

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

#### Indonesia

In **Indonesia**, the latest available March data indicates a small increase of 11 tb/d, or 1% y-o-y. All product categories saw increases with jet/kerosene, diesel oil and naphtha leading growth by more than 5%, 2% and 2% y-o-y, respectively.

# Malaysia

In **Malaysia**, **oil demand** for March came up flat y-o-y, with demand in the majority of petroleum product categories increasing firmly, although this was offset by declining fuel oil requirements.

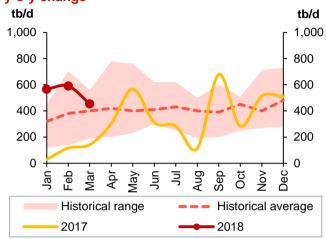
#### **Thailand**

In **Thailand**, the latest available data implies solid oil demand growth in March y-o-y, by around 50 tb/d. Jet/kerosene, LPG and diesel oil grew the most, while fuel oil and the other products categories declined.

The continuous positive oil demand momentum in India, along with various other countries in the region such as Indonesia, Thailand and Philippines, indicates an optimistic projection for Other Asia's consumption going forward. Demand is expected to be supported by the overall economic improvement and the steady general economic performance of the region. However, the impact of various other factors such as the monsoon season, the baseline effect and the current oil price environment are to be closely monitored.

**Other Asia's oil demand** increased by 0.31 mb/d y-o-y in 2017. Oil demand for 2018 is anticipated to increase by 0.42 mb/d y-o-y.

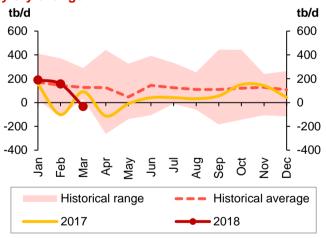
# Graph 4 - 10: Other Asia's oil demand, v-o-y change



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

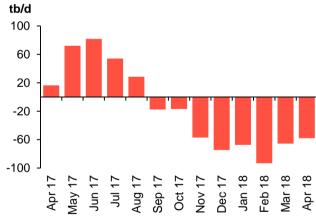
### Latin America

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



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

**Graph 4 - 12: Brazilian gasoline demand,** y-o-y change



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

#### **Brazil**

In **Brazil**, preliminary **oil demand data** suggests a rebound in April, adding 0.11 tb/d, or 4.5%, y-o-y, the highest level of monthly growth so far in 2018. Total consumption was at 2.7 mb/d.

All products recorded positive growth with the exception of gasoline and fuel oil. Gasoline continued to register declines, dropping by 58 tb/d, or 7.6%, y-o-y. Ethanol demand, on the other hand, increased by 63 tb/d, the seventh consecutive monthly increase. This is due to ethanol prices remaining more competitive than gasoline, thereby promoting ethanol usage in lieu of gasoline.

Diesel oil was on an upward trend, following a minor decline in March. Diesel oil demand increased by almost 0.1 mb/d in April, or by a solid 11.4% y-o-y. This is a result of improved manufacturing activities, which recorded an increase of more than 1% y-o-y, the twelfth consecutive month of a y-o-y rise.

Fuel oil fell the most in percentage terms, softening by 15 tb/d, or around 13% y-o-y. This monthly decline is primarily the result of fuel substitution, especially with gas in the power generation sector.

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

		Change 2018/17				
	<u>Apr 18</u>	<u>Apr 17</u>	<u>tb/d</u>	<u>%</u>		
LPG	229	216	12	5.7		
Naphtha	146	144	2	1.4		
Gasoline	708	766	-58	-7.6		
Jet/kerosene	119	108	11	10.1		
Diesel oil	968	869	99	11.4		
Fuel oil	98	113	-15	-13.1		
Other products	401	338	63	18.7		
Total	2,670	2,556	114	4.5		

Note: \* = Inland deliveries.

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

### **Argentina**

**Argentina's oil demand** in March increased slightly y-o-y. Gains were seen in all main product categories however, most of those gains were offset by losses in residual fuel oil requirements.

Y-t-d, oil demand in Argentina showed strong momentum, with 1Q18 data indicating a sold rise of 62 tb/d, or 9%, y-o-y. This performance is mainly driven by solid growth in middle distillates, as both jet/kerosene and diesel oil posted gains of around 11% and 5%, y-o-y, respectively.

### **Ecuador**

The latest **Ecuadorian oil demand** data for April showed the highest y-o-y gains in 2018 so far. The increases are dominated by rising residual fuel oil demand and by strong diesel oil and jet/kerosene demand. Requirements for all other products also posted firm gains y-o-y, with the exception of LPG.

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

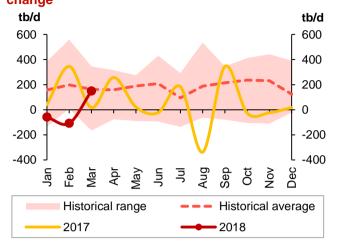
			Change 2018/17				
	<u>Apr 18</u>	<u>Apr 17</u>	tb/d	<u>%</u>			
LPG	31	33	-2	-6.1			
Naphtha	14	12	2	16.7			
Gasoline	68	64	4	6.3			
Jet/kerosene	8	7	1	14.3			
Diesel oil	92	79	13	16.5			
Fuel oil	31	15	16	106.7			
Other products	22	17	5	29.4			
Total	266	227	39	17.2			

Sources: JODI and OPEC Secretariat.

**Latin American oil demand** is estimated to have grown by 0.04 mb/d y-o-y in 2017. Oil demand in 2018 is projected to increase by 0.09 mb/d y-o-y.

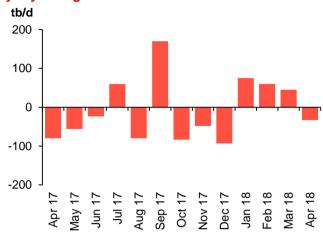
### Middle East

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



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

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



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

### Saudi Arabia

In **Saudi Arabia**, the first four months of 2018 saw a more than 5% y-o-y decline in oil requirements. April was extremely sluggish, with the highest drop ever recorded. Oil requirements weakened by as much as 0.42 mb/d, which translates to more than 17%, y-o-y.

All product categories have shown a decline. Most of the weakness occurred in the heavy part of the barrel including the 'other products' category. Diesel oil continued its downward trend which started in 1Q16 as government infrastructure projects showed signs of slowing down. Cement deliveries dropped by more than 9% y-o-y, an indication of slower construction activities in the country.

Diesel oil requirements dropped by 73 tb/d, or 12%, y-o-y. Total diesel oil demand is now at 0.58 mb/d, substantially lower than the record levels in September 2015 of around 1 mb/d. For the heavy fuels, the main factors behind the drop in crude for direct use as well as fuel oil demand growth are the mild weather conditions, indications of slow requirements from the power sector due to higher electricity tariffs and substitution programmes from fuel oil and direct crude for burning to natural gas.

Transportation fuels in general also declined with gasoline and jet/kerosene both dropping by around 7% y-o-y each. Reduction of subsidies, general slowdown in consumer spending and higher inflation rates are cumulatively having a negative influence on the products' performance.

# Iraq

In **Iraq**, rising oil demand in the first four months of 2018 has been observed with a mixed performance among product categories. This trend was supported further by April oil demand growth data which indicates an increase of around 95 tb/d, or 15% y-o-y, marking the highest gains thus far in 2018.

Most of the main petroleum product categories registered positive growth with the exceptions of naphtha, jet/kerosene and the 'other products' category. Gains were witnessed in fuel oil demand mainly to satisfy the power generation sector, with total fuel oil consumption reaching 0.28 mb/d.

### Other countries in the Middle East

Other countries in the region experienced positive growth, with the **UAE** and **Kuwait** adding around 10 tb/d each, while oil demand in **IR Iran** weakened by around 30 tb/d during the month of April.

**Middle East oil demand** growth is foreseen tilted slightly to the downside in 2018, mainly as a result of geopolitical concerns, substitution programmes towards other fuels as well as subsidy reduction policies. On the other hand, the improvement in the oil price environment should translate into positive overall economic activities, thereby lending some support to oil demand in 2018. Transportation fuels, mainly gasoline and diesel oil, are anticipated to be the products leading oil demand growth.

Middle East oil demand increased by 0.08 mb/d y-o-y in 2017. Oil demand in 2018 is projected to increase by 0.06 mb/d y-o-y.

# **World Oil Supply**

World oil supply in May 2018 increased by 0.27 mb/d m-o-m, to average 97.86 mb/d, representing an increase of 1.74 mb/d y-o-y. Preliminary non-OPEC oil supply in May, including OPEC NGLs, was up by 0.23 mb/d m-o-m and rose by 2.09 mb/d y-o-y to average 65.99 mb/d.

For 2017, non-OPEC supply was revised up slightly by 0.01 mb/d from last month's assessment due to rounding, representing growth of 0.88 mb/d y-o-y.

For 2018, total non-OPEC supply was revised up by 0.13 mb/d, to 59.75 mb/d, representing y-o-y growth of 1.86 mb/d. This came on the back of upward revisions of 80 tb/d in 1Q18 historical production data in the OECD, particularly in the US and Canada, and upward adjustments in 2Q18 in the OECD (+79 tb/d), FSU (+215 tb/d) and China (+81 tb/d) due to higher-than-expected output, mostly in April and also in May by 234 tb/d. Nevertheless, total upward revisions for the month were offset by downward revisions in 1Q18 as well as 2Q18 by -44 tb/d and -136 tb/d, respectively.

OPEC NGLs and non-conventional liquids' production averaged 6.34 mb/d in May, remaining unchanged m-o-m. OPEC NGLs in 2017, based on OPEC Member Countries' production data given through direct communication, were revised down by 0.07 mb/d and now are estimated to grow by 0.09 mb/d to average 6.23 mb/d; for 2018, production is forecast to grow by 0.12 mb/d to average 6.35 mb/d, which indicates a downward revision of 0.06 mb/d.

According to secondary sources, OPEC crude oil production increased by 35 tb/d to average 31.87 mb/d in May 2018.

Table 5 - 1: Non-OPEC supply forecast comparison in 2017-2018\*, mb/d

		Change		Change
Region	<u>2017</u>	<u>2017/16</u>	<u>2018</u>	<u>2018/17</u>
OECD Americas	21.47	0.86	23.23	1.76
OECD Europe	3.83	-0.03	3.88	0.05
OECD Asia Pacific	0.39	-0.03	0.40	0.00
Total OECD	25.69	0.80	27.50	1.81
Other Asia	3.60	-0.11	3.60	-0.01
Latin America	5.14	0.07	5.25	0.11
Middle East	1.24	-0.04	1.23	-0.01
Africa	1.85	0.07	1.89	0.04
Total DCs	11.83	-0.01	11.96	0.13
FSU	14.06	0.20	14.02	-0.04
Other Europe	0.13	-0.01	0.12	0.00
China	3.97	-0.12	3.90	-0.08
Non-OPEC production	55.68	0.86	57.50	1.82
Processing gains	2.21	0.02	2.25	0.04
Non-OPEC supply	57.89	0.88	59.75	1.86

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

# Monthly revisions on non-OPEC supply growth forecast

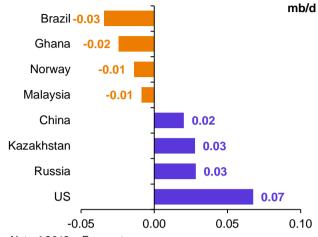
The **non-OPEC oil supply estimate for 2017** in absolute terms in the new monthly assessment was steady at 57.89 mb/d, but due to a minor upward change in 4Q16 that caused a higher base, growth of 0.88 mb/d y-o-y is expected.

The non-OPEC oil supply forecast for 2018 was revised up in absolute terms by 0.13 mb/d to show an average of 59.75 mb/d, mainly in the US, Russia, Kazakhstan and China, which was partially offset by downward revisions in Brazil, Ghana, Norway and Malaysia.

In terms of y-o-y growth for 2018, the US was revised up by 68 tb/d, Russia and Kazakhstan by 28 tb/d each and China by 20 tb/d. Meantime, the production changes forecasts were revised down in Brazil (-34 tb/d), Ghana (-24 tb/d), Norway (-14 tb/d) and Malaysia (-9 tb/d).

As a result, y-o-y growth of non-OPEC supply in 2018 was revised up by 0.13 mb/d to 1.86 mb/d.

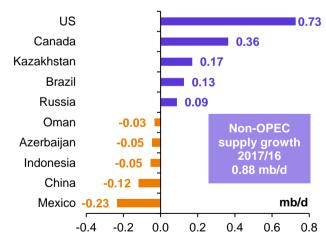
Graph 5 - 1: MOMR Jun 18/May 18 revisions in 2018\* annual supply changes



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

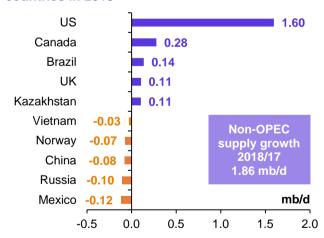
# Main countries for non-OPEC oil supply changes in 2017 and 2018

**Graph 5 - 2: Annual supply changes for selected countries in 2017** 



Source: OPEC Secretariat.

Graph 5 - 3: Annual supply changes for selected countries in 2018\*



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

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

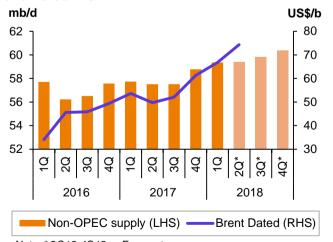
							Change 2	2017/16
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>Growth</u>	<u>%</u>
Americas	20.61	21.10	20.95	21.39	22.42	21.47	0.86	4.17
of which US	13.63	13.81	14.12	14.32	15.18	14.36	0.73	5.33
Europe	3.85	3.98	3.84	3.73	3.77	3.83	-0.03	-0.68
Asia Pacific	0.42	0.38	0.40	0.41	0.38	0.39	-0.03	-7.70
Total OECD	24.89	25.46	25.18	25.53	26.56	25.69	0.80	3.21
Other Asia	3.71	3.65	3.60	3.57	3.60	3.60	-0.11	-2.91
Latin America	5.07	5.13	5.14	5.13	5.15	5.14	0.07	1.30
Middle East	1.28	1.24	1.24	1.25	1.22	1.24	-0.04	-3.21
Africa	1.78	1.82	1.85	1.86	1.88	1.85	0.07	3.91
Total DCs	11.84	11.84	11.82	11.81	11.85	11.83	-0.01	-0.11
FSU	13.86	14.13	14.14	13.90	14.07	14.06	0.20	1.44
of which Russia	11.08	11.25	11.24	11.06	11.14	11.17	0.09	0.79
Other Europe	0.13	0.13	0.13	0.13	0.12	0.13	-0.01	-3.87
China	4.09	3.96	4.03	3.95	3.96	3.97	-0.12	-2.85
Total "Other regions"	18.08	18.22	18.30	17.97	18.15	18.16	0.08	0.43
Total non-OPEC								
production	54.81	55.52	55.31	55.31	56.57	55.68	0.86	1.58
Processing gains	2.19	2.21	2.21	2.21	2.21	2.21	0.02	0.77
Total non-OPEC supply	57.01	57.73	57.52	57.52	58.78	57.89	0.88	1.55
Previous estimate	57.02	57.74	57.52	57.51	58.79	57.89	0.87	1.53
Revision	-0.01	-0.01	0.00	0.01	-0.01	0.00	0.01	0.01

Source: OPEC Secretariat.

# Non-OPEC oil supply highlights in 2018

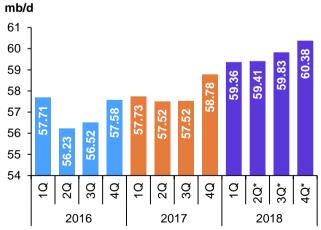
**Preliminary non-OPEC oil supply in May 2018** saw growth of 0.23 mb/d m-o-m to average 59.65 mb/d, which was higher by 2.07 mb/d y-o-y. Oil production in May 2018 increased in OECD Americas, Other Asia, Latin America and FSU m-o-m, remained steady in Africa and the Middle East, and declined in Europe, Asia Pacific and China.

**Graph 5 - 4: Non-OPEC quarterly liquids supply and Dated Brent** 



Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat.

Graph 5 - 5: Non-OPEC quarterly oil supply in 2016-2018



Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat. Global oil prices have increased owing to stock draws in the US, strong OPEC and participating non-OPEC conformity with voluntary production adjustments in the Declaration of Cooperation (DoC), concerns about potential escalating trade restrictions between the US and the rest of the world and geopolitical factors in the Middle East.

Non-OPEC capital expenditures (including exploration) in the oil sector in 2017, following a decline of 29% y-o-y in 2015 and 28% y-o-y in 2016, recovered by adding 6% y-o-y and is now expected to increase by \$14 billion y-o-y (5%), reaching ~\$290 billion in 2018. According to the latest Rystad Energy analysis in May 2018, \$57 billion in new projects were sanctioned y-t-d, and an additional \$71 billion are forecast by year-end.

Investments in North American tight oil, mainly in the US, following a rebound by \$38 billion (68%) in 2017, are forecast to grow by \$16 billion, or 17% y-o-y, to reach an estimated \$110 billion.

Table 5 - 3: Non-OPEC oil supply in 2018\*, mb/d

							Change 20	18/17
	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	<u>Growth</u>	<u>%</u>
Americas	21.47	22.82	22.92	23.47	23.68	23.23	1.76	8.19
of which US	14.36	15.52	15.96	16.11	16.23	15.96	1.60	11.11
Europe	3.83	3.91	3.79	3.80	4.01	3.88	0.05	1.34
Asia Pacific	0.39	0.40	0.40	0.40	0.39	0.40	0.00	0.88
Total OECD	25.69	27.13	27.12	27.67	28.08	27.50	1.81	7.06
Other Asia	3.60	3.62	3.57	3.60	3.60	3.60	-0.01	-0.20
Latin America	5.14	5.11	5.15	5.32	5.41	5.25	0.11	2.16
Middle East	1.24	1.21	1.25	1.23	1.22	1.23	-0.01	-0.70
Africa	1.85	1.86	1.88	1.91	1.91	1.89	0.04	2.02
Total DCs	11.83	11.80	11.85	12.06	12.14	11.96	0.13	1.12
FSU	14.06	14.13	14.12	13.89	13.94	14.02	-0.04	-0.29
of which Russia	11.17	11.16	11.16	10.98	10.98	11.07	-0.10	-0.93
Other Europe	0.13	0.12	0.12	0.12	0.12	0.12	0.00	-2.76
China	3.97	3.94	3.95	3.84	3.85	3.90	-0.08	-1.97
Total "Other regions"	18.16	18.19	18.20	17.85	17.91	18.04	-0.12	-0.68
Total non-OPEC								
production	55.68	57.12	57.16	57.58	58.13	57.50	1.82	3.27
Processing gains	2.21	2.25	2.25	2.25	2.25	2.25	0.04	1.67
Total non-OPEC supply	57.89	59.36	59.41	59.83	60.38	59.75	1.86	3.21
Previous estimate	57.89	59.33	59.19	59.70	60.25	59.62	1.72	2.98
Revision	0.00	0.04	0.23	0.13	0.13	0.13	0.13	0.23

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

# Non-OPEC oil supply in 2017 and 2018

# **OECD**

### **OECD Americas**

### US

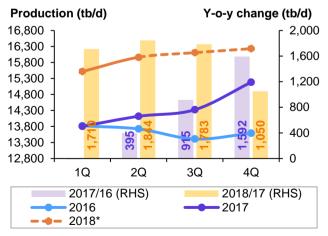
As per the latest available monthly data, **US crude oil production** in March 2018 continued to increase, rising by 215 tb/d m-o-m, to average 10.47 mb/d, up by 1.33 mb/d y-o-y. Crude oil production in the main states of Texas, New Mexico, Colorado, Oklahoma, Utah and Wyoming increased in March m-o-m, while oil output in North Dakota and Alaska showed minor declines. In the meantime, oil output from the Gulf of Mexico (GoM) declined by 19 tb/d m-o-m to average 1.70 mb/d. In March, the share of growth from Texas was 159 tb/d, with total crude output for the state already reaching 4.17 mb/d.

Preliminary crude oil production in April and May based on the weekly data provided by *the US Department of Energy (DOE)* shows further incremental production by 108 tb/d and 158 tb/d to average 10.58 mb/d and 10.74 mb/d, respectively.

With regard to NGL production, output in March increased by 150 tb/d m-o-m to average 4.17 mb/d, up by 529 tb/d y-o-y.

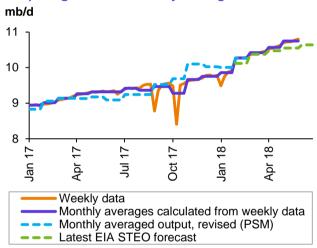
As a result, following the upward revision in US liquids supply in 1Q18 by 27 tb/d compared to last month's assessment and indications of higher-than-expected increases in production both of both crude oil and NGLs in the coming months, US liquids supply for 2018 was revised up by 0.07 mb/d, representing y-o-y growth of 1.60 mb/d, to average 15.96 mb/d. US peak liquids supply is forecast to reach an average of 16.23 mb/d in 4Q18.

Graph 5 - 7: US quarterly liquids supply, 2016-2018\*



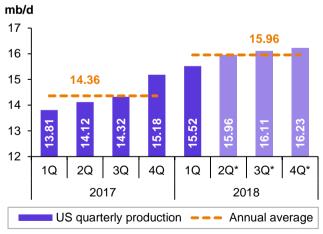
Note: \*2018 = Forecast. Source: OPEC Secretariat.

Graph 5 - 6: US weekly crude oil production, comparing with the monthly average



Sources: EIA and OPEC Secretariat.

Graph 5 - 8: US total quarterly liquids supply



Note: \* 2Q18-4Q18 = Forecast. Sources: EIA and OPEC Secretariat.

Following yearly growth of 0.50 mb/d in US crude oil output in 2017, robust growth of more than double that amount, at 1.16 mb/d y-o-y, for an average of 10.51 mb/d, is anticipated in 2018.

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

			Change		Change		Change
	<u>2016</u>	<u>2017</u>	<u>2017/16</u>	<u>2018</u> *	<u>2018/17</u>	<u>2018</u> *	<u>2018/17</u>
Tight crude	4.24	4.70	0.47	5.81	1.12		
Gulf of Mexico crude	1.60	1.68	0.08	1.76	0.08	Crude	Crude
Conventional crude oil	3.02	2.97	-0.05	2.94	-0.04	10.51	1.16
Unconventional NGLs	2.58	2.74	0.16	3.10	0.36	NGLs	NGLs
Conventional NGLs	0.93	0.99	0.07	1.06	0.06	4.16	0.42
					-	Biofuels	Biofuels
Biofuels + Other liquids	1.27	1.27	0.00	1.29	0.02	1.29	0.02
US total supply	13.63	14.36	0.73	15.96	1.60		

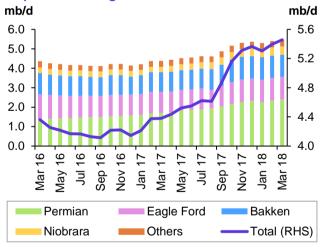
Note: \* 2018 = Forecast.

Sources: EIA, Rystad Energy and OPEC Secretariat.

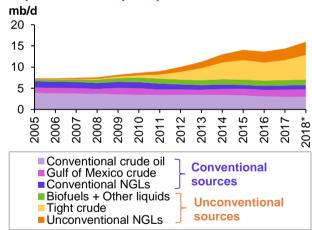
US tight crude output in March 2018 is estimated to have grown by 0.06 mb/d m-o-m to average 5.46 mb/d, according to the EIA's tight oil production estimates. The preliminary estimate for April 2018 showed an increase of 0.10 mb/d m-o-m. Tight crude output from shale and tight formations in the Permian Basin was up by 0.05 mb/d in February m-o-m to average 2.39 mb/d, while output from the Bakken shale play in North Dakota, as well as the Niobrara and Eagle Ford shale formations each increased m-o-m by 0.01 mb/d to average 1.14 mb/d, 0.43 mb/d and 1.17 mb/d, respectively. The latest preliminary results indicate that North Dakota oil production in April bounced back strongly in comparison to a month earlier as key operators boosted their output. In fact, it is likely that production in April will have surpassed the peak achieved in November 2017. After reaching a two-year peak in November 2017, crude production experienced a gradual drop over four consecutive months due to winter effects and an accelerated base decline. Tight crude production in other US shale plays was steady at 0.33 mb/d. In 1Q18, tight crude production is estimated to have grown by 1.07 mb/d compared with the same quarter a year ago.

Graph 5 - 9: US tight crude breakdown

Souces: EIA and OPEC Secretariat.



Graph 5 - 10: US liquids production breakdown



Note: \*2018 = Forecast.

Sources: EIA, Rystad Energy and OPEC Secretariat.

In 2017, US tight crude production is estimated to have increased by 0.47 mb/d to average 4.70 mb/d, with unconventional sources from shale (tight crude + unconventional NGLs) making up 85% of total US supply growth.

For 2018, US tight crude is forecast to grow by 1.11 mb/d y-o-y to average 5.81 mb/d. The growth from unconventional NGLs and tight oil combined holds a share of 93% of total supply. It is worth pointing out that tight crude production from the Bakken shale play in North Dakota in 1Q18 increased by 0.14 mb/d compared to the same quarter a year ago. In Niobrara, oil output was up by 0.15 mb/d in the same period, while the Eagle Ford play and Permian Basin saw increases of 0.08 mb/d and 0.69 mb/d, respectively. Total growth in other shale plays during 1Q18 vs 1Q17 is estimated at only 0.03 mb/d.

Table 5 - 5: US tight oil production growth in 2017 and 2018

Shale play	<u>2017</u>		<u>2018</u>	*
tb/d	Production	Y-o-y change	Production	Y-o-y change
Permian tight	1.92	0.46	2.69	0.78
Bakken shale	1.06	0.04	1.18	0.12
Eagle Ford shale	1.08	-0.09	1.17	0.09
Niobrara shale	0.33	0.04	0.39	0.06
Other tight plays	0.31	0.02	0.39	0.08
Total	4.70	0.47	5.81	1.12

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

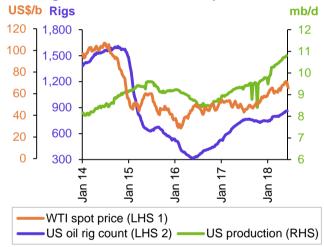
# **US** oil rig count

The total US rig (oil and gas) count increased by 3 units w-o-w to 1,060 rigs in the week ended 1 June, which is the highest number of units since April 2015.

The US oil rig count increased by 2 units w-o-w to reach 861 rigs, while the gas rig count was down by 1 unit to reach 197 rigs. The corresponding y-o-y increase was 128 units, or 17%. Horizontal rigs (active in oil and gas fields) moved up by 3 units w-o-w to reach 929 rigs.

The oil rig counts in the Permian and Williston Basins were down w-o-w by 1 rig each to 476 and 56 rigs, respectively, while the count was up in the DJ-Niobrara and Eagle Ford Basins by 1 unit to 26 rigs and 2 units to 69 rigs, respectively.

Graph 5 - 11: The comparison between WTI price, US oil rig count and US crude oil production



Sources: Baker Hughes, EIA and OPEC Secretariat.

Table 5 - 6: US rotary rig count on 1 June 2018

						Change	
		<u>1 Jun 18</u>	Month ago	Year ago	<u>M-o-m</u>	<u>Y-o-y</u>	<u>Y-o-y, %</u>
Oil and gas split	Oil	861	834	733	27	128	17%
	Gas	197	196	182	1	15	8%
Location	Onshore	1,041	1,013	893	28	148	17%
	Offshore	19	19	23	0	-4	-17%
Basin	Williston	56	57	46	-1	10	22%
	Eagle Ford	69	67	78	2	-9	-12%
	Permian	476	458	364	18	112	31%
Drilling trajectory	Directional	65	64	68	1	-3	-4%
	Horizontal	929	913	771	16	158	20%
	Vertical	66	55	77	11	-11	-14%
US total rig count		1,060	1,032	916	28	144	16%

Sources: Baker Hughes and OPEC Secretariat.

### Canada

Oil sands production from **Alberta** achieved record levels in December 2017, reaching nearly 2.75 mb/d of raw bitumen and synthetic crude oil (SCO), although Canadian total oil sands output in December 2017 reached 2.98 mb/d. Provincial well data and company maintenance schedules suggest stable near-term output of around 2.6 mb/d, although production increases could come as early as June 2018 with the completion of spring maintenance.

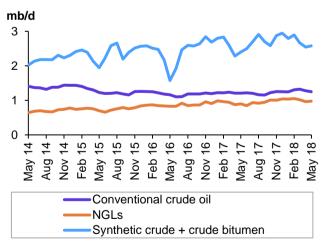
According to preliminary data, **Canadian oil supply** showed a drop of 0.24 mb/d in March compared with the actual output in February, to average 5.04 mb/d, but was up by 0.23 mb/d y-o-y. The main reason for this decrease in March was due to the big drop of 0.23 mb/d in overall oil sands production to average 2.7 mb/d. While production of synthetic crude following heavy maintenance declined at the Scotford upgrader, the Suncor plant and Mildred Lake, oil output from major producers at in-situ projects also dropped by ~100 tb/d m-o-m. Mining output, on the other hand, will show more variation, considering the amount of scheduled maintenance for 2018. In the very near term, it is believed that mined SCO and bitumen volumes will stabilize at around 1.2 mb/d. Although the Suncor-operated Fort Hills project is slated to ramp up throughout 2018, production additions will be partially offset by planned spring maintenance at Syncrude, Suncor's U1 Upgrader and the CNRL-operated Athabasca Oil Sands Project (AOSP).

Synthetic oil production is likely to decline more in the coming months as maintenance is extended for a longer period. However, oil sands production in March was still higher by 0.07 mb/d compared to March 2017. Total oil sands production could surpass peak December levels as early as July, with further increases on the back of the Fort Hills and post-maintenance ramp-ups. Nevertheless, autumn maintenance at Horizon, Suncor's U2 Upgrader and AOSP will likely temper these increases, at least for September and October.

The monthly declines were followed by decreases in NGL output by 35 tb/d m-o-m, easing to 1.02 mb/d, as well as a minor decrease in offshore production, although conventional crude oil output rose by 18 tb/d to average 1.32 mb/d in March. Usually, as per historical seasonal pattern, Canada's production decreases in 2Q and recovers at the beginning of 3Q.

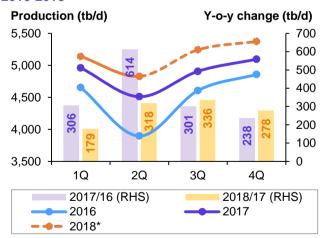
In 2017, some 55%, or 2.71 mb/d, of total oil production in Canada came from oil sands, 25% from conventional sources and around 20% from NGLs. Canada's 2018 production forecast, following robust growth of 0.36 mb/d in 2017, shows y-o-y growth of 0.28 mb/d to average 5.15 mb/d in 2018.

Graph 5 - 12: Canada production by product type



Source: OPEC Secretariat.

Graph 5 - 13: Canada quarterly liquids supply, 2016-2018



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

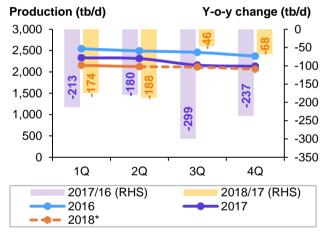
### **Mexico**

**Mexico's liquids supply** in April shows a minor increase by 0.01 mb/d m-o-m to average 2.13 mb/d, down by 0.18 mb/d y-o-y. While crude oil output remained unchanged in April at 1.87 mb/d m-o-m, production of NGLs grew by a minor 0.01 mb/d to average 0.26 mb/d. Production of light crude oil is in increasing decline y-o-y where output fell by double in 2016 y-o-y compared to the decline in 2015 at 0.05 mb/d, dropping to 0.78 mb/d. However, it declined at a slower pace, by 0.06 mb/d, in 2017 to average 0.72 mb/d. According to Pemex crude data, the average for the first four months of 2018, light crude output was down to less than 0.6 mb/d, while heavy grade crude was more or less steady at 1.08 mb/d in the same period. Hence, Pemex plans to stop exports of light crude (Isthmus), while, in parallel, they plan to increase exports of heavy crude, mainly to the US.

The m-o-m decline in Mexico's crude oil output was mainly due to the declines seen at three main fields: the KMZ complex, the Cantarel field as well as the Chuc field, all of which are located offshore. The average crude oil output in 1Q18 from these three main sources dropped by 0.06 mb/d, y-t-d to average 1.13 mb/d, while declines in other fields were estimated at around 0.08 mb/d in the same period.

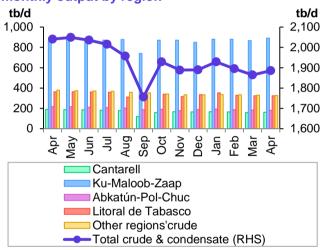
Mexico's liquids supply for 2018, following a downward revision of 10 tb/d in 2Q18 and an upward revision by 9 tb/d in 1Q18, remains unchanged with a contraction of 0.12 mb/d, which is less than the decline seen a year earlier, to average 2.11 mb/d.

Graph 5 - 14: Mexico's quarterly liquids supply, 2016-2018



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

# Graph 5 - 15: Mexico crude and condensate monthly output by region



Sources: Pemex and OPEC Secretariat.

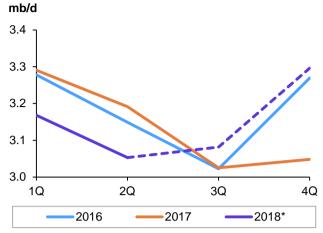
# **OECD Europe**

Total liquids production of the three main producers in the **North Sea** – Norway, the UK and Denmark – was up by 0.04 mb/d in April m-o-m to average 3.10 mb/d, but it showed a decline of 0.2 mb/d y-o-y. On a quarterly basis, North Sea oil production declined by 0.12 mb/d y-o-y, or 3.6%, in 1Q18 to average 3.17 mb/d.

Most of the decline stemmed from Norway, which saw production fall by 0.11 mb/d compared with a year earlier to 1.96 mb/d. Production in Denmark was also down by 0.02 mb/d in 1Q18 y-o-y with output falling to its lowest level since 1990 at 0.12 mb/d.

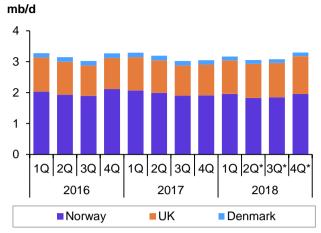
On the contrary, UK oil production increased in 1Q18 by 0.02 mb/d y-o-y to average 1.09 mb/d, and now in April, it also increased by 0.08 mb/d m-o-m to average 1.12 mb/d.

Graph 5 - 16: North Sea quarterly liquids supply, 2016-2018



Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat.

Graph 5 - 17: Norway, UK and Denmark quarterly liquids supply, 2016-2018



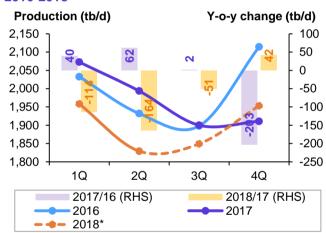
Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat.

# **Norway**

According to the *Norwegian Petroleum Directorate's (NPD)* monthly production report, preliminary **Norwegian production** figures for April 2018 show an average production of 1.87 mb/d of crude, NGLs and condensates, indicating a decrease of 34 tb/d compared to the previous month.

Production of crude oil, at 1.51 mb/d, was down by 7 tb/d m-o-m and was lower by 0.19 mb/d (-11.4%), y-o-y. At the same time, NGLs and condensate output also decreased, dropping by 26 tb/d to average 0.36 mb/d. According to the NPD, liquids production was approximately 4.5% lower than its projection for the month and now stands about 3% below the forecast for this year. April production was below forecast, mainly due to minor technical problems at some fields as well as maintenance work.

Graph 5 - 18: Norway's quarterly liquids supply, 2016-2018



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

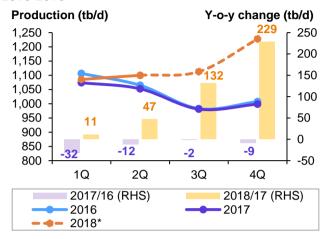
The oil production forecast for 2018 was revised down by 14 tb/d due to a downward revision of 56 tb/d in 2Q18. Hence, production is expected to drop by 0.07 mb/d y-o-y to average 1.90 mb/d.

#### UK

Oil production in the UK in April 2018 was up by 0.08 mb/d m-o-m to average 1.12 mb/d, also higher by 0.08 mb/d y-o-y. The main reason for this growth was actually due to the rebound of lost production during maintenance in the Kraken project and outages elsewhere in March. In 2017, the deepest drop owing to maintenance was registered in August when oil output declined to the lowest level, at 0.92 mb/d, following production shutdowns in the Buzzard and other small fields. However, UK oil production in 3Q18 is expected to be stagnant q-o-q due to the new projects' ramp-ups. Oil output is on track this year where production ramp-ups of the six new projects that started in 2017 combine with other new projects that are planned to start up in 2018, namely Clair Ridge with a peak capacity of 100 tb/d, Harrier with 30 tboe/d, the Erskine field for condensate production and Mariner with a peak capacity of 55 tb/d.

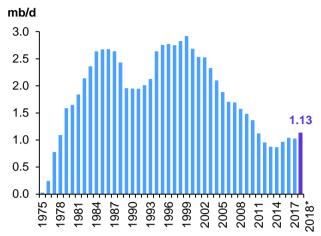
Following a minor y-o-y decline of 0.01 mb/d in 2017, the UK oil supply forecast for 2018 was revised up by 0.02 mb/d, and is now expected to grow by 0.11 mb/d y-o-y to average 1.13 mb/d. However, scheduled heavy maintenance from June onwards is likely to impact this outlook if the new project start-ups get delayed.

Graph 5 - 19: UK quarterly liquids supply, 2016-2018



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

Graph 5 - 20: UK annual supply



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

# **Developing Countries**

The **total oil supply of developing countries (DCs)** is estimated to reach an average of 11.83 mb/d in 2017, representing a decline of 0.01 mb/d y-o-y. This was due to production declines in Other Asia and the Middle East by 0.11 mb/d and 0.04 mb/d, respectively, while oil supply increased y-o-y by 0.07 mb/d in Latin America, followed by 0.07 mb/d in Africa.

However, remarkable y-o-y growth of 0.13 mb/d for 2018 is anticipated. Oil supply in DCs during the current year is forecast to reach an average of 11.96 mb/d, mainly coming from Latin America, which is expected to average 5.25 mb/d, representing growth of 0.11 m/d y-o-y, and followed by Africa with yearly growth projected at 0.04 mb/d. However, oil production is expected to decline in Other Asia by a minor 0.01 mb/d to reach 3.60 mb/d and also in the Middle East by 0.01 mb/d to average 1.23 mb/d.

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

	1Q	2Q	3Q	4Q	Yearly	Change Y-o-y
2016	11.76	11.73	11.91	11.97	11.84	-0.19
2017	11.84	11.82	11.81	11.85	11.83	-0.01
2018*	11.80	11.85	12.06	12.14	11.96	0.13

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

### **Latin America**

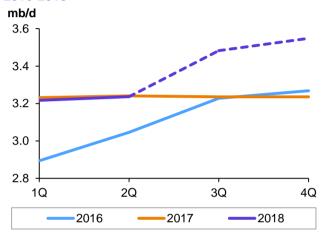
#### **Brazil**

**Brazil's April liquids production** was up by 0.03 mb/d m-o-m to average 3.22 mb/d, and was also higher y-o-y by 0.07 mb/d. Crude oil output rose m-o-m by 22 tb/d to average 2.58 mb/d, mainly due to increasing production at the Lula field in the Santos Basin through P-66 FPSO. Brazil's crude oil output in 1Q18, despite strong production at Lula, declined by 42 tb/d, mainly due to heavy declines in post-salt production and, to some extent, maintenance on the platforms as well as delays in relation to new projects. Incremental output in 1Q18 has been offset by a quarterly decline of around 40 tb/d in the Campos Basin.

In late April, the P-74 FPSO with a capacity of 150 tb/d started producing on the Buzios field offshore Brazil, marking the beginning of an ambitious plan to take oil production from the current 2.62 mb/d to 3.53 mb/d by 2022 with an additional 17 units. The top ten planned and announced pre-salt projects in Brazil will spend over \$220 billion throughout their lifetime in capital and operating expenditures. These projects are Buzios I to Buzios V, Sepia, Libra Central, Lula Oeste, Carcara and Mero (Libra Noroeste), which together will contribute incremental capacity of 1.8 mb/d to global oil supply by 2025. At the beginning of May, first oil was produced from the Atlanta field offshore Brazil. It is located in block BS-4 of the Santos Basin. Atlanta is a post-salt oil field situated 185 km from Rio de Janeiro in water depths of approximately 1,500 m (4,921 ft). Production is now from one well, but it is still in the stabilization phase. Production is expected to reach 20 tb/d of oil later in 2Q from two wells. The oil is being produced to the FPSO Petrojarl I. By adding the third well, production from Atlanta could increase by 10 tb/d for a total of 30 tb/d.

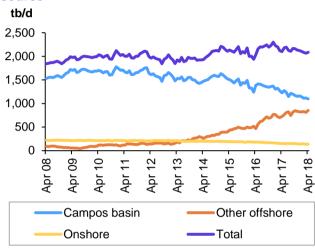
Oil production from pre-salt will continue to break records and account for 70% of the overall Brazilian output in 2022, about 21 percentage points above the current share.

Graph 5 - 21: Brazil's quarterly liquids supply, 2016-2018



Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat.

Graph 5 - 22: Brazil's crude oil production by source

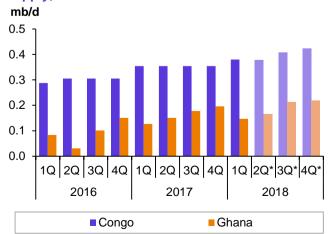


Sources: Petrobras and OPEC Secretariat.

### **Africa**

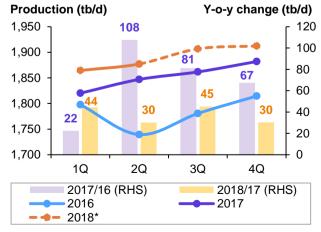
In 2017, **Africa's oil production** grew by 0.07 mb/d y-o-y to average 1.85 mb/d, mainly due to incremental production in Congo and Ghana, while production in the Sudans, Egypt and Africa others declined. Oil production in Chad and South Africa remained stagnant.

Graph 5 - 23: Congo and Ghana quarterly liquids supply, 2016-2018



Note: \*2Q18-4Q18 = Forecast. Source: OPEC Secretariat.

Graph 5 - 24: African quarterly liquids supply, 2016-2018



Note: \*2018 = Forecast. Source: OPEC Secretariat. For 2018, as a result of a continuation of production ramp-ups in Ghana and Congo, Africa's oil supply is expected to increase by 0.04 mb/d y-o-y to average 1.89 mb/d. While Ghana and Congo are expected to grow by 0.02 mb/d and 0.04 mb/d to average 0.19 mb/d and 0.40 mb/d, respectively, oil production is likely to drop mainly in Africa others by 0.03 mb/d y-o-y.

### **FSU**

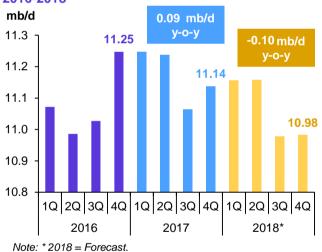
The **FSU's oil supply** is estimated to have grown by 0.20 mb/d y-o-y in 2017 to average 14.06 mb/d. Russia's production in 2017 is forecast to have grown by 0.09 mb/d y-o-y to average 11.17 mb/d, while Kazakhstan is estimated to have seen yearly growth of 0.17 mb/d to average 1.73 mb/d through the ramp-up at the Kashagan field. Oil production in Azerbaijan and FSU others in 2017 declined y-o-y by 0.05 mb/d and 0.01 mb/d, respectively.

For 2018, the FSU's oil supply is expected to decline by 0.04 mb/d to average 14.02 mb/d, assuming Russian production remains limited to the required level of 10.98 mb/d in accordance with the DoC's voluntary production adjustment level. Therefore, Russia's oil production (crude and NGLs) is forecast to see a contraction of 0.10 mb/d, representing average supply of 11.07 mb/d. Other countries in the region will also decline, except Kazakhstan, which is expected to grow by 0.11 mb/d due to the continuation of the Kashagan's production ramp-up.

#### Russia

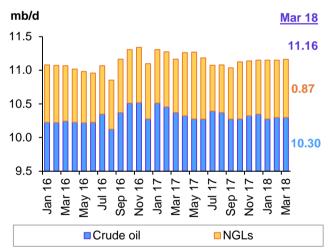
Preliminary **Russian liquids output** in May averaged 11.16 mb/d, unchanged over April and March, but lower by 0.11 mb/d from a year ago, according to *the Ministry of Energy*.

Graph 5 - 25: Russia liquids supply quarterly, 2016-2018



Source: OPEC Secretariat.

**Graph 5 - 26: Russia's liquids supply monthly** 



Sources: Ministry of Energy and OPEC Secretariat.

Russian liquids output in 1Q18 was marginally higher by 0.02 mb/d at 11.16 mb/d compared to 4Q17, and oil supply in 2Q18 is expected to remain unchanged over 1Q18 at 11.16 mb/d.

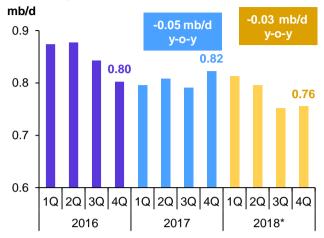
For 2018, a production level of 10.98 mb/d, in line with the DoC, is forecast, showing a y-o-y decline of 0.10 mb/d for an average of 11.07 mb/d. Given the production levels in recent months, the supply data in 1Q18 has been revised up by 0.18 mb/d over the forecast number of 10.98 mb/d to average 11.16 mb/d and is expected to continue at the same level in April and May.

# **Azerbaijan**

In April, **Azerbaijan's crude oil production** decreased by 8 tb/d m-o-m to average 0.72 mb/d. Azeri liquids supply, including NGL output of 0.08 mb/d, reached 0.80 mb/d, which is 0.01 mb/d lower m-o-m and 0.02 mb/d lower y-o-y.

Liquids supply for 2018, following a contraction of 0.05 mb/d in 2017, is forecast to see a further decline of 30 tb/d to average 0.78 mb/d. Oil production in Azerbaijan is in decline, which may be partially compensated for by the ramp-up of condensate production at the offshore Shah-Deniz field. More than half a mb of oil production in Azerbaijan are being produced from the ACG complex in the Caspian Sea.

Graph 5 - 27: Azerbaijan liquids supply quarterly 2016-2017, and forecast for 2018



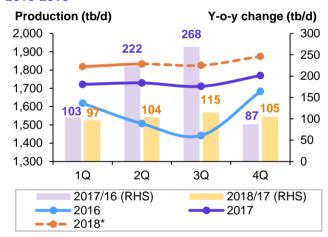
Note: \*2018 = Forecast. Source: OPEC Secretariat.

### Kazakhstan

Kazakhstan's preliminary liquids production in April 2018 is estimated to have remained unchanged m-o-m at 1.83 mb/d, but was higher y-o-y by 0.09 mb/d. Crude oil production remained at 1.56 mb/d and NGLs output at 0.27 mb/d. Kashagan output averaged 0.25 mb/d in March and April. However, according to the final June CPC schedule released, the Kashagan export share is projected at 312 tb/d, produced by the NCOC consortium's developer of the offshore Kashagan project.

Preliminary 1Q18 liquids supply indicated an increase of 0.05 mb/d q-o-q to average 1.82 mb/d. As a result, Kazakhstan's liquids supply in 2018 was revised up by 0.03 mb/d and is now forecast to grow by 0.11 mb/d in the current year to average 1.84 mb/d.

Graph 5 - 28: Kazakhstan quarterly liquids supply, 2016-2018



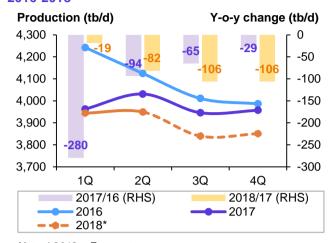
Note: \*2018 = Forecast. Source: OPEC Secretariat.

### China

China's oil supply in April was up slightly by 0.01 mb/d m-o-m to average 3.96 mb/d, higher than the average in 1Q18 by 0.02 mb/d, but lower by 0.07 mb/d y-o-y. According to data released by the Chinese National Bureau of Statistics, crude oil output increased in April by 16 tb/d m-o-m to average 3.77 mb/d, down by 0.12 mb/d y-o-y. The biggest decline was seen in Daqing, the largest oil field in China. According to the production statistics, the output from this field has declined by around 5% p.a. since 2016. In offshore, oil production in the last four months of 2018 was lower in the biggest province for offshore production – the Guangdong – compared to a year ago.

For 2018, Chinese oil supply is now forecast to see a contraction of 0.08 mb/d y-o-y to average 3.90 mb/d, revised up by 0.02 mb/d compared to the last assessment.

Graph 5 - 29: China quarterly liquids supply, 2016-2018



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

E&P investment in China reached more than \$54 billion in 2013. However, due to the subsequent collapse in oil prices, investment gradually declined and reached a floor in 2017 of at \$30 billion, down by about \$24 billion. Now, after the recession, China is expected to increase investment by around \$4 billion in 2018 and \$5 billion in 2019 y-o-y, to reach a total of \$34 billion and \$39 billion, respectively.

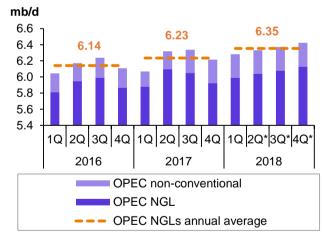
# **OPEC NGLs and non-conventional oils**

**OPEC NGLs and non-conventional liquids output** in **May 2018** averaged 6.33 mb/d, up by 0.01 mb/d m-o-m.

OPEC NGLs in **2017**, based on MCs' production data given through direct communication, were revised down by 0.08 mb/d and now are estimated to grow by 0.09 mb/d to average 6.23 mb/d.

For **2018**, production is forecast to grow by 0.12 mb/d to average 6.35 mb/d, indicating a downward revision of 0.06 mb/d.

Graph 5 - 30: China liquids supply quarterly, 2016-2018



Note: \*2Q18-4Q18 = Forecast. Sources: OPEC Secretariat.

Table 5 - 8: OPEC NGLs + non-conventional oils, 2015-2018\*, mb/d

			Change						Change		Change
	<u>2015</u>	<u>2016</u>	<u>16/15</u>	<u>1Q17</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>17/16</u>	<u>2018</u>	<u>18/17</u>
Total OPEC	6.04	6.14	0.10	6.07	6.32	6.34	6.21	6.23	0.09	6.35	0.12

Note: 2018 = Forecast. Source: OPEC Secretariat.

# **OPEC crude oil production**

According to secondary sources, **total OPEC-14 crude oil production** averaged 31.87 mb/d in May, an increase of 35 tb/d from the previous month. Higher production in Saudi Arabia, Algeria and Iraq was partially offset by decreased crude oil production, mainly in Nigeria, Venezuela and Libya.

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

	<u>2016</u>	<u>2017</u>	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18</u>	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	<u>May/Apr</u>
Algeria	1,090	1,043	1,055	1,014	1,014	979	992	1,031	39.0
Angola	1,725	1,637	1,641	1,628	1,562	1,523	1,511	1,525	14.0
Ecuador	545	530	536	525	515	517	518	519	0.6
Equatorial									
Guinea	160	133	127	129	134	134	127	130	3.0
Gabon	221	200	199	199	195	193	187	189	1.8
Iran, I.R.	3,515	3,811	3,833	3,822	3,813	3,813	3,823	3,829	5.6
Iraq	4,392	4,446	4,478	4,401	4,437	4,430	4,427	4,455	27.7
Kuwait	2,853	2,708	2,707	2,704	2,704	2,704	2,707	2,701	-5.7
Libya	390	817	932	967	986	972	979	955	-24.3
Nigeria	1,556	1,658	1,763	1,760	1,780	1,773	1,764	1,711	-53.5
Qatar	656	607	603	604	593	597	594	585	-9.5
Saudi Arabia	10,406	9,954	9,994	9,975	9,950	9,912	9,901	9,987	85.5
UAE	2,979	2,915	2,922	2,892	2,850	2,866	2,871	2,865	-6.3
Venezuela	2,154	1,911	1,920	1,762	1,538	1,474	1,434	1,392	-42.5
Total OPEC	32,643	32,372	32,711	32,383	32,071	31,887	31,834	31,869	35.4

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

Source: OPEC Secretariat.

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

	<u>2016</u>	<u>2017</u>	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18</u>	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May/Apr
Algeria	1,146	1,059	1,065	1,012	1,004	966	979	1,040	61.0
Angola	1,722	1,632	1,669	1,588	1,519	1,496	1,498	1,486	-12.0
Ecuador	549	531	535	522	512	511	517	516	-1.0
Equatorial									
Guinea		129	124	126	127	125	122	126	3.6
Gabon		210	206	202					
Iran, I.R.	3,651	3,867	3,865	3,833	3,811	3,806	3,804	3,806	2.0
Iraq	4,648	4,469	4,380	4,361	4,360	4,360	4,360	4,360	0.0
Kuwait	2,954	2,704	2,700	2,702	2,702	2,700	2,705	2,700	-5.0
Libya									
Nigeria	1,427	1,536	1,637	1,613	1,611	1,560	1,630	1,516	-114.5
Qatar	652	600	589	608	594	616	578	601	22.8
Saudi Arabia	10,460	9,959	9,978	9,977	9,942	9,907	9,868	10,030	161.4
UAE	3,088	2,967	2,969	2,904	2,841	2,872	2,869	2,870	1.0
Venezuela	2,373	2,035	2,016	1,741	1,623	1,509	1,505	1,533	28.0
Total OPEC				••		••			

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

.. Not available.

Source: OPEC Secretariat.

# World oil supply

Preliminary data for May 2018 indicates that global oil supply increased by 0.27 mb/d m-o-m to average 97.86 mb/d, representing an increase of 1.74 mb/d y-o-y.

While liquids supply in non-OPEC countries (including OPEC NGLs) increased by 0.23 mb/d m-o-m to average 65.99 mb/d, up by 2.09 mb/d v-o-v. OPEC crude oil production increased by 0.04 mb/d to average 31.87 mb/d, representing a decrease of 0.35 mb/d y-o-y.

In May, oil supply increased in the US, Canada, Brunei, Brazil, Kazakhstan, Azerbaijan, Ghana and Saudi Arabia m-o-m, while declines in production were seen in Mexico, Norway, the UK, Australia, Colombia, Egypt, China and Nigeria.

mb/d <sub>95.0</sub> 97.9 mb/d 34 99 31.9 32.7 98 33 97 32 96 31 95 94 30 93 29 92 28 9 16 16 17 17 17 17 17 17 8 oct O Dec. Feb , Apr ` Feb

Jun

OPEC crude production (LHS)

World supply (RHS)

Oct

Apr

Graph 5 - 31: OPEC and world oil supply

Source: OPEC Secretariat.

The share of OPEC crude oil in total global production was unchanged at 32.6% in May, compared with the previous month. Estimates are based on preliminary data from direct communications for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

# **Product Markets and Refinery Operations**

Product markets in the Atlantic Basin performed positively in May, with gains seen all across the barrel. In the US, improved domestic gasoline demand, along with tighter middle distillate and fuel oil markets droved refinery margins to a new all-time record high.

In Europe, product markets retained the previous month's gains with most of the support stemming from the top and bottom of the barrels. Record high product prices weighed on refinery margins and probably prevented further gains.

Meanwhile, product markets in Asia weakened marginally, pressured by slower jet/kerosene demand and rising inventory levels.

# **Refinery margins**

In May, **US** refinery margins jumped to an all-time high of \$18.50/b, breaching the highest level reached in 2017 and climbing up by 11% higher compared to the previous month. Supported came from higher gasoline exports, which peaked at 1.1 mb/d in the week ended 18 May. Furthermore, the gasoil market tightened as stock levels continued to decline for most of May, also contributing to the positive performance of refining margins.

Scheduled maintenance, along with unplanned secondary unit outages pressured refinery throughputs, further contributing to the lift in refinery margins due to reduced product output. In addition, improvements at the bottom of the barrel, attributed to an uptick in fuel oil export opportunities, also provided support. US refinery margins for WTI averaged \$18.5/b in May, up by \$2.2/b m-o-m and \$8.9/b y-o-y.

Graph 6 - 1: Refining margins US\$/b US\$/b 20 20 15 15 10 10 5 5 0 0 Jan 18 Feb 18 Mar 18 Jun 17 Dec 17 18 18 Мау WTI (US Gulf) Brent (Rotterdam) Oman (Singapore)

Sources: Argus Media and OPEC Secretariat.

In May, an estimated 964 tb/d of crude intake was placed offline, equivalent to 55% of the previous month's offline maintenance volumes. In the coming month, peak maintenance season in the US is expected to be completed, which, along with a pick-up in gasoline demand, could drive refinery crude intake upwards, enabling refiners to capitalise on the record-breaking high margins.

In **Europe**, refinery margins in May remained flat m-o-m, where support from all across the barrel offset supply-side pressure as spring refinery maintenance season in Europe came to an end, and refinery utilization rates rose. This positive performance is attributable to improved gasoline export opportunities to West of Suez and the US, along with declining onshore Amsterdam-Rotterdam-Antwerp (ARA) stock levels, firm domestic diesel demand and lower regional inflows from Russia due to maintenance interventions. In addition, strong positive performance at the bottom of the barrel on the back of open arbitrage to East of Suez kept refinery margins at healthy levels despite the spike in product prices in response to high crude prices. Refinery margins for Brent in Europe averaged \$6.4/b in May, remaining unchanged compared to a month earlier, and lower by \$1.2/b y-o-y.

**Asian** product markets weakened in May, pressured by a rise in jet/kerosene inventories due to slower demand. This negative impact offset moderate gains witnessed with all other products across the barrel.

# **Refinery operations**

In the **US**, refinery utilization rates decreased in May to average 92.6%, which corresponds to a throughput of 16.9 mb/d. This represented a drop of 0.4 pp and 11 tb/d, respectively, compared with the previous month. Y-o-y, the May refinery utilization rate was down by 1.7 pp, with throughputs showing a drop of 620 tb/d. An estimated 1 mb/d (84% of May maintenance volume) of offline capacity is expected to return online in June. This should support refinery throughputs. However, an anticipated pick-up in fuel demand in the months thereafter along with favourable economics evidenced by the record-high refinery margins will most likely offset supply side pressure and keep utilization rates high in the medium-term.

**European** refinery utilization averaged 87.2%, corresponding to a throughput of 10.6 mb/d. This is a m-o-m rise of 1.0 pp and 127 tb/d, respectively, and y-o-y it is up by 4.9 pp and 598 tb/d.

In **Asia**, refinery utilization in Japan averaged 80.4% in May, corresponding to a throughput of 2.8 mb/d. Compared to the previous month, throughputs were down by 349 tb/d, and they were down by 123 tb/d y-o-y. In China, refinery utilization rates averaged 86.5%, corresponding to a throughput of 11.3 mb/d. This is down m-o-m by 6.0 pp and 800 tb/d, respectively, and down by 1.0 pp but up 286 tb/d y-o-y. In Singapore, refinery runs averaged 83.3%, with a throughput of 1.3 mb/d. This is up m-o-m by 3.0 pp and 41 tb/d, respectively, and up by 2.0 pp and 25 tb/d y-o-y.

Graph 6 - 2: Refinery utilization rates % % 100 100 95 95 90 90 85 85 80 80 75 75 Dec 17 Jan 18 **Nov 17** 8 Jun 17 Sep, Feb Nar Ö Apr Иay **-**EU-16 -Japan -Singapore

Sources: EIA, Euroilstock, PAJ and Argus Media.

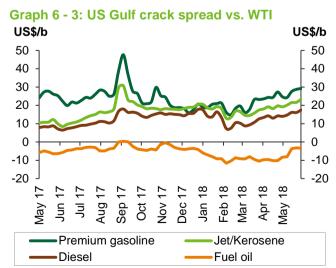
# **Product markets**

### **US** market

**US gasoline crack spreads** continued to strengthen in May despite a 1.1 mb counter-seasonal stock build over the month. Support emerged from solid domestic demand from the US midcontinent region, driven by widening price differentials between USGC and midcontinent gasoline. In May, the US gasoline crack spread against WTI averaged \$26.7/b, up by \$1.7/b m-o-m, and marginally higher by 58¢/b y-o-y.

The US Gulf Coast (USGC) jet/kerosene market gained some ground on the back of solid export requirements amid a globally tightening jet/kerosene market. The US jet/kerosene crack spread against WTI averaged \$21.1/b, up by \$2.3 m-o-m and higher by \$10.1 y-o-y.

**US gasoil crack spreads** continued the upward trend seen since March. Among the supporting factors were significant inventory drawdowns on the back of strong domestic demand. A rise in USGC gasoil prices which reached \$85/b, a multi-year record high, gave way to reversed arbitrage opportunities of deliveries originally headed to the US from Europe and prevented a further boost of cracks. The US gasoil crack spread against WTI averaged \$15.6/b, up by \$1.8 m-o-m and higher by \$7.4 y-o-y.



Sources: Argus Media and OPEC Secretariat.

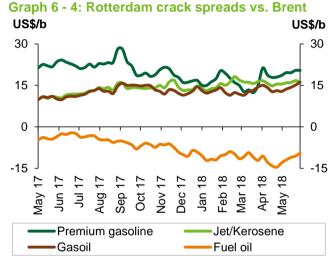
At the bottom of the barrel, **fuel oil crack spreads** gained some ground as stocks declined. In May, the US fuel oil crack spread against WTI averaged minus \$5.3/b, up by \$4.4/b m-o-m and marginally higher by 42¢ y-o-y.

# **European market**

The **gasoline market** in Europe strengthened in May, on the back of ample arbitrage opportunities, as firm demand from West of Suez, as well as the US, provided a lift to gasoline cracks. Additional support came from declining onshore ARA gasoline stock levels, which fell to a four-month low. The gasoline crack spread against Brent averaged \$19.7/b in May, up by 60¢ m-o-m, and by \$1.3 y-o-y.

The **jet/kerosene market** performed positively as cracks saw a trend reversal compared to the lows witnessed in the previous month. The jet/kerosene Rotterdam crack spread against Brent averaged \$16.2/b, up by 31¢ m-o-m, and by \$5.5 y-o-y.

The **gasoil market** continued to strengthen on the back of firm domestic demand and the tightening gasoil market environment. A reduction of output from Russia, attributable to ongoing maintenance interventions, contributed to the upside of gasoil cracks in Europe. The gasoil market balance is expected to remain strong as higher diesel demand in the driving season should offset pressure and refineries in Russia restore operations and increase throughputs. The gasoil crack averaged \$14.4/b in May, which was 54¢ higher m-o-m, and \$3.8 higher y-o-y.



Sources: Argus Media and OPEC Secretariat.

At the bottom of the barrel, the **fuel oil 3.5% crack spread** further extended the recovery witnessed in the previous month. The fuel oil crack exhibited the strongest performance improvement across the barrel, although remaining below levels recorded a year earlier. This development was attributable to an opening in arbitrage volumes to East of Suez as the fuel oil market there continued to tighten.

Another bullish factor supporting the fuel oil market was the seasonal pick-up in demand for power generators in the Middle East for home cooling, as temperatures increased. In the near term, fuel oil cracks are expected to strengthen further during the summer season amid higher demand from Chinese independents for refinery feedstock as an alternative to avoid crude import consumer taxes, assuming favourable economics. In Europe, fuel oil cracks averaged minus \$14.2/b in May, gaining \$1.8 m-o-m, but losing \$2.5 y-o-y.

### **Asian market**

The **Asian gasoline market** rebounded from the low witnessed in the previous month. A pick up in arbitrage opportunities from Indonesia backed by higher gasoline demand provided an uplift to cracks. High gasoline stocks in Singapore, which increased by 4.7% in the week ended May 30, pressured the regional gasoline market, preventing further upside of Asian gasoline cracks during May. The Singapore gasoline 92 crack spread against Oman averaged \$11.1/b, up by \$0.9 m-o-m and higher by \$0.4 y-o-y.

The Singapore light distillate naphtha crack spread returned to positive territory in May. Support stemmed from strong petrochemical demand. The new taxation system for oil product imports in China probably provided additional support as local petrochemical plants have shifted feedstock preference to naphtha, avoiding import consumer tax on imported LPG. The Singapore naphtha crack spread against Oman averaged \$0.5/b, up by \$1.6 m-o-m and by \$0.8 y-o-y.

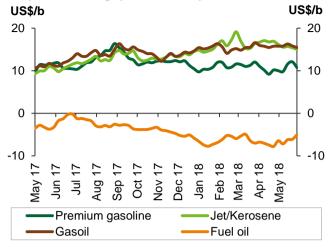
#### **Product Markets and Refinery Operations**

The **jet/kerosene market** lost some ground in May, pressured by high inventory levels and high retail prices. Slightly higher jet/kerosene US output pressured export opportunities from Asia, contributing to the weakening seen in jet/kerosene cracks during May.

The Singapore jet/kerosene crack spread against Oman averaged \$15.7/b, down by \$1.1 m-o-m, and higher by \$5 y-o-y.

Asian **gasoil crack spreads** strengthened slightly, supported by solid demand coupled with low inventories, which were reported to hit a three-year low. The Singapore gasoil crack spread against Oman averaged \$16.1/b, up by 32¢ m-o-m and higher by \$4.2 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Oman



Sources: Argus Media and OPEC Secretariat.

The **Singapore fuel oil crack spread** against Oman strengthened on the back of improved fundamentals and lower refinery output, amid a short market balance. An upswing in demand attributed to higher power generation demand for cooling from the Middle East provided support to the positive fuel oil performance witnessed in May. The Singapore fuel oil crack spread against Oman averaged minus \$6.1/b, up by \$1.1 m-o-m but was lower \$1.1 y-o-y.

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

<u>Event</u>	Time frame	<u>US</u>	<u>Europe</u>	<u>Asia</u>	<b>Observation</b>
End of maintenance season	June 2018	➡ High impact on refining margins as an additional 84% of May's offline crude capacity returns online	-	-	Record high refinery margins in the US, along with diesel market tightness will most likely continue to support refinery margins
Higher fuel oil demand from the Middle East	Summer 2018	-	-	↑ High impact on fuel oil cracks	Higher demand to run power generators to meet cooling requirements in Middle East
Investments in secondary units for gasoline self-sufficiency in Middle East and China	1H19	-	-	↑ High impact on refinery margins	Objective is to reduce high-octane blending component imports and increase finished gasoline exports from Iran, Saudi Arabia and China

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Re	finery throu	ughput, mb/	′d		Refinery u	tilization, %	
	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	Change May/Apr	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	Change <u>May/Apr</u>
US	16.96	16.88	16.87	-0.01	89.86	92.33	92.63	0.3 pp
Euro-16	9.85	10.21	10.62	0.41	80.78	83.79	87.17	3.4 pp
France	1.01	0.97	1.15	0.18	80.92	77.72	91.98	14.3 pp
Germany	1.73	1.78	1.82	0.04	79.11	81.17	83.08	1.9 pp
Italy	1.41	1.28	1.35	0.07	69.06	62.46	65.94	3.5 pp
UK	0.87	1.07	1.08	0.01	66.90	82.26	82.89	0.6 pp
Japan	3.29	3.18	2.83	-0.35	93.58	90.33	80.36	-9.97 pp

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

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

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18</u>	<u>2Q18*</u>
Total OECD	37.61	37.41	37.94	38.04	38.25	38.19	37.50	38.00
OECD Americas	19.01	18.78	19.03	19.80	19.03	19.00	18.79	18.78
of which US	16.43	16.51	16.88	17.42	16.89	17.01	16.75	16.91
OECD Europe	12.00	11.85	12.09	11.82	12.42	12.25	12.04	12.27
of which:								
France	1.15	1.12	1.14	1.11	1.18	1.20	1.10	1.12
Germany	1.87	1.88	1.85	1.74	1.93	1.92	1.86	1.82
Italy	1.34	1.30	1.36	1.28	1.40	1.44	1.48	1.34
UK	1.10	1.08	1.06	1.06	1.06	1.08	0.89	1.07
OECD Asia Pacific	6.60	6.78	6.82	6.43	6.80	6.95	6.95	6.39
of which Japan	3.26	3.28	3.23	2.99	3.24	3.19	3.33	3.03
Total Non-OECD	40.59	41.38	42.09	41.44	42.04	43.10	42.96	43.14
of which:								
China	10.44	10.77	11.35	11.00	11.27	11.92	11.75	11.61
Middle East	6.66	6.98	7.12	7.15	7.21	7.29	7.22	7.52
Russia	5.64	5.58	5.59	5.46	5.62	5.64	5.78	5.68
Latin America	6.13	5.69	5.43	5.51	5.34	5.22	5.17	5.12
India	4.56	4.93	4.98	4.89	4.82	5.21	5.19	4.95
Africa	2.11	2.08	2.07	2.03	2.08	2.02	2.08	2.12
Total world	78.20	78.78	80.09	79.48	80.29	81.29	80.47	81.13

Note: \* Includes OPEC Secretariat's estimates.

Totals may not add up due to independent rounding.

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

## **Product Markets and Refinery Operations**

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

				Change	Ye	ear-to-date
		<u>Apr 18</u>	May 18	May/Apr	<u>2017</u>	<u>2018</u>
US Gulf (Cargoes FOB):						
Naphtha*		68.99	77.04	8.05	55.09	68.01
Premium gasoline	(unleaded 93)	91.32	96.63	5.31	74.42	87.02
Regular gasoline	(unleaded 87)	85.02	90.91	5.89	68.57	81.28
Jet/Kerosene		85.16	91.00	5.84	66.07	83.12
Gasoil	(0.2% S)	80.14	85.51	5.37	62.31	78.00
Fuel oil	(3.0% S)	52.55	52.55	0.00	47.05	53.78
Rotterdam (Barges FoB)	:					
Naphtha		65.69	73.73	8.04	53.66	65.94
Premium gasoline	(unleaded 98)	90.68	96.58	5.90	75.13	87.00
Jet/Kerosene		87.45	93.03	5.58	66.84	85.45
Gasoil/Diesel	(10 ppm)	85.49	91.30	5.81	66.35	83.01
Fuel oil	(1.0% S)	58.66	65.69	7.03	48.71	58.46
Fuel oil	(3.5% S)	55.61	62.64	7.03	44.31	55.34
Mediterranean (Cargoes	s FOB):					
Naphtha	·	66.59	73.32	6.73	52.81	65.43
Premium gasoline**		82.50	87.54	5.04	66.56	78.85
Jet/Kerosene		86.16	90.80	4.64	65.12	83.39
Diesel		85.58	91.45	5.87	66.92	82.95
Fuel oil	(1.0% S)	59.63	66.57	6.94	49.55	59.62
Fuel oil	(3.5% S)	56.90	63.80	6.90	46.18	56.71
Singapore (Cargoes FO	B):					
Naphtha		67.14	74.66	7.52	54.04	66.51
Premium gasoline	(unleaded 95)	81.50	87.60	6.10	68.01	80.37
Regular gasoline	(unleaded 92)	78.45	85.29	6.84	65.43	77.76
Jet/Kerosene		85.16	89.93	4.77	65.32	83.02
Gasoil/Diesel	(50 ppm)	84.04	90.27	6.23	66.33	82.44
Fuel oil	(180 cst)	61.07	68.06	6.99	49.67	60.38
Fuel oil	(380 cst 3.5% S)	59.63	56.56	-3.07	49.24	59.63

Note: \* Barges.

Sources: Argus Media and OPEC Secretariat.

<sup>\*\*</sup> Cost, insurance and freight (CIF).

#### **Tanker Market**

In May, weak dirty tanker market sentiment continued, despite spot freight rates mostly showing gains from the previous month across a number of routes.

Vessels of different sizes, in both clean and dirty sectors of the market, saw relatively positive developments. These came despite the market still suffering from limited activity prior to the arrival of the summer months. The increase in vessel supply, however, which has been persisting, prevented significant gains.

On average, dirty tanker freight rates rose by 19% from the previous month, while average clean spot freight rates remained flat. Both dirty and clean spot freight rates showed some increases on certain routes in May, on the back of enhanced activities, tonnage list tightening, and port and weather delays. However, rate gains in both sectors were only relative and were insufficient to compensate for the losses caused by the increase in operational cost, as bunker prices in all ports went up.

## **Spot fixtures**

According to preliminary data, **OPEC spot fixtures** dropped by 0.5% in May, compared with the previous month, to average 13.48 mb/d. **Global spot fixtures** rose by 3.8% m-o-m, to average 20.34 mb/d.

Fixtures on the **Middle East-to-East** route were up by 3.4% m-o-m, while on the **Middle East-to-West** routes they declined by 12.7% m-o-m. **Outside of the Middle East**, chartering activities were marginally higher than the previous month, but only by 0.2%.

Table 7 - 1: Spot fixtures, mb/d

				Change
	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May 18/Apr 18
All areas	19.22	19.59	20.34	0.74
OPEC	13.88	13.55	13.48	-0.07
Middle East/East	7.55	6.87	7.11	0.24
Middle East/West	2.02	2.47	2.16	-0.32
Outside Middle East	4.30	4.20	4.21	0.01

Sources: Oil Movements and OPEC Secretariat.

## Sailings and arrivals

**OPEC sailings** rose slightly by 0.02 mb/d, or 0.1%, in May from the previous month, reflecting a minor gain of 0.8% from the year before. **Middle East sailings** remained almost flat from the previous month, showing a marginal drop of by 0.01 mb/d, however, they remain higher from the previous year by 0.38 mb/d.

According to preliminary data, **arrivals** at ports in different areas showed mixed movement. Arrivals in **West Asian, European and North American ports** showed a decline in May from the previous month by 0.5%, 4.1% and 8.3%, respectively. Vessel arrivals in **Far Eastern ports**, however, were the exception, as they showed an increase from the previous month by 7.6%

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

	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	Change May 18/Apr 18
Sailings				
OPEC	24.51	24.38	24.40	0.02
Middle East	17.85	17.75	17.74	-0.01
Arrivals				
North America	10.23	9.37	8.60	-0.78
Europe	12.13	12.43	11.92	-0.51
Far East	8.57	8.57	9.22	0.65
West Asia	4.66	4.48	4.46	-0.02

Sources: Oil Movements and OPEC Secretariat.

## Dirty tanker freight rates

## Very large crude carrier (VLCC)

**VLCC spot freight rates** were mostly weak in May, despite showing some relative gains, which came on the back of an active start to the month. VLCC spot freight rates rose on key trading routes, but earnings in the market showed no major enhancements, as the increase in rates remains limited. Combined with increasingly higher bunker prices, this kept market returns subdued.

VLCC spot freight rates increased, though they were limited by the overhang of ships seen during the month. The ongoing low level in rates, along with the increase in operational costs, pushed ship-owners towards resisting the low rates as market returns became insufficient. Therefore, although VLCC spot freight rates showed minor average gains in May, these remain far from being able to compensate the increase in bunker prices.

VLCC spot freight rates for tankers trading on the **Middle East-to-East** routes rose by 7% m-o-m, to stand at Worldscale (WS) 44 points. Spot freight rates on the **West Africa-to-East** route followed the same pattern, showing a similar increase by 8% m-o-m, or WS3 points, to stand at WS45 points. In contrast, **Middle East-to-West** freight rates dropped on average, though slightly, by 4% m-o-m, or WS1 point, to stand at WS19 points.

Freight rates for VLCCs in the transatlantic increased in May as tonnage availability tightened. Nevertheless, the higher rates encouraged vessels to ballast to the region, which eventually increased the availability there, ending the rise in rates.

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

	Size				Change
	1,000 DWT	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May 18/Apr 18
Middle East/East	230-280	40	41	44	3
Middle East/West	270-285	19	20	19	-1
West Africa/East	260	41	42	45	3

Sources: Argus Media and OPEC Secretariat.

#### **Suezmax**

Average spot freight rates in Suezmax went up in May showing some positive developments from one month before. This increase came despite the market having suffered from high vessel supply versus limited tonnage demand.

The Suezmax market started the month with high activity in different regions, including the North Sea and Black Sea, which led to the clearance of the tonnage list, and a surge of activity in West Africa along with a temporary tightening in vessel supply. This allowed owners to push for higher rates. However, that did not last for long. The chartering activities slowed down and the rates softened afterwards, when all requirements were covered.

Eventually, spot freight rates for tankers operating on the **West Africa-to-US Gulf Coast (USGC) route** rose by 16% m-o-m, to stand at WS62 points in May. Spot freight rates for tankers operating on the **Northwest Europe (NWE)-to-USGC route** went up by 17% m-o-m, to average WS56 points. Average rates in the USGC increased as a result of steady activity and weather delays.

Nevertheless, Suezmax rates on both routes showed a decline compared with the previous year by 18% each. By the end of May, Suezmax was chosen occasionally as an alternative to Aframax, which showed rates firming at higher levels.

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

	Size				Change
	1,000 DWT	<u>Mar 18</u>	<u>Apr 18</u>	May 18	May 18/Apr 18
West Africa/US Gulf Coast	130-135	57	54	62	9
Northwest Europe/US Gulf Coast	130-135	51	48	56	8

Sources: Argus Media and OPEC Secretariat.

#### **Aframax**

Similarly to other dirty tanker developments, **Aframax spot freight rates** rose in May, compared to one month before. They reached a higher level than seen in other classes, showing an average increase of 25% m-o-m.

Aframax had a slow start in the beginning of the month, with rates showing no significant changes from April, mainly in the North Sea and the Baltics. The situation varied across different markets at that point, while in the Black Sea and the Mediterranean, the tonnage list was balanced. The increase in spot freight rates was needed substantially to compensate the higher operational costs.

Freight rates for tankers operating on the **Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes** went up by WS31 points and WS27 points from the previous month, respectively, to average WS110 and WS101 points.

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

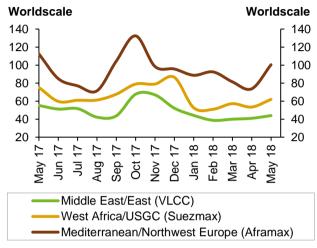
	Size				Change
	1,000 DWT	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May 18/Apr 18
Indonesia/East	80-85	81	84	94	10
Caribbean/US East Coast	80-85	95	97	109	12
Mediterranean/Mediterranean	80-85	87	80	110	31
Mediterranean/Northwest Europe	80-85	82	74	101	27

Sources: Argus Media and OPEC Secretariat.

Spot rates in NWE increased m-o-m, as a result of the resistance of ship owners to lower rates in light of rising low sulfur bunker fuel oil (LSFO) prices, which exceeded more than \$620/mt. This made voyages at lower rates not feasible, despite limited improvements in activity levels. Moreover, the improved sentiment in NWE came on the back of ullage delays in Rotterdam and an increase in replacement requirements.

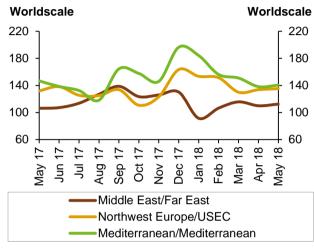
The Caribbean's tonnage list cleared at the beginning of the month as a result of continuous activity. This led to rates firming with average spot freight rates increasing on the **Caribbean-to-US East Coast (USEC) route** by 12% m-o-m, to stand at WS109 points. Similarly, Aframax freight rates to eastern destinations showed another increase. The **Indonesia-to-East route** rose by 12% m-o-m, to average WS94 points.

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



Sources: Argus Media and Platts.

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



Sources: Argus Media and OPEC Secretariat.

## Clean tanker freight rates

Clean tanker spot freight rates continued to be weak in May, as the product tanker market was uneventful. On average, the clean spot tanker freight rates were broadly unchanged from the previous month and stood at WS134 points. Average spot freight rates kept almost flat despite some increases found on some trading routes, although these rises were mostly insignificant.

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

	<b>Size</b> 1,000 DWT	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	Change May 18/Apr 18
East of Suez					
Middle East/East	30-35	116	110	113	3
Singapore/East	30-35	146	141	133	-9
West of Suez					
Northwest Europe/US East Coast	33-37	130	134	135	2
Mediterranean/Mediterranean	30-35	151	138	141	2
Mediterranean/Northwest Europe	30-35	161	145	151	6

Sources: Argus Media and OPEC Secretariat.

In the **East of Suez**, clean tankers of all sizes saw subdued activity in May despite some uptick in rates seen occasionally in the Middle East. Thus, freight rates for tankers operating on the **Middle East-to-East route** rose slightly by WS3 points, to average WS113 points, while rates for the **Singapore-to-East route** dropped by 6% m-o-m, to average WS133 points.

In the **West of Suez**, the clean tanker market was mostly quiet. In the Mediterranean, rates registered an increase on both **Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes** by 2% and 4% m-o-m, respectively, to stand at WS141 and WS151 points. A slight thinning in the tonnage list combined with increased activity in the Black Sea was enough to grant somewhat higher spot freight rates. Though the increase remains limited, similarly spot freight rates for tankers trading on the **NWE to USEC route** inched up by WS2 points m-o-m, to average WS135 points in May.

#### Oil Trade

In May, preliminary data shows US crude oil imports dropped by 441 tb/d m-o-m to average 7.8 mb/d. On an annual basis, US crude imports went down by 676 tb/d y-o-y. US product imports increased by 361 tb/d, or 18%, from the previous month to average 2.4 mb/d, up by 193 tb/d y-o-y. Product imports were supported by high product demand in the country.

Japan's crude oil imports were stable in April compared to the previous month, averaging 3.2 mb/d. On an annual basis, crude imports were lower in April by 309 tb/d, or 9%. Japan's product imports decreased by 44 tb/d m-o-m to average 521 tb/d in April.

According to preliminary data, China's crude imports increased by 390 tb/d to reach a new peak of 9.64 mb/d in April, exceeding the previous high reached in January 2018. Y-o-y, crude imports soared by 1.2 mb/d. The rise in imports was driven by high buying by independent refiners. At the same time, China's crude stocks were up from the previous month. Nevertheless, refinery throughput showed a slight decline from a month earlier. As to the crude oil supplier share; Russia, Saudi Arabia and Angola were the top suppliers to China in April, accounting for 15%, 12%, 11% respectively. Crude imports from all top suppliers showed a slight increase from the previous month.

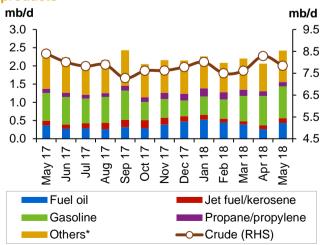
In April, India's crude imports dropped to the lowest level since January 2017 to average 4.2 mb/d, down by 161 tb/d m-o-m. Annually, India's crude imports declined by 238 tb/d y-o-y. India's product imports were up by 11 tb/d, or 1%, m-o-m to average 853 tb/d. On a yearly basis, product imports were up by 101 tb/d, or 13%, y-o-y. The increase was driven by higher imports of naphtha and fuel oil.

#### US

In May, preliminary data shows that **US crude oil imports** dropped by 441 tb/d m-o-m to average 7.8 mb/d. On an annual basis, US crude imports declined by 555 tb/d y-o-y.

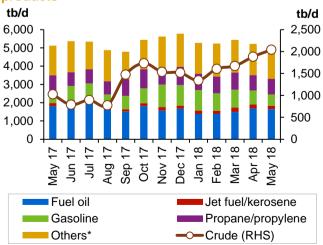
**US product imports** increased by 361 tb/d, or 18%, m-o-m to average 2.4 mb/d in May. On an annual basis, they rose by 193 tb/d y-o-y. Product imports remain supported by high product demand in the country. On a y-t-d basis, crude imports were lower by 331 tb/d, while product imports rose by 57 tb/d.

**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 EIA and OPEC Secretatiat.

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



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

**US crude exports** in May continued to increase since the beginning of the year, reaching 2. mb/d, an increase of 158 tb/d m-o-m. **Product exports** dropped by 311 tb/d, or 6%, m-o-m, to stand at 4.9 mb/d.

As a result, **US total net exports increased in May to average 3.3 mb/d, up by 73 tb/d m-o-m**, but down by 1.2 mb/d y-o-y.

Regarding **suppliers to the US**, Canada remained the top supplier in March, accounting for 46% of total US crude imports. Canadian exports to the US were 55 tb/d lower than a month before. Saudi Arabia was the second largest supplier to the US, holding a share of 10% of total crude imports, while Iraq was positioned third, accounting for 9% of total US crude imports. Imports from Saudi Arabia were 122 tb/d higher than a month earlier. Imports from Iraq increased by 91 tb/d from the previous month.

Total **US crude imports from OPEC Member Countries** increased in March by 91 tb/d, or 4%, from the previous month. Imports from OPEC Member Countries accounted for 33% of total US crude imports.

**Product imports from OPEC Member Countries** in March rose from the previous month to stand at 320 tb/d, holding a share of 15% of total product imported by the US, up by 84 tb/d from the same month last year. As to the **product supplier share**, Canada and Russia maintained their position as first and second suppliers to the US, holding a share of 30% and 14%, respectively. Algeria was the third largest product supplier to the US, with imports averaging 56 tb/d.

As to **US crude imports by region** in March, US crude imports from North America averaged 3.5 mb/d. North America was the top region for US crude imports, followed by Latin America, which stood at 1.8 mb/d. The Middle East came as the third region with an average of 1.6 mb/d. Imports from Africa were lower than one month earlier, while imports from Asia averaged 64 tb/d.

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

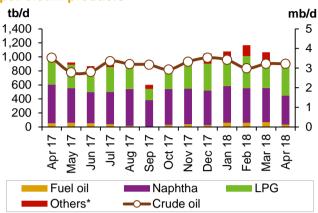
	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	Change <u>May 18/Apr 18</u>
Crude oil	5,945	6,402	5,802	-600
Total products	-3,229	-3,154	-2,482	672
Total crude and products	2,716	3,247	3,320	73

Sources: US Energy Information Administration and OPEC Secretariat.

### **Japan**

**Japan's crude oil imports** remained stable in April from the previous month, averaging 3.2 mb/d. On an annual basis, crude imports were lower by 309 tb/d, or 9%. Japanese refinery throughput decreased by around 115 tb/d.

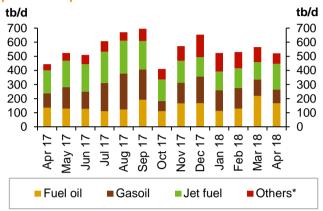
**Graph 8 - 3: Japan's imports of crude and petroleum products** 



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

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

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



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

As to **supplier share**, Saudi Arabia maintained its position as the top crude supplier to Japan holding a 40% share of total crude imports, similar to the previous month's volume, averaging 1.3 mb/d. The UAE was the second-largest supplier with a 28% share of total crude imports. Japan's imports from the UAE were up by 60 tb/d in April m-o-m. Kuwait came in third place, holding a share of 9%. Japan's imports from Kuwait increased from the previous month by 93 tb/d.

OPEC Secretariat.

**Japan's product imports** decreased in April by 193 tb/d m-o-m to average 499 tb/d. Similarly Japan's domestic product sales declined by 9.8% from last year.

Japan's product exports in April were down from the previous month by 44 tb/d, averaging 521 tb/d.

Accordingly, **Japan's total net exports dropped by 146 tb/d m-o-m, to average 3.2 mb/d in April**, reflecting lower monthly and annual imports by 5% and 11%, respectively.

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

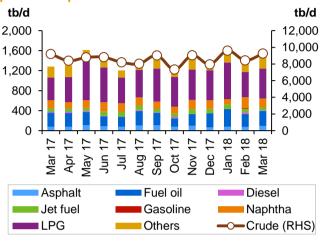
Crude oil	<u>Feb 18</u> 2,994	<u>Mar 18</u> 3,218	Apr 18 3,220	<u>Apr 18/Mar 18</u>
Total products	180	127	-22	-148
Total crude and products	3,173	3,345	3,198	-146

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

#### China

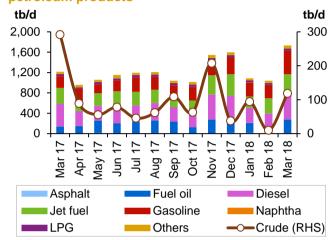
According to preliminary data, **China's crude imports** increased by 390 tb/d to reach a new peak of 9.64 mb/d in April, exceeding the previous high reached in January 2018. Y-o-y, crude imports soared by 1.2 mb/d. The rise in imports was driven by high buying by independent refiners. At the same time, China's crude stocks were up from the previous month. Nevertheless, refinery throughput showed a slight decline from a month earlier.

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



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

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



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

As to the **crude oil supplier share**; Russia, Saudi Arabia and Angola were the top suppliers to China in April, accounting for 15%, 12%, 11%, respectively.

Crude imports from all top suppliers showed a slight increase from the previous month.

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

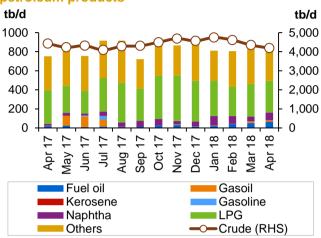
	<u>Jan 18</u>	<u>Feb 18</u>	<u>Mar 18</u>	Change <u>Mar 18/Feb 18</u>
Crude oil	9,502	8,425	9,132	707
Total products	476	410	-242	-652
Total crude and products	9,978	8,835	8,890	55

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

#### India

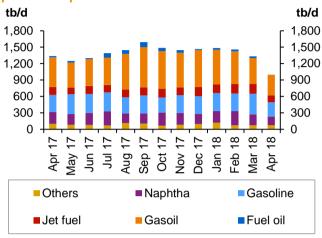
In April, **India's crude imports** dropped to the lowest level seen since January 2017, down by 161 tb/d from the previous month to average 4.2 mb/d. This drop came despite the country showing slightly higher refinery throughput, which rose by almost 30 tb/d in April. Annually, Indian crude imports declined by 238 tb/d from the level seen during the same period last year.

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



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

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



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

**India's product imports** were up slightly by 11 tb/d, or 1%, from a month ago to average 853 tb/d. Y-o-y, product imports were up by 101 tb/d, or 13%. The increase in product imports was mainly driven by higher imports of naphtha and fuel oil.

As to **India's product exports**, they fell from a month earlier by 335 tb/d, or 25%, to average 998 tb/d in April, mainly as exports of diesel, gasoline, naphtha and fuel dropped.

Consequentially, India's total net exports increased by 185 tb/d to average 4 mb/d.

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

Total crude and products	3,958	3,854	4,040	185
Total products	-652	-492	-145	346
Crude oil	4,609	4,346	4,185	-161
	<u>Feb 18</u>	<u>Mar 18</u>	<u>Apr 18</u>	Change Apr 18/Mar 18

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 April, the **Former Soviet Union's (FSU) total crude oil exports** rose by 115 tb/d m-o-m, or 2%, to average 7 mb/d. **Total Russian crude exports** increased by 165 tb/d m-o-m, or 4%, to average 4.1 mb/d.

In the **Transneft system**, total shipments from the Black Sea decreased by 3 tb/d m-o-m, or 1%, to average 540 tb/d in April. Total Baltic Sea exports increased by 114 tb/d m-o-m in April, as shipments from the Primorsk port terminal and the Ust Luga port increased. Druzhba pipeline total shipments dropped by 48 tb/d m-o-m, to average 957 tb/d. Kozmino shipments increased by 70 tb/d m-o-m, or 12%, to average 645 tb/d.

Exports through the **Lukoil system** showed minor changes from the previous month in the Barents Sea, while remaining flat in the Baltic Sea.

In **Other routes**, Russia Fareast total exports were up by 15 tb/d m-o-m, while Black Sea total exports dropped by 57 tb/d m-o-m, as a result of lower shipments from the Novorossiysk Port terminal (CPC). Similarly, for the Mediterranean Sea, BTC supplies dropped from the previous month by 58 tb/d m-o-m, or 8%, to average 648 tb/d in April.

**Total FSU products exports** dropped by 56 tb/d m-o-m, or 2%, to average 3.1 mb/d. This was driven by a decrease in gasoline and gasoil exports, which dropped by 111 tb/d and 61 tb/d m-o-m, respectively, in April.

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

		2017	4Q17	1Q18	<u>Mar 18</u>	Apr 18
Troponoft ovetom		2011	<u> 10(11</u>	1010	<u>mar ro</u>	<u>/\pi 10</u>
Transneft system	Black Sea total	605	617	521	542	540
Europe		605	617	525	542 542	540 540
	Novorossiysk port terminal - total of which: Russian oil	424	409	361	365	396
	Others	181	208	171	177	144
	Baltic Sea total	1,516	1,434	1,289	1,278	1,392
	Primorsk port terminal - total	871	777	761	768	864
	of which: Russian oil	871	777	761	768	864
	Others	0	0	0	0	0
	Ust-Luga port terminal - total	645	657	554	510	528
	of which: Russian oil	470	478	368	348	312
	Others	175	180	176	162	216
	Druzhba pipeline total	1,009	1,018	979	1,005	957
	of which: Russian oil	977	986	953	973	925
	Others	32	32	32	32	32
Asia	Pacific ocean total	645	662	593	575	645
	Kozmino port terminal - total	645	662	606	575	645
	China (via ESPO pipeline) total	336	345	552	549	581
	China Amur	336	345	559	549	581
Total Russian o	rude exports	4,111	4,076	3,940	3,949	4,114
<u>Lukoil system</u>						
Europe &	Barents Sea total	170	146	144	135	139
North America	Varandey offshore platform	170	146	143	135	139
Europe	Baltic Sea total	13	13	7	6	7
Luiope	Kalinigrad port terminal	13	13	7	6	7
	ramigrad port terrinia	10	10	,	U	•
Other routes		2.42				
Asia	Russian Far East total	343	317	364	368	382
	Aniva bay port terminal	127	135	134	142	146
	De Kastri port terminal	216	182	235	226	236
	Central Asia total	262	285	237	209	251
Firmana	Kenkiyak-Alashankou	262	285	241	209	251
Europe	Black Sea total	1,277	1,374	<b>1,397</b> 1,319	1,482	1,426
	Novorossiysk port terminal (CPC)	1,194 72	1,276	1,319	1,405	1,337
	Supsa port terminal  Batumi port terminal	11	90 8	5	77 0	80 9
	Kulevi port terminal	0	0	0	0	0
	Mediterranean Sea total	<b>707</b>	<b>719</b>	677	<b>705</b>	648
	BTC	707	719	670	705	648
	B10	707	713	070	700	0-10
Russian rail						
	Russian rail	40	45	33	29	33
	of which: Russian oil	40	45	33	29	33
	Others	0	0	0	0	0
Total FSU crud	e exports	6,923	6,976	6,798	6,884	7,000
<u>Products</u>						
<u>i iouuoto</u>	Gasoline	193	171	234	264	153
	Naphtha	549	559	532	515	528
	Jet	35	32	36	30	43
	Gasoil	980	881	1,102	1,104	1,043
	Fuel oil	1,025	1,012	996	951	987
	VGO	308	313	327	283	337
Total FSU prod		3,089	2,967	3,271	3,147	3,091
Total FSU oil exports		10,012	9,943	10,069	10,031	10,091
Total 1 00 on exports		10,012	3,343	10,003	10,031	10,031

Sources: Argus Nefte Transport and Argus Global Markets.

#### **Stock Movements**

Preliminary data for April showed that total OECD commercial oil stocks fell by 6.7 mb m-o-m to stand at 2,811 mb. This was 247 mb lower than the same time one year ago, and 26 mb below the latest five-year average. Compared to the seasonal norm, crude stocks indicated a slight surplus of 0.4 mb, while product stocks witnessed a deficit of 26.5 mb, m-o-m.

Preliminary data for May showed that US total commercial oil stocks rose by 22 mb m-o-m. At 1,209.8 mb, total US commercial stocks were 140 mb lower than the same period a year ago, and 15 mb lower than the latest five-year average. Within the components, crude and products stocks rose by 0.6 mb and 21.4 mb m-o-m, respectively.

The latest information for China showed that total commercial oil inventories fell by 3.4 mb m-o-m in April to stand at 381.8 mb. At this level, total commercial stocks were 0.1 mb lower than in the same month of the previous year. Within the components, crude rose by 2.6 mb, while product stocks fell by 6 mb, m-o-m.

#### **OECD**

Preliminary data for April showed that **total OECD commercial oil stocks** fell by 6.7 mb m-o-m for the third consecutive month to stand at 2,811 mb. This was 247 mb lower than the same time one year ago, and 26 mb below the latest five-year average. It should be noted that the overhang has been reduced by more than 363 mb since January 2017. Within the components, crude stocks rose by 13.5 mb, while product stocks fell by 20.2 mb, m-o-m. Within the regions, OECD Americas and OECD Europe fell by 4.8 mb and 4.2 mb, respectively, while OECD Asia Pacific inventories rose by 2.3 mb, m-o-m.

OECD **commercial crude stocks** rose by 13.5 mb m-o-m in April, ending the month at 1,416 mb. This was 122 mb lower than the same time a year ago, but 0.4 mb higher than the latest five-year average. Compared to the previous month, OECD Americas and OECD Asia Pacific experienced stock builds, while OECD Europe witnessed a stock draw.

mb mb 3.200 3,200 3,100 3,100 Avg. 3,000 3,000 2013-17 2,900 2,900 2,800 2,800 Historical range 2013-17 2,700 2,700 2.600 2.600 2,500 2,500 Dec 9

2017

-2018

Graph 9 - 1: OECD commercial oil stocks

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

2016

In contrast, OECD **product inventories** fell by 20.2 mb m-o-m in April to stand at 1,395 mb. This was 124 mb below the same time a year ago, and 26.5 mb below the seasonal norm. Within the OECD regions, OECD Americas and OECD Europe experienced stock draws, while OECD Asia Pacific witnessed a stock build.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.4 days m-o-m in April to stand at 59.1 days. This was 5.2 days below the same period in 2017, and 2.2 days lower than the latest five-year average. Within the regions, OECD Americas had 2.2 fewer days of forward cover than the historical average to stand at 57.5 days. OECD Asia Pacific indicated a deficit of 3.2 days below the seasonal norm to stand at 50.0 days, and OECD Europe stocks stood at 1.9 days below the latest five-year average to finish the month of April at 66.6 days.

#### **OECD Americas**

**OECD Americas total commercial stocks** fell by 4.8 mb in April for the eleventh consecutive month to stand at 1,454 mb. This was 154 mb below a year ago and 16 mb lower than the seasonal norm. Within the components, crude stocks rose by 12.5 mb, while product stocks fell by 17.3 mb, m-o-m.

**Commercial crude oil stocks** in OECD Americas rose by 12.5 mb m-o-m in April to stand at 772 mb. This was 83.5 mb lower than the same period a year ago, but 12.2 mb higher than the latest five-year average. The build was driven by higher US crude oil imports, which increased by more than 60 tb/d to average nearly 8.3mb/d in April. Lower US crude oil throughputs, which decreased by around 100 tb/d, to average 16.9 mb/d in April also contributed to the build in crude oil stocks.

In contrast, **product stocks** in OECD Americas fell by 17.3 mb m-o-m in April to stand at 682 mb. This was 70 mb below the same time one year ago and 28 mb lower than the seasonal norm. Higher product consumption in the US was behind the product stock draw.

### **OECD Europe**

**OECD Europe's total commercial stocks** fell by 4.2 mb m-o-m in April, ending the month at 972 mb. This was 57 mb lower than the same time a year ago, but 12 mb above the latest five-year average. Crude and product inventories fell by 0.2 mb and 4.0 mb, m-o-m, respectively.

OECD Europe's **commercial crude stocks** fell by 0.2 mb m-o-m in April, ending the month at 420 mb. This was 7.3 mb lower than a year earlier, but 8.6 mb higher than the latest five-year average. The drop in crude oil stocks could be attributed to the increase in refinery throughput in EU countries, which rose by around 370 tb/d in April to an average of 10.2 mb/d

OECD Europe's **commercial product stocks** fell by 4.0 mb m-o-m to end April at 551 mb. This was 50 mb below the same time a year ago, but 3.8 mb higher than the seasonal norm. The fall in product stocks could be attributed to higher demand in the OECD region.

#### **OECD** Asia Pacific

**OECD Asia Pacific's total commercial oil stocks** rose by 2.3 mb m-o-m in April, reversing the sharp stock draw of the previous month. At 385 mb, they were 35 mb lower than a year ago and 22 mb below the five-year average. Within the components, crude and product inventories rose by 1.3 mb and 1.0 mb, m-o-m, respectively.

OECD Asia Pacific's **crude inventories** rose by 1.3 mb m-o-m to end the month of April at 224 mb, which was 31.6 mb below a year ago and 20.4 mb under the seasonal norm.

OECD Asia Pacific's **total product inventories** increased 1.0 mb m-o-m to end April at 161 mb, standing 3.7 mb below the same time a year ago, and 1.9 mb less than the seasonal norm.

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

				Change	
	Feb 18	<u>Mar 18</u>	<b>Apr 18</b>	Apr 18/Mar 18	<b>Apr 17</b>
Crude oil	1,406	1,402	1,416	13.5	1,538
Products	1,439	1,415	1,395	-20.2	1,519
Total	2,845	2,817	2,811	-6.7	3,057
Days of forward cover	60.3	59.5	59.1	-0.4	64.3

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

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

Nov Dec

<del>-</del>2018

## **EU plus Norway**

Preliminary data for April showed that **total European commercial oil stocks** fell by 4.2 mb m-o-m, reversing the build of the last three months, to stand at 1,112 mb. This was 51 mb, or 4.4%, lower than the same time a year ago, but 5.8 mb, or 0.5%, higher than the latest five-year average. Within the components, crude and products stocks fell m-o-m by 0.2 mb and 4.0 mb, respectively.

European **crude inventories** fell in April to stand at 476 mb. This was 9.6 mb, or 2.0%, lower than the same period a year ago and 6.5 mb, or 1.3%, below the latest five-year average. The drop in crude oil stocks could be attributed to the increase in refinery throughput, which rose by around 370 tb/d in April to an average of 10.2 mb/d. This corresponded to a capacity utilization rate of 83.8%, around 3.0 pp lower than the previous month.

mb mb 1.200 1.200 1.180 1.180 1,160 1,160 Avg. 1,140 1,140 2013-17 1,120 1,120 1,100 1,100 Historical range 1,080 1,080 2013-17 1,060 1,060 1,040 1,040

2017

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

Source: Euroilstock.

2016

European **product stocks** fell by 4.0 mb m-o-m, ending April at 636 mb. This was 41.5 mb, or 6.1%, lower than the same time a year ago, albeit 0.7 mb, or 0.1%, higher than the seasonal norm. Within products, all products stocks witnessed draws. This drop in products inventories was driven mainly by higher demand in Europe, but higher refinery output in the region limited further drops in product stocks.

**Gasoline stocks** in April fell by 1.4 mb m-o-m, reversing the build of the previous six consecutive months to stand at 125 mb. This was 3.7 mb, or 3.0%, higher than the same time one year ago, and 7.4 mb, or 6.3%, above the seasonal norm.

**Distillate stocks** declined by 1.8 mb m-o-m to end April at 409 mb, which indicates a deficit of 50 mb, or 10.8%, below the same time a year ago, and 6.0 mb, or 1.5%, below the latest five-year average.

**Residual fuel** fell by 0.7 mb m-o-m to April at 69 mb, which indicates a deficit of 2 mb, or 2.7%, below the same time a year ago, and 9.0 mb, or 11.6%, below the latest five-year average.

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

				Change	
	<u>Feb 18</u>	<u>Mar 18</u>	<u>Apr 18</u>	<u>Apr 18/Mar 18</u>	<u>Apr 17</u>
Crude oil	470.9	476.0	475.8	-0.2	485.4
Gasoline	123.7	126.1	124.7	-1.4	121.0
Naphtha	34.3	34.3	34.3	0.0	27.9
Middle distillates	417.3	410.4	408.6	-1.8	458.2
Fuel oils	64.4	69.2	68.5	-0.7	70.4
Total products	639.7	640.1	636.1	-4.0	677.6
Total	1,110.6	1,116.1	1,111.9	-4.2	1,163.0

Sources: Argus and Euroilstock.

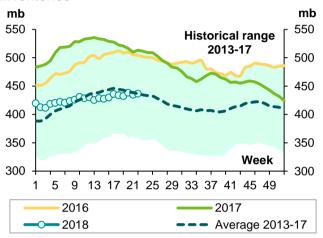
#### US

Preliminary data for May showed that **US total commercial oil stocks** rose by 22 mb m-o-m, reversing the declines seen over the last eleven consecutive months. At 1,209.8 mb, total US commercial stocks stood at 139.6 mb, or 10.3%, lower than the same period a year ago, and 14.7 mb, or 1.2%, lower than the latest five-year average. Within the components, crude and products stocks rose m-o-m by 0.6 mb and 21.4 mb, respectively.

US **commercial crude stocks** rose in May to stand at 436.6 mb, which was 80 mb, or 15%, below the same time last year, and 4.7 mb, or 1.1%, under the latest five-year average. This build came despite lower crude oil imports, which decreased by more than 500 tb/d to average nearly 7.7 mb/d. In May, crude inventories in Cushing, Oklahoma, fell by 1.2 mb versus April, ending the month at 34.9 mb.

**Total product stocks** rose by 21.4 mb m-o-m in May to stand at 773.2 mb. This was 59.4 mb, or 7.1%, down from the level seen at the same time in 2017, and 10.0 mb, or 1.3%, below the seasonal average. Within products, the picture was mixed with gasoline, jet fuel and other unfinished products experiencing stock builds, while distillates and residual fuel stocks saw stock draws.

Graph 9 - 3: US weekly commercial crude oil inventories



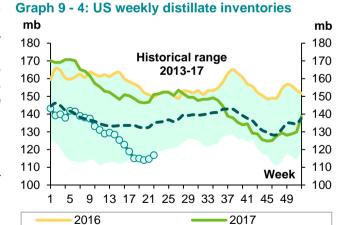
Sources: US Energy Information Administration and OPEC Secretariat.

**Gasoline stocks** rose by 1.1 mb m-o-m in May, reversing the stock draw of last month. At 239 mb, they were 3.1 mb, or 1.3%, below the same time a year ago, yet 9.5 mb, or 4.1%, above the seasonal norm. This build came mainly from higher gasoline output, which increased by around 100 tb/d to average 10.2 mb/d. Apparent demand for gasoline in May remained almost unchanged, when compared to the previous month, averaging 9.4 mb/d.

**Jet fuel stocks** rose by 1.2 mb m-o-m in May, to stand at 40.9 mb, which was 3.5 mb, or 7.9%, below the same time a year ago, and 1.4 mb, or 3.2%, below the latest five year average.

In contrast, **distillate stocks** fell by 2.0 mb m-o-m in May, the fifth consecutive monthly drop, to stand at 116.8 mb. This was 37.0 mb, or 24.1%, below the same period a year ago, and 21 mb, or 15%, below the latest five-year average. The decline came mainly on the back of higher demand as distillates production remained almost flat from the previous month.

**Residual fuel stocks** fell by 0.7 mb m-o-m in May, to stand at 32.2 mb, which was 7.7 mb, or 19.4%, below the same time a year ago, and 7.6 mb, or 19.6%, below the latest five year average.



Sources: US Energy Information Administration and OPEC Secretariat.

2018

--- Average 2013-17

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

				Change	
	<u>Mar 18</u>	<u>Apr 18</u>	<u>May 18</u>	May 18/Apr 18	<u>May 17</u>
Crude oil	423.4	436.0	436.6	0.6	516.9
Gasoline	239.6	238.0	239.0	1.1	242.1
Distillate fuel	130.4	118.8	116.8	-2.0	153.8
Residual fuel oil	35.0	32.9	32.2	-0.7	40.0
Jet fuel	40.4	39.8	40.9	1.2	44.5
Total products	772.8	751.8	773.2	21.4	832.5
Total	1,196.3	1,187.7	1,209.8	22.0	1,349.4
SPR	665.5	664.3	660.2	-4.1	684.5

Sources: US Energy Information Administration and OPEC Secretariat.

## **Japan**

In Japan, total commercial oil stocks rose by 2.5 mb in April, the second consecutive monthly increase, to stand at 135 mb. At this level, they were 10.2 mb, or 7.1%, below the same time a year ago, and 16.0 mb, or 10.6%, below the latest five-year average. Within the components, crude and products inventories rose m-o-m by 1.3 mb and 1.0 mb, respectively.

Japanese **commercial crude oil stocks** rose in April to stand at 77.9 mb. This was 9.6 mb, or 10.9%, below the same period a year ago, and 12.1 mb, or 13.5 %, below the seasonal norm. The build was driven by lower crude throughputs, which declined by around 115 tb/d, or 3.2%, to stand at 3.2 mb/d. Higher crude imports, which increased by 0.1% to average 3.2 mb/d, also contributed to some of the build in crude oil stocks.

Graph 9 - 5: Japan's commercial oil stocks mb mb 180 180 170 170 160 Avg. 160 2013-17 150 150 140 140 Historical range 130 130 2013-17 120 120 ٥

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

2017

2016

Japan's **total product inventories** rose m-o-m by 1.0 mb to end April at 57.1 mb. This was 0.7 mb, or 1.2%, lower than the same month last year, and 3.9 mb, or 6.4%, lower than the seasonal norm. Within products, gasoline, distillates stocks and residual fuel witnessed stock builds, while naphtha inventories experienced stock draws.

**Gasoline stocks** rose by 0.6 mb m-o-m to stand at 10.8 mb in April. This was 0.7 mb, or 6.1%, lower than the same time a year ago, and 1.4 mb, or 11.3%, below the latest five-year average. The build was driven by lower domestic consumption, which decreased by 5.8% from the previous month. Lower gasoline output limited any further build in gasoline stocks.

**Distillate stocks** rose by 1.9 mb m-o-m to stand at 25.2 mb in April. This was 1.7 mb, or 7.0 %, above the same time a year ago, and 0.1 mb, or 0.4 %, above the seasonal average. Within the distillate components, jet fuel and gasoil stocks rose m-o-m by 17% and 15% in April, respectively, while kerosene stocks fell by 4.2%. Higher production combined with lower domestic sales was behind the stock builds, while the drop in kerosene stocks was mainly driven by lower output.

**Total residual fuel oil stocks** rose by 0.7 mb m-o-m to stand at 12.7 mb in April. This was 0.6 mb, or 4.3%, below the same period a year ago, and 1.6 mb, or 11.2%, less than the latest five-year average. Within the fuel oil components, fuel oil A and fuel B.C rose by 4.8% and 5.9% m-o-m, respectively. The builds in both products were driven by lower domestic sales.

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

				Change	
	<u>Feb 18</u>	<u>Mar 18</u>	<u>Apr 18</u>	<u>Apr 18/Mar 18</u>	<u>Apr 17</u>
Crude oil	78.7	76.6	77.9	1.3	87.4
Gasoline	10.4	10.2	10.8	0.6	11.5
Naphtha	7.6	10.5	8.4	-2.1	9.4
Middle distillates	20.9	23.4	25.2	1.9	23.6
Residual fuel oil	11.7	12.1	12.7	0.7	13.3
Total products	50.6	56.1	57.1	1.0	57.8
Total**	129.3	132.8	135.0	2.3	145.3

Note: \* At the end of the month.

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

#### China

The latest information for **China** showed that **total commercial oil inventories** fell by 3.4 mb in April, the second consecutive monthly drop, to stand at 381.8 mb. At this level, total commercial stocks were 0.1 mb lower than in the same month of the previous year. Within the components, crude rose by 2.6 mb, while product stocks fell by 6 mb, m-o-m.

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

				Change	
	<u>Feb 18</u>	<u>Mar 18</u>	<u>Apr 18</u>	<u>Apr 18/Mar 18</u>	<u>Apr 17</u>
Crude oil	210.5	205.5	208.1	2.6	221.3
Gasoline	69.5	74.3	78.0	3.7	71.0
Diesel	89.8	85.1	75.8	-9.3	70.3
Jet/Kerosene	20.5	20.4	20.0	-0.4	19.2
Total products	179.8	179.8	173.8	-6.0	160.6
Total	390.3	385.2	381.8	-3.4	381.9

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

In April, **commercial crude stocks** rose to stand at 208.1 mb, which was 13.3 mb below the same time last year. This build came on the back of higher imports, which increased by 1.44%. The decline in crude runs of 0.5% in April also contributed to the build in crude oil commercial stocks.

In contrast, **total product stocks** saw a drop of 6 mb m-o-m in April to end the month at 173.8 mb. This was 13.2 mb above the same time a year ago. Within products, the picture was mixed, as gasoline inventories rose, while diesel and kerosene witnessed stocks draws.

**Diesel inventories** fell by 9.3 mb m-o-m in April to stand at 75.8 mb, which was 5.4 mb higher than the same time last year. The drop was attributed to lower diesel output, combined with higher diesel demand. This was on the back of higher activity in infrastructure projects and more demand from the agriculture sector.

**Jet/kerosene stocks** also fell by 0.4 mb m-o-m in April to stand at 20.0 mb. This was 0.8 mb higher than the same time last year.

In contrast, **gasoline stocks** rose by 3.7 mb m-o-m in April to end the month at 78.0 mb. This was 7.0 mb higher than the same time last year. The build was driven by weaker demand, compared to the previous month.

<sup>\*\*</sup> Includes crude oil and main products only.

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

#### **Singapore**

At the end of April, **total product stocks in Singapore** fell by 8.0 mb m-o-m to stand at 38.5 mb. This was 10.8 mb, or 21.9%, below the same period a year ago. All the products experienced stock draws.

**Light distillate stocks** fell by 2.4 mb m-o-m, ending the month of April at 12.7 mb. This was 1.2 mb, or 8.9%, above the same period a year ago. **Middle distillate stocks** fell by 2.5 mb m-o-m to stand at 8.1 mb in April. This was 3.5 mb, or 32%, below the same time a year ago. The drop for both product categories could be attributed to higher exports from the Singapore hub.

**Fuel oil inventories** fell by 3.2 mb m-o-m, ending the month of April at 17.6 mb. This was 5.9 mb, or 25%, lower than the same period last year.

#### **Amsterdam-Rotterdam-Antwerp (ARA)**

**Total product stocks in ARA** fell by 6.7 mb m-o-m, thus reversing the build of the previous four months. At 39.2 mb, product stocks in ARA were 9.8 mb, or 20.0%, lower than at the same time a year ago. Within products, with the exception of fuel oil, all products witnessed stock draws.

**Gasoline stocks** fell by 2.2 mb m-o-m in April to stand at 9.6 mb. This was 0.2 mb, or 2.1%, above the same time last year. **Gasoil stocks** fell by 4.3 mb m-o-m, ending the month of April at 15.6 mb. This was 8.1 mb, or 34.2%, below the same period a year earlier. The stock draw in both product categories could be attributed to higher exports.

In contrast, **fuel oil stocks** rose by 0.6 mb m-o-m to stand at 7.0 mb. This was 0.3 mb, or 4.1%, below the same time last year.

## **Balance of Supply and Demand**

Demand for OPEC crude in 2017 is estimated at 33.1 mb/d, unchanged from the last MOMR report and 0.7 mb/d higher than the 2016 level. In comparison, according to secondary sources, OPEC crude production averaged 32.4 mb/d in 2017, which is 0.7 mb/d lower than the demand for OPEC crude.

In 2018, the demand for OPEC crude is projected at 32.7 mb/d, which is 0.1 mb/d less than the previous MOMR and 0.3 mb/d lower than the level seen in 2017.

## Balance of supply and demand in 2017

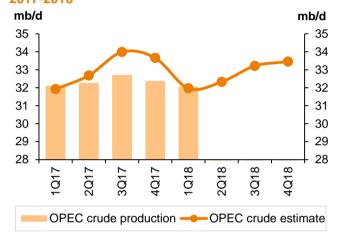
**Demand for OPEC crude in 2017** increased from the previous month to stand at 33.1 mb/d, representing an increase of 0.7 mb/d from the 2016 level.

Compared to the last *MOMR*, the first and fourth quarters were revised up by 0.1 mb/d and 0.2 mb/d, respectively. While the second quarter was revised down by 0.1 mb/d, the third quarter remained unchanged.

Compared with the same quarters in 2016, the first and the third quarters increased by 1.2 mb/d and 0.4 mb/d, respectively. The second and fourth quarters grew by 0.6 mb/d each.

According to secondary sources, OPEC crude production averaged 32.4 mb/d in 2017, which is 0.7 mb/d lower than the demand for OPEC crude.

Graph 10 - 1: Balance of supply and demand, 2017-2018\*



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

Table 10 - 1: Supply/demand balance for 2017, mb/d

							Change
	<u>2016</u>	<u>1Q17</u>	<u> 2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	2017/16
(a) World oil demand	95.54	95.73	96.52	97.85	98.65	97.20	1.65
Non-OPEC supply	57.01	57.73	57.52	57.52	58.78	57.89	0.88
OPEC NGLs and non-conventionals	6.14	6.07	6.32	6.34	6.21	6.23	0.09
(b) Total non-OPEC supply and OPEC NGLs	63.15	63.80	63.83	63.86	64.99	64.12	0.98
Difference (a-b)	32.39	31.93	32.68	33.99	33.66	33.07	0.68
OPEC crude oil production	32.64	32.11	32.28	32.71	32.38	32.37	-0.27
Balance	0.25	0.18	-0.41	-1.28	-1.27	-0.70	-0.95

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

Source: OPEC Secretariat.

## Balance of supply and demand in 2018

**Demand for OPEC crude for 2018** remained unchanged from the previous report to stand at 32.7 mb/d, which is 0.3 mb/d lower than the 2017 level.

Compared to the last *MOMR*, the first quarter was revised up by 0.2 mb/d, while the second was revised down by 0.1 mb/d. Both third and fourth quarters remained unchanged.

When compared with the same quarters in 2017, the first quarter is estimated to have remained unchanged, while the second and the third quarters are forecast lower by 0.4 mb/d and 0.8 mb/d, respectively. The fourth quarter is also projected to show a drop, albeit by only 0.2 mb/d.

According to secondary sources, OPEC crude production averaged 32.1 mb/d in 1Q18, which is 0.1 mb/d higher than the demand for OPEC crude in the same period.

Table 10 - 2: Supply/demand balance for 2018\*, mb/d

							Change
	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>4Q18</u>	<u>2018</u>	2018/17
(a) World oil demand	97.20	97.61	98.07	99.42	100.25	98.85	1.65
Non-OPEC supply	57.89	59.36	59.41	59.83	60.38	59.75	1.86
OPEC NGLs and non-conventionals	6.23	6.28	6.33	6.37	6.42	6.35	0.12
(b) Total non-OPEC supply and OPEC NGLs	64.12	65.65	65.74	66.20	66.80	66.10	1.98
Difference (a-b)	33.07	31.97	32.33	33.22	33.45	32.75	-0.32
OPEC crude oil production	32.37	32.07					
Balance	-0.70	0.10					

Note: \* 2018 = Forecast.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Appendix

# **Appendix**

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

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>1Q17</u>	2Q17	3Q17	4Q17	<u>2017</u>	<u>1Q18</u>	2Q18	3Q18	4Q18	2018
World demand													
OECD	45.8	46.4	46.9	47.0	47.1	47.6	48.0	47.4	47.6	47.4	48.0	48.3	47.8
Americas	24.2	24.6	24.7	24.5	25.0	25.0	25.1	24.9	24.9	25.2	25.2	25.3	25.2
Europe	13.5	13.8	14.0	13.9	14.3	14.8	14.4	14.4	14.1	14.4	14.9	14.5	14.5
Asia Pacific	8.1	8.1	8.1	8.6	7.8	7.9	8.4	8.2	8.6	7.8	7.9	8.4	8.2
DCs	30.2	30.9	31.5	31.6	32.0	32.4	32.1	32.0	32.3	32.7	33.1	32.8	32.7
FSU	4.7	4.6	4.6	4.6	4.4	4.8	5.1	4.7	4.7	4.5	4.9	5.2	4.8
Other Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	10.8	11.5	11.8	11.9	12.4	12.3	12.7	12.3	12.3	12.8	12.7	13.1	12.7
(a) Total world demand	92.1	94.1	95.5	95.7	96.5	97.8	98.7	97.2	97.6	98.1	99.4	100.3	98.8
Non-OPEC supply													
OECD	24.3	25.3	24.9	25.5	25.2	25.5	26.6	25.7	27.1	27.1	27.7	28.1	27.5
Americas	20.1	21.1	20.6	21.1	20.9	21.4	22.4	21.5	22.8	22.9	23.5	23.7	23.2
Europe	3.6	3.8	3.9	4.0	3.8	3.7	3.8	3.8	3.9	3.8	3.8	4.0	3.9
Asia Pacific	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
DCs	11.8	12.0	11.8	11.8	11.8	11.8	11.9	11.8	11.8	11.9	12.1	12.1	12.0
FSU	13.5	13.7	13.9	14.1	14.1	13.9	14.1	14.1	14.1	14.1	13.9	13.9	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	4.4	4.1	4.0	4.0	3.9	4.0	4.0	3.9	3.9	3.8	3.9	3.9
Processing gains	2.2	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	56.2	57.8	57.0	57.7	57.5	57.5	58.8	57.9	59.4	59.4	59.8	60.4	59.7
OPEC NGLs +													
OPEC NGLs + non-conventional oils	<b>56.2</b> 5.9	<b>57.8</b> 6.0	<b>57.0</b> 6.1	6.1	<b>57.5</b> 6.3	<b>57.5</b> 6.3	<b>58.8</b> 6.2	<b>57.9</b> 6.2	<b>59.4</b> 6.3	<b>59.4</b> 6.3	<b>59.8</b> 6.4	6.4	<b>59.7</b> 6.4
OPEC NGLs +													
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs	5.9	6.0	6.1	6.1	6.3	6.3	6.2	6.2	6.3	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production	5.9	6.0	6.1	6.1	6.3	6.3	6.2	6.2	6.3	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)	5.9 <b>62.1</b> 30.5	6.0 63.8 31.7	6.1 63.1 32.6	63.8 32.1	6.3 63.8 32.3	6.3 63.9	6.2 65.0 32.4	6.2 64.1 32.4	6.3 65.6 32.1	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply	5.9 <b>62.1</b>	6.0 <b>63.8</b>	6.1 <b>63.1</b>	6.1 63.8	6.3 63.8	6.3 <b>63.9</b>	6.2 <b>65.0</b>	6.2 <b>64.1</b>	6.3 <b>65.6</b>	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and	5.9 <b>62.1</b> 30.5 92.6	6.0 63.8 31.7 95.5	6.1 63.1 32.6 95.8	6.1 63.8 32.1 95.9	6.3 63.8 32.3 96.1	6.3 63.9 32.7 96.6	6.2 65.0 32.4 97.4	6.2 64.1 32.4 96.5	6.3 65.6 32.1 97.7	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)	5.9 62.1 30.5 92.6	6.0 63.8 31.7	6.1 63.1 32.6	63.8 32.1	6.3 63.8 32.3	6.3 63.9	6.2 65.0 32.4	6.2 64.1 32.4	6.3 65.6 32.1	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, manual statements	5.9 62.1 30.5 92.6 0.6	6.0 63.8 31.7 95.5	6.1 63.1 32.6 95.8	6.1 63.8 32.1 95.9	6.3 63.8 32.3 96.1 -0.4	6.3 63.9 32.7 96.6	6.2 65.0 32.4 97.4	6.2 64.1 32.4 96.5	6.3 65.6 32.1 97.7	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial	5.9 62.1 30.5 92.6 0.6 b 2,706	6.0 63.8 31.7 95.5 1.4	6.1 63.1 32.6 95.8 0.3	6.1 63.8 32.1 95.9 0.2	6.3 63.8 32.3 96.1 -0.4	6.3 63.9 32.7 96.6 -1.3	6.2 65.0 32.4 97.4 -1.3	6.2 64.1 32.4 96.5 -0.7 2,853	6.3 65.6 32.1 97.7 0.1 2,817	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine in the commercial SPR	5.9 62.1 30.5 92.6 0.6 b 2,706 1,582	6.0 63.8 31.7 95.5 1.4 2,989 1,588	6.1 63.1 32.6 95.8 0.3 3,002 1,600	6.1 63.8 32.1 95.9 0.2 3,033 1,600	6.3 63.8 32.3 96.1 -0.4 3,018 1,588	6.3 63.9 32.7 96.6 -1.3 2,970 1,578	6.2 65.0 32.4 97.4 -1.3 2,853 1,568	6.2 64.1 32.4 96.5 -0.7 2,853 1,568	6.3 65.6 32.1 97.7 0.1 2,817 1,574	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine in the commercial SPR  Total	5.9 62.1 30.5 92.6 0.6 b 2,706 1,582 4,288	6.0 63.8 31.7 95.5 1.4 2,989 1,588 4,577	6.1 32.6 95.8 0.3 3,002 1,600 4,602	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548	6.2 65.0 32.4 97.4 -1.3 2,853 1,568 4,421	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421	6.3 65.6 32.1 97.7 0.1 2,817 1,574 4,392	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine in the commercial SPR  Total Oil-on-water	5.9  62.1  30.5  92.6  0.6  b  2,706 1,582 4,288 924	6.0 63.8 31.7 95.5 1.4 2,989 1,588 4,577 1,017	6.1 32.6 95.8 0.3 3,002 1,600 4,602	6.1 63.8 32.1 95.9 0.2 3,033 1,600	6.3 63.8 32.3 96.1 -0.4 3,018 1,588	6.3 63.9 32.7 96.6 -1.3 2,970 1,578	6.2 65.0 32.4 97.4 -1.3 2,853 1,568	6.2 64.1 32.4 96.5 -0.7 2,853 1,568	6.3 65.6 32.1 97.7 0.1 2,817 1,574	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total  Oil-on-water  Days of forward consumption	5.9  62.1  30.5  92.6  0.6  b  2,706  1,582  4,288  924  n in OEC	6.0 63.8 31.7 95.5 1.4 2,989 1,588 4,577 1,017 D, days	6.1 32.6 95.8 0.3 3,002 1,600 4,602 1,102	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632 1,043	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607 1,052	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548 998	6.2 32.4 97.4 -1.3 2,853 1,568 4,421 1,025	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421 1,025	6.3  65.6  32.1  97.7  0.1  2,817 1,574 4,392 1,036	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks	5.9  62.1  30.5  92.6  0.6  b  2,706 1,582 4,288 924  1 in OEC 58.3	6.0  63.8  31.7  95.5  1.4  2,989 1,588 4,577 1,017  D, days 63.7	6.1 32.6 95.8 0.3 3,002 1,600 4,602 1,102 63.3	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632 1,043	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607 1,052 63.4	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548 998 61.9	6.2 65.0 32.4 97.4 -1.3 2,853 1,568 4,421 1,025 59.9	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421 1,025 59.7	6.3  65.6  32.1  97.7  0.1  2,817 1,574 4,392 1,036  59.5	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks SPR	5.9  62.1  30.5  92.6  0.6  1,582  4,288  924  in OEC  58.3  34.1	6.0  63.8  31.7  95.5  1.4  2,989 1,588 4,577 1,017  D, days 63.7 33.9	6.1 32.6 95.8 0.3 3,002 1,600 4,602 1,102 63.3 33.7	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632 1,043 64.5 34.0	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607 1,052 63.4 33.3	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548 998 61.9 32.9	6.2 65.0 32.4 97.4 -1.3 2,853 1,568 4,421 1,025 59.9 32.9	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421 1,025 59.7 32.8	6.3  65.6  32.1  97.7  0.1  2,817 1,574 4,392 1,036  59.5 33.3	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, m Commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks SPR  Total	5.9  62.1  30.5  92.6  0.6  b  2,706 1,582 4,288 924  1 in OEC 58.3	6.0  63.8  31.7  95.5  1.4  2,989 1,588 4,577 1,017  D, days 63.7	6.1 32.6 95.8 0.3 3,002 1,600 4,602 1,102 63.3	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632 1,043	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607 1,052 63.4	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548 998 61.9	6.2 65.0 32.4 97.4 -1.3 2,853 1,568 4,421 1,025 59.9	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421 1,025 59.7	6.3  65.6  32.1  97.7  0.1  2,817 1,574 4,392 1,036  59.5	6.3	6.4	6.4	6.4
OPEC NGLs + non-conventional oils  (b) Total non-OPEC supply and OPEC NGLs  OPEC crude oil production (secondary sources)  Total supply  Balance (stock change and miscellaneous)  OECD closing stock levels, machine commercial SPR  Total  Oil-on-water  Days of forward consumption Commercial onland stocks SPR	5.9  62.1  30.5  92.6  0.6  1,582  4,288  924  in OEC  58.3  34.1	6.0  63.8  31.7  95.5  1.4  2,989 1,588 4,577 1,017  D, days 63.7 33.9	6.1 32.6 95.8 0.3 3,002 1,600 4,602 1,102 63.3 33.7	6.1 63.8 32.1 95.9 0.2 3,033 1,600 4,632 1,043 64.5 34.0	6.3 63.8 32.3 96.1 -0.4 3,018 1,588 4,607 1,052 63.4 33.3	6.3 63.9 32.7 96.6 -1.3 2,970 1,578 4,548 998 61.9 32.9	6.2 65.0 32.4 97.4 -1.3 2,853 1,568 4,421 1,025 59.9 32.9	6.2 64.1 32.4 96.5 -0.7 2,853 1,568 4,421 1,025 59.7 32.8	6.3  65.6  32.1  97.7  0.1  2,817 1,574 4,392 1,036  59.5 33.3	6.3	6.4	6.4	6.4

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

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

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>1Q17</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>2017</u>	<u>1Q18</u>	<u>2Q18</u>	3Q18	<u>4Q18</u>	<u>2018</u>
World demand													
OECD	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Americas	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Non-OPEC supply													
OECD	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Americas	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-0.1	-	-	-
FSU	-	-	-	-	-	-	-	-	-	0.2	-	-	0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	0.1	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	_	_	-	-	-	-	-	-	_	0.2	0.1	0.1	0.1
OPEC NGLs +													
non-conventionals	_	_	_	-0.1	0.1	_	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
(b) Total non-OPEC supply							V.—		<u> </u>				911
and OPEC NGLs	_	_	-	-0.1	0.1	_	-0.2	-0.1	-0.1	0.1			
OPEC crude oil production													
(secondary sources)	_	_	_	_	_	_	_	_	_				
Total supply		_	-	-0.1	0.1	-	-0.2	-0.1	-				
Balance (stock change and													
miscellaneous)	-	-	-	-0.1	0.1	-	-0.2	-0.1	-				
OECD closing stock levels (mb	١												
Commercial	')					-			-11				
SPR	-		-	•	•	-	-	•	6				
Total			-		-	-	-	-	-6				
Oil-on-water		-		-	_	-			-0				
	-		-										
Days of forward consumption	IN OECD												
Commercial onland stocks	-	-	-	-	-	-	-	-	-				
SPR	-	-	-	-	-	-	-	-	-				
Total	-	-	-	-	-	-	-	-	-				
Memo items													
(a) - (b)	-	-	_	0.1	-0.1	-	0.2	0.1	0.2	-0.1	-	-	-

Note: \* This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the May 2018 issue. This table shows only where changes have occurred.

Source: OPEC Secretariat.

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

		<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>1Q17</u>	<u>2Q17</u>	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18</u>
Closing stock	c levels, mb												
OECD onland	l commercial	2,989	3,002	2,853	3,039	3,076	3,084	3,002	3,033	3,018	2,970	2,853	2,817
	Americas	1,561	1,598	1,499	1,592	1,611	1,621	1,598	1,608	1,595	1,572	1,499	1,459
	Europe	993	989	942	1,026	1,026	1,013	989	1,022	999	965	942	976
	Asia Pacific	435	414	412	421	438	450	414	404	424	433	412	383
OECD SPR		1,588	1,600	1,568	1,595	1,592	1,596	1,600	1,600	1,588	1,578	1,568	1,574
	Americas	697	697	665	697	697	697	697	694	681	676	665	667
	Europe	475	481	480	478	474	477	481	484	484	479	480	485
	Asia Pacific	416	421	423	419	421	421	421	422	423	423	423	422
OECD total		4,577	4,602	4,421	4,633	4,668	4,679	4,602	4,632	4,607	4,548	4,421	4,392
OLOD total		.,	.,002	7,721	.,000	7,000	7,010	.,00_	.,00_	.,	.,0 .0	,	
Oil-on-water		1,017	1,102	1,025	1,055	1,094	1,068	1,102	1,043	1,052	998	1,025	1,036
Oil-on-water	ard consumptio	1,017	1,102	1,025	,	,	<u> </u>						<u>'</u>
Oil-on-water		1,017	1,102	1,025	,	,	<u> </u>						<u>'</u>
Oil-on-water  Days of forwa		1,017 n in OEC	1,102 D, days	1,025	1,055	1,094	1,068	1,102	1,043	1,052	998	1,025	1,036
Oil-on-water  Days of forwa	l commercial	1,017 n in OEC	1,102 D, days 64	1,025	1,055	1,094	1,068	1,102	1,043	1,052	998	1,025	1,036
Oil-on-water  Days of forwa	d commercial Americas	1,017 n in OEC 64 63	1,102 D, days 64 65	<b>60</b>	1,055 66 65	<b>1,094 65</b> 64	<b>1,068 65</b> 65	<b>64</b> 65	<b>64</b> 64	<b>63</b> 64	998 62 63	<b>60</b> 60	<b>1,036 59</b> 58
Oil-on-water  Days of forwa	Americas Europe	1,017 n in OEC 64 63 73	1,102 D, days 64 65 71	<b>60</b> 60 67	<b>1,055 66</b> 65 74	<b>65</b> 64 71	<b>65</b> 65 71	<b>64</b> 65 71	<b>64</b> 64 71	<b>63</b> 64 68	998 62 63 67	<b>60</b> 60 67	1,036 59 58 68
Oil-on-water  Days of forwa  OECD onland	Americas Europe	1,017 n in OEC 64 63 73 51	1,102 D, days 64 65 71 48	60 60 67 48	1,055 66 65 74 55	<b>65</b> 64 71 56	<b>65</b> 65 71 54	<b>64</b> 65 71 48	<b>64</b> 64 71 52	<b>63</b> 64 68 54	<b>998 62</b> 63 67 51	<b>60</b> 60 67 48	<b>59</b> 58 68 49
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific	1,017 n in OEC 64 63 73 51 34	1,102 D, days 64 65 71 48 34	60 60 67 48 33	1,055 66 65 74 55 35	1,094 65 64 71 56 34	1,068 65 65 71 54 34	1,102 64 65 71 48 34	1,043 64 64 71 52 34	1,052 63 64 68 54 33	998 62 63 67 51	<b>60</b> 60 67 48 <b>33</b>	1,036 59 58 68 49
Oil-on-water  Days of forwa  OECD onland	Americas Europe Asia Pacific  Americas	1,017 n in OEC 64 63 73 51 34 28	1,102 D, days 64 65 71 48 34 28	1,025 60 60 67 48 33 27	1,055 66 65 74 55 35 28	1,094 65 64 71 56 34 28	1,068 65 65 71 54 34 28	1,102 64 65 71 48 34 28	1,043 64 64 71 52 34 28	1,052 63 64 68 54 33 27	998 62 63 67 51 33 27	1,025 60 60 67 48 33 27	1,036 59 58 68 49 33 27

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

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

							Change						Change
	2014	2015	2016	3Q17	4Q17	2017	17/16	1Q18	2Q18	3Q18	4Q18	2018	18/17
US	13.0	14.0	13.6	14.3	15.2	14.4	0.7	15.5	16.0	16.1	16.2	16.0	1.6
Canada	4.3	4.4	4.5	4.9	5.1	4.9	0.4	5.1	4.8	5.2	5.4	5.1	0.3
Mexico	2.8	2.6	2.5	2.2	2.1	2.2	-0.2	2.2	2.1	2.1	2.1	2.1	-0.1
OECD Americas*	20.1	21.1	20.6	21.4	22.4	21.5	0.9	22.8	22.9	23.5	23.7	23.2	1.8
Norway	1.9	1.9	2.0	1.9	1.9	2.0	0.0	2.0	1.8	1.8	2.0	1.9	-0.1
UK	0.9	1.0	1.0	1.0	1.0	1.0	0.0	1.1	1.1	1.1	1.2	1.1	0.1
Denmark	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	3.6	3.8	3.9	3.7	3.8	3.8	0.0	3.9	3.8	3.8	4.0	3.9	0.1
Australia	0.4	0.4	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other 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	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Total OECD	24.3	25.3	24.9	25.5	26.6	25.7	0.8	27.1	27.1	27.7	28.1	27.5	1.8
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.9	0.9	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	0.9	0.9	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.8	0.8	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 Asia others	0.3	0.3	0.3	0.3 0.2	0.3	0.3	0.0	0.3	0.3	0.2	0.2	0.2	0.0 0.0
Other Asia	3.6	0.3 <b>3.7</b>	3.7	0.2 <b>3.6</b>	3.6	3.6	-0.0	3.6	3.6	3.6	3.6	3.6	0.0 <b>0.0</b>
	0.7	0.7	0.7	0.6	0.7	0.6	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Argentina Brazil	2.9	3.1	3.1	3.2	3.2	3.2	0.0	3.2	3.2	3.5	3.5	3.4	0.0
Colombia	1.0	1.0	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.8	0.9	0.9	0.0
Trinidad & Tobago	0.1	0.1	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.0	0.3	0.3	0.0
L. America others	0.1	0.3	0.1	0.1	0.3	0.1	0.0	0.1	0.3	0.1	0.1	0.1	0.0
Latin America	5.0	5.2	5.1	5.1	5.2	5.1	0.1	5.1	5.2	5.3	5.4	5.2	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	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	1.3	1.3	1.3	1.2	1.2	1.2	0.0	1.2	1.3	1.2	1.2	1.2	0.0
Chad	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Congo	0.3	0.3	0.3	0.4	0.4	0.4	0.1	0.4	0.4	0.4	0.4	0.4	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
Ghana	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.0
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.3	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.1	0.1	0.2	0.0
Africa	1.8	1.8	1.8	1.9	1.9	1.9	0.1	1.9	1.9	1.9	1.9	1.9	0.0
Total DCs	11.8	12.0	11.8	11.8	11.9	11.8	0.0	11.8	11.9	12.1	12.1	12.0	0.1
FSU	13.5	13.7	13.9	13.9	14.1	14.1	0.2	14.1	14.1	13.9	13.9	14.0	0.0
Russia	10.7	10.8	11.1	11.1	11.1	11.2	0.1	11.2	11.2	11.0	11.0	11.1	-0.1
Kazakhstan	1.6	1.6	1.6	1.7	1.8	1.7	0.2	1.8	1.8	1.8	1.9	1.8	0.1
Azerbaijan	0.9	0.9	8.0	8.0	8.0	8.0	0.0	8.0	8.0	8.0	8.0	8.0	0.0
FSU others	0.4	0.4	0.4	0.3	0.3	0.4	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
China	4.3	4.4	4.1	3.9	4.0	4.0	-0.1	3.9	3.9	3.8	3.9	3.9	-0.1
Non-OPEC production	54.0	55.6	54.8	55.3	56.6	55.7	0.9	57.1	57.2	57.6	58.1	57.5	1.8
Processing gains	2.2	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	56.2	57.8	57.0	57.5	58.8	57.9	0.9	59.4	59.4	59.8	60.4	59.7	1.9
OPEC NGL	5.7	5.8	5.9	6.1	5.9	6.0	0.1	6.0	6.0	6.1	6.1	6.1	0.1
OPEC Non-conventional	0.3	0.3	0.2	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
OPEC (NGL+NCF)	5.9	6.0	6.1	6.3	6.2	6.2	0.1	6.3	6.3	6.4	6.4	6.4	0.1
Non-OPEC &													
OPEC (NGL+NCF)	62.1	63.8	63.1	63.9	65.0	64.1	1.0	65.6	65.7	66.2	66.8	66.1	2.0

Note: \* OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

				Change							Change
	<u>2015</u>	<u>2016</u>	2017	2017/16	2Q17	3Q17	<u>4Q17</u>	1Q18	<u>Apr 18</u>	<u>May 18</u>	May/Apr
US	977	509	875	366	892	947	921	964	1,011	1,045	34
Canada	192	131	207	76	115	208	204	273	98	83	-15
Mexico	52	26	17	-8	23	18	12	19	25	23	-2
OECD Americas	1,221	665	1,099	434	1,030	1,174	1,137	1,257	1,134	1,151	17
Norway	17	17	15	-2	17	13	15	15	16	13	-3
UK	14	9	9	0	9	11	6	6	6	6	0
OECD Europe	117	96	92	-4	92	88	88	86	88	80	-8
OECD Asia Pacific	17	7	15	9	17	15	16	16	18	23	5
Total OECD	1,355	768	1,206	438	1,139	1,277	1,240	1,359	1,240	1,254	14
Other Asia*	202	180	186	6	182	178	199	196	191	195	4
Latin America	145	68	70	2	62	75	82	80	79	74	-5
Middle East	102	88	74	-14	76	75	70	73	77	74	-3
Africa	29	17	16	-1	17	17	15	16	22	24	2
Total DCs	478	353	346	-7	337	346	365	365	369	367	-2
Non-OPEC rig count	1,833	1,121	1,552	431	1,477	1,622	1,606	1,724	1,609	1,621	12
Algeria	51	54	54	0	56	54	53	53	55	50	-5
Angola	11	6	3	-4	3	2	2	3	2	4	2
Ecuador	12	4	6	2	8	5	6	6	6	6	0
Equatorial Guinea**	1	1	1	0	1	1	1	1	1	1	0
Gabon	4	1	1	0	1	1	2	3	4	4	0
lran**	54	59	61	2	61	61	61	61	61	61	0
lraq**	52	43	49	6	49	54	52	58	60	60	0
Kuwait**	47	44	54	9	55	53	52	54	54	54	0
Libya**	3	1	1	0	1	1	1	1	1	1	0
Nigeria	30	25	28	3	28	27	28	32	32	33	1
Qatar	8	8	10	2	11	10	7	8	11	11	0
Saudi Arabia	155	156	149	-7	150	148	147	145	142	147	5
UAE	42	51	52	1	51	53	53	53	54	54	0
Venezuela	110	100	91	-9	95	89	85	88	78	70	-8
OPEC rig count	579	552	558	6	568	561	550	566	561	556	-5
World rig count***	2,412	1,673	2,110	437	2,045	2,183	2,156	2,289	2,170	2,177	7
of which:											
Oil	1,750	1,189	1,541	352	1,503	1,608	1,591	1,727	1,635	1,645	10
Gas	563	370	466	96	441	478	466	468	441	437	-4
Others	100	113	103	-10	101	98	98	94	94	95	1

Note: \* Other Asia includes Indonesia.

Totals may not add up due to independent rounding.

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

<sup>\*\*</sup> Estimated data when Baker Hughes Incorporated did not reported the data.

<sup>\*\*\*</sup> Data excludes China and FSU.

## Key takeaways from the

## **OPEC Annual Statistical Bulletin (ASB) 2018**

The **OPEC ASB**<sup>4</sup> provides detailed and comprehensive time-series data on many different aspects of the global petroleum industry, including production, demand, imports and exports, as well as exploration and transportation activities. The publication contains key statistical data on oil and natural gas activities in each of OPEC's 14 Member Countries. Additionally, it provides valuable industry data for various countries with detailed classifications, mainly by geographical region, and covers the major global economic areas.

The OPEC ASB 2018 comprises data up to the end of 2017. The following are some of the key takeaways from the publication.

- In 2017, **world crude oil production** declined by 0.70 mb/d, or 0.9%, as compared to 2016, to reach 74.69 mb/d, marking the first yearly decline since 2009. OPEC crude oil production fell y-o-y by 0.93 mb/d, or 2.8%, while crude production in non-OPEC countries registered gains. The biggest increases were for the US with 0.50 mb/d, or 5.6%, and Libya with 0.43 mb/d, or 109.5%, while the largest declines were seen in Saudi Arabia at 0.50 mb/d, or 4.8%, and Venezuela at 0.34 mb/d, or 14.2%. In 2017, the top three crude oil producing countries were Russia (10.35 mb/d), Saudi Arabia (9.96 mb/d) and the US (9.36 mb/d).
- World oil demand averaged 97.20 mb/d in 2017, up by 1.7% y-o-y, with the largest increases taking place in the Asia and Pacific region (particularly China and India), Europe and North America. Total OECD oil demand grew solidly for the third consecutive year in 2017, while oil demand in OPEC Member Countries returned to modest growth after declining in 2016. Distillates and gasoline accounted for around 55.6% of total world oil demand in 2017, and are on an increasing trend.
- World refinery capacity expanded by 0.10 mb/cd<sup>5</sup> to stand at 96.93 mb/cd during 2017, mainly supported by additions in the Asia and Pacific region, particularly China and India. Refinery capacity in the OECD in 2017 declined by 0.17 mb/cd, mainly due to closures in Europe and Japan. Global refinery throughput ramped up by 1.6% to reach 83.7 mb/d in 2017.
- Total exports of crude oil from OPEC Member Countries averaged 24.86 mb/d in 2017 declining by 0.41 mb/d, or 1.6%, as compared to 2016. As in previous years, the bulk of crude oil from Member Countries was exported to the Asia and Pacific region, in the amount of 15.56 mb/d, or 62.6%.
- The **OPEC Reference Basket** averaged \$52.43/b in 2017, up from \$40.76/b in 2016. The yearly increase was \$11.67/b, or 28.6%, compared to 2016. The 2017 volatility stood at \$5.00/b, or 9.5%, relative to the yearly average.

<sup>&</sup>lt;sup>4</sup> The interactive version of the ASB can be retrieved under http://asb.opec.org/; a Smart App is also publicly available for iOS and Android devices.

<sup>&</sup>lt;sup>5</sup> Million barrels per calendar day.

## **Glossary of Terms**

## **Abbreviations**

b barrels

b/d barrels per day
bp basis points
bb billion barrels
bcf billion cubic feet

cu m cubic metres

mb million barrels

mb/d million barrels per day mmbtu million British thermal units

mn million

m-o-m month-on-month mt metric tonnes

q-o-q quarter-on-quarter

pp percentage points

tb/d thousand barrels per day

tcf trillion cubic feet

y-o-y year-on-year y-t-d year-to-date

### **Acronyms**

ARA Amsterdam-Rotterdam-Antwerp

BoE Bank of England
BoJ Bank of Japan
BOP Balance of payments

BRIC Brazil, Russia, India and China

CAPEX capital expenditures

CCI Consumer Confidence Index

CFTC Commodity Futures Trading Commission

CIF cost, insurance and freight CPI consumer price index

DCs developing countries

DUC drilled, but uncompleted (oil well)

ECB European Central Bank

EIA US Energy Information Administration Emirates NBD Emirates National Bank of Dubai

EMs emerging markets EV electric vehicle

FAI fixed asset investment
FCC fluid catalytic cracking
FDI foreign direct investment
Fed US Federal Reserve
FID final investment decision

FOB free on board

FPSO floating production storage and offloading

FSU Former Soviet Union FX Foreign Exchange

FY fiscal year

GDP gross domestic product GFCF gross fixed capital formation

GoM Gulf of Mexico GTLs gas-to-liquids

HH Henry Hub

HSFO high-sulphur fuel oil

ICE Intercontinental Exchange
IEA International Energy Agency
IMF International Monetary Fund
IOCs international oil companies

IP industrial production

ISM Institute of Supply Management

LIBOR London inter-bank offered rate

LLS Light Louisiana Sweet
LNG liquefied natural gas
LPG liquefied petroleum gas
LR long-range (vessel)
LSFO low-sulphur fuel oil

MCs (OPEC) Member Countries

MED Mediterranean

MENA Middle East/North Africa

MOMR (OPEC) Monthly Oil Market Report

MPV multi-purpose vehicle

MR medium-range or mid-range (vessel)

NBS National Bureau of Statistics

NGLs natural gas liquids

NPC National People's Congress (China)

NWE Northwest Europe

NYMEX New York Mercantile Exchange

OECD Organisation for Economic Co-operation and Development

OPEX operational expenditures
OIV total open interest volume
ORB OPEC Reference Basket
OSP Official Selling Price

PADD Petroleum Administration for Defense Districts

PBoC People's Bank of China 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

## **Contributors to the OPEC Monthly Oil Market Report**

#### **Editor-in-Chief**

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

#### **Editor**

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

#### **Analysts**

Crude Oil Price Movements Eissa Alzerma

email: ealzerma(at)opec.org

Commodity Markets Hector Hurtado

email: hhurtado(at)opec.org

World Economy Afshin Javan

email: ajavan(at)opec.org

Imad Al-Khayyat

email: ial-khayyat(at)opec.org

Joerg Spitzy

email: jspitzy(at)opec.org

World Oil Demand Hassan Balfakeih

email: hbalfakeih(at)opec.org

World Oil Supply

Mohammad Ali Danesh
email: mdanesh(at)opec.org

Product Markets and Refinery Operations Tona Ndamba

email: tndamba(at)opec.org

Tanker Market and Oil Trade Anisah Almadhayyan

email: aalmadhayyan(at)opec.org

Stock Movements Aziz Yahyai

email: ayahyai(at)opec.org

Technical team Nadir Guerer

email: nguerer(at)opec.org

Aziz Yahyai

email: ayahyai(at)opec.org

Viveca Hameder

email: vhameder(at)opec.org

#### Statistical services

Adedapo Odulaja, Head, Data Services Department (aodulaja(at)opec.org),

Hossein Hassani, Statistical Systems Coordinator (hhassani(at)opec.org),

Pantelis Christodoulides (World Oil Demand), Klaus Stoeger (World Oil Supply),

Mouhamad Moudassir (World Economy),

Mohammad Sattar (Crude Oil Price Movements, Tanker Market, Oil Trade),

Ryszard Pospiech (Commodity Markets, Tanker Market, Stock Movements),

Mihni Mihnev (Product Markets and Refinery Operations)

### Editing, production, design and circulation

James Griffin, Fantini, Alvino-Mario Fantini, Maureen MacNeil, Scott Laury, Matthew Quinn, Hataichanok Leimlehner, Liane-Sophie Hamamciyan, Andrea Birnbach

#### Disclaimer

The data, analysis and any other information contained in the Monthly Oil Market Report (the "MOMR") is for informational purposes only and is not intended as a substitute for advice from your business, finance, investment consultant or other professional. The views expressed in the MOMR are those of the OPEC Secretariat and do not necessarily reflect the views of its Governing Bodies and/or individual OPEC Member Countries.

Whilst reasonable efforts have been made to ensure the accuracy of the MOMR's content, the OPEC Secretariat makes no warranties or representations as to its accuracy, currency reference or comprehensiveness, and assumes no liability or responsibility for any inaccuracy, error or omission, or for any loss or damage arising in connection with or attributable to any action or decision taken as a result of using or relying on the information in the MOMR.

The MOMR may contain references to material(s) from third parties whose copyright must be acknowledged by obtaining necessary authorization from the copyright owner(s). The OPEC Secretariat shall not be liable or responsible for any unauthorized use of third party material(s). All rights of the Publication shall be reserved to the OPEC Secretariat, including every exclusive economic right, in full or per excerpts, with special reference but without limitation, to the right to publish it by press and/or by any communications medium whatsoever, including Internet; translate, include in a data base, make changes, transform and process for any kind of use, including radio, television or cinema adaptations, as well as sound-video recording, audio-visual screenplays and electronic processing of any kind and nature whatsoever.

Full reproduction, copying or transmission of the MOMR is not permitted in any form or by any means by third parties without the OPEC Secretariat's written permission, however the information contained therein may be used and/or reproduced for educational and other non-commercial purposes without the OPEC Secretariat's prior written permission, provided that OPEC is fully acknowledged as the copyright holder.

	Year-to-date	67.48
	April 2018	68.43
up 5.68 in May	May 2018	74.11

May OPEC crude production		mb/d, according to secondary sources
A	Mar. 2040	24.07
up 0.04 in May	May 2018	31.87
	April 2018	31.83

Economic growth rate								
	World	OECD	US	Japan	Euro-zone	China	India	
2017	3.8	2.5	2.3	1.7	2.5	6.9	6.3	
2018	3.8	2.4	2.7	1.2	2.2	6.5	7.3	

Supply and dema	and				mb/d
2017		17/16	2018		18/17
World demand	97.2	1.7	World demand	98.8	1.7
Non-OPEC supply	57.9	0.9	Non-OPEC supply	59.7	1.9
OPEC NGLs	6.2	0.1	OPEC NGLs	6.4	0.1
Difference	33.1	0.7	Difference	32.7	-0.3

OECD commercial stocks						
	Feb 18	Mar 18	Apr 18	Apr 18/Mar 18	Apr 17	
Crude oil	1,406	1,402	1,416	13.5	1,538	
Products	1,439	1,415	1,395	-20.2	1,519	
Total	2,845	2,817	2,811	<b>-</b> 6.7	3,057	
Days of forward cover	60.3	59.5	59.1	-0.4	64.3	