

# OPEC

## Monthly Oil Market Report

12 April 2017

***Feature article:***  
***Summer oil market outlook***

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# Oil Market Highlights

## Crude Oil Price Movements

The OPEC Reference Basket averaged \$50.32/b in March, representing a decline of 5.7% from the previous month. Crude futures also declined on concerns about growing oil output and high crude inventories in the US. ICE Brent ended 6.2% lower at \$52.54/b, while NYMEX WTI decreased 7.1% to \$49.67/b. The Brent-WTI spread widened to \$2.86/b, supporting US crude oil exports. Hedge funds liquidated their large net long positions in crude, contributing to the sharp drop in oil prices.

## World Economy

The momentum in global economic growth has been improving resulting in an upward revision in the 2017 forecast to now stand at 3.3% from 3.2% previously, while growth for 2016 remains at 3.0%. OECD growth in 2017 remains at 1.9%, with the US and Euro-zone seeing no revisions. Japan's 2017 growth forecast was revised up to 1.2% from 1.1% previously. China's 2017 growth was also revised higher to 6.3% from 6.2%, while India's forecast remains at 7.0%. Russia's 2017 growth was revised up to 1.2% from 1.0%, while the forecast for Brazil is unchanged at 0.5%.

## World Oil Demand

World oil demand growth in 2016 was kept broadly unchanged at 1.38 mb/d, averaging 95.05 mb/d. For 2017, oil demand growth is anticipated to be around 1.27 mb/d, following an upward revision of 10 tb/d to average 96.32 mb/d. The 'Other Asia' group – which includes India – is anticipated to lead oil demand growth in 2017, followed by China and OECD Americas. OECD Asia Pacific is the only region anticipated to see a decline in oil demand in 2017.

## World Oil Supply

Non-OPEC oil supply is estimated to have averaged 57.32 mb/d in 2016, representing a contraction of 0.69 mb/d y-o-y following a minor downward revision of 30 tb/d. In 2017, non-OPEC oil supply is projected to grow by 0.58 mb/d, following an upward revision of 176 tb/d due to higher than expected growth in the US and lesser contractions in Colombia and China, to average 57.89 mb/d. The US supply growth forecast was revised up by 0.20 mb/d to stand at 0.54 mb/d. OPEC NGLs and non-conventional oil production is forecast to grow by 0.13 mb/d in 2017, following growth of 0.14 mb/d in 2016. In March, OPEC production decreased by 153 tb/d, according to secondary sources, to average 31.93 mb/d.

## Product Markets and Refining Operations

Product markets exhibited a mixed performance in the Atlantic Basin, as the lack of export opportunities for gasoline amid increasing inflows of middle distillates impacted the European market. Meanwhile, stronger domestic gasoline demand in the US ahead of the transition to summer grades lent strong support to refinery margins. In Asia, the lack of arbitrage amid increasing inflows into the region weighed on the market despite the onset of the spring refinery maintenance season.

## Tanker Market

The tanker market showed a mixed pattern in March. VLCCs exhibiting an average decline of 23% m-o-m in spot rates on its various trading routes, as the tonnage availability remained abundant. In contrast, Suezmax and Aframax rates increased m-o-m by 13%, and 6%, respectively, mainly due to transit delays in the Turkish Straits, discharge delays in the east, and occasional tightening in tonnage supply. The market experienced higher monthly freight rates for clean tankers on most reported routes.

## Stock Movements

Total OECD commercial oil stocks fell in February to 2,987 mb to now stand 268 mb above the latest five-year average. Crude and product stocks indicated a surplus of around 227 mb and 41 mb, respectively. In terms of days of forward cover, OECD commercial stocks stood at 64.2 days, some 4.6 days higher than the latest five-year average.

## Balance of Supply and Demand

Demand for OPEC crude in 2016 now stands at 31.7 mb/d, which is 1.9 mb/d higher than the 2015 level. In 2017, demand for OPEC crude is projected at 32.2 mb/d, around 0.6 mb/d higher than the 2016 level.

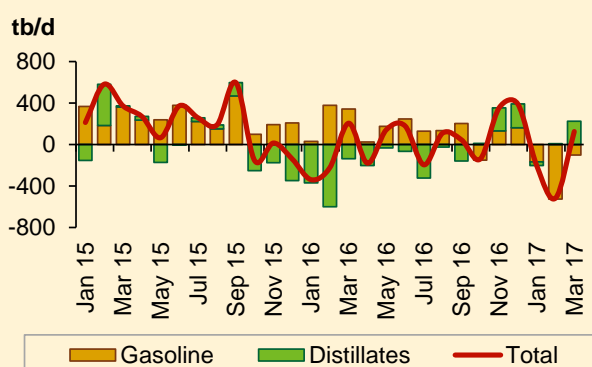
## Feature Article

### Summer oil market outlook

Product markets and refinery margins, particularly in the Atlantic basin, were impacted in 2016 by the high level of inventories worldwide. Additionally, the increase in crude oil prices and the deceleration in diesel demand growth, mainly in China and the US, capped refinery margins. In general, product crack spreads struggled to recover in the latter part of the year as the colder winter weather failed to boost prices.

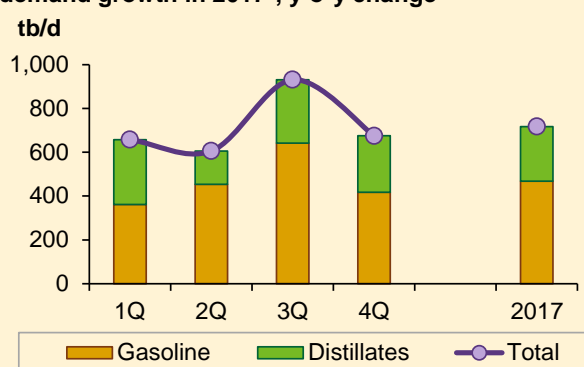
The US is typically a key driver of product markets in the run-up to the summer driving season. Despite weakness at the beginning of 2017, the US gasoline market has seen some recovery in recent weeks (see **Graph 1**). After slowing by 170 tb/d y-o-y in January, US gasoline demand has been on the rise, averaging more than 9.3 mb/d in March, according to preliminary EIA weekly data. Another positive factor has been the continued decline in US gasoline inventories, which have fallen by around 20 million barrels since the end of January. Heavy refinery maintenance and higher exports to Latin America have contributed to these draws.

**Graph 1: US product consumption, y-o-y change**



Note: 2017 data based on weekly average.  
Sources: US EIA and OPEC Secretariat.

**Graph 2: Global gasoline and distillates quarterly demand growth in 2017\*, y-o-y change**



Note: \* 2017 = Forecast.  
Sources: US EIA and OPEC Secretariat.

Middle distillates have also started to show a positive performance in the US. A continued draw has been seen in inventories amid demand reaching more than 4 mb/d in March following growth of 240 tb/d y-o-y. Outside the US, the middle distillates market has experienced some recovery from the slump seen last year in several regions. Demand has picked up since 4Q16 and is expected to continue to recover over the coming months, supported by the improving economic performance, particularly in Asia where manufacturing PMIs have moved higher not only in India and China but also in Vietnam and the Philippines. Gasoil demand in China is expected to be supported by higher investments in infrastructure and increasing mining activities. Healthy economic activities in Asia will have a positive impact on all products in the region – particularly gasoil – in the coming months. In Europe, gasoil consumption has also improved due to the improving economy across large parts of the continent, colder weather during the first quarter of 2017, and the high growth in vehicle sales. However, this momentum is not expected to continue over the remainder of the year. As a result, global gasoline and distillate demand is forecast to grow by around a combined 718 tb/d in 2017 (see **Graph 2**).

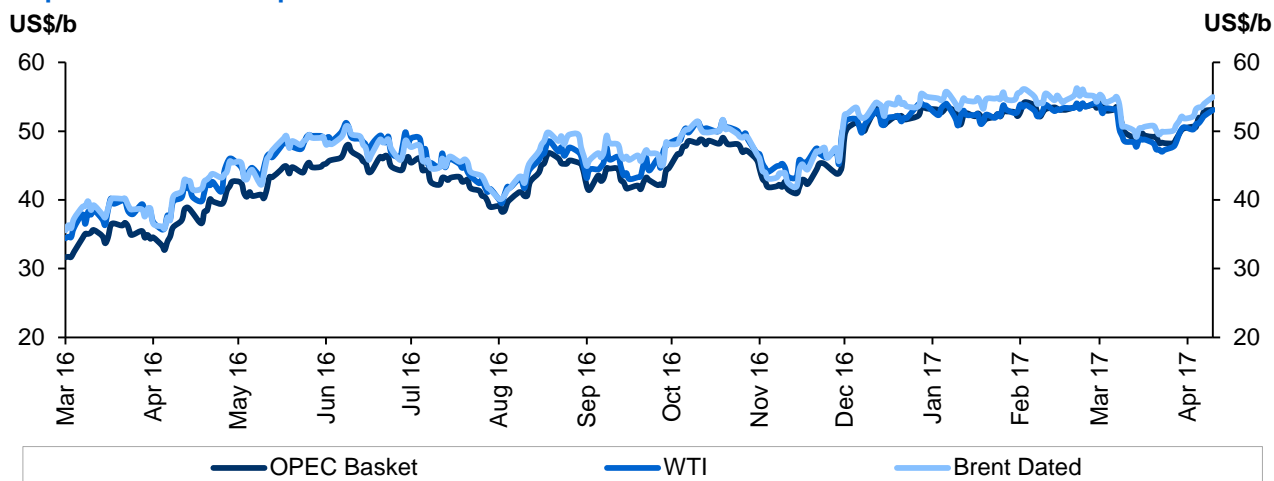
Despite some downside risks, general expectations for demand growth for oil products in the coming months remain bullish, supported by firm economic performance across the globe and the expected increase in demand for gasoline over the driving season, mainly in North America and Asia. Higher demand for oil products will encourage refiners to maximise throughputs following the end of the spring maintenance season, amid new capacity coming on line in North America, Middle East and Asia. This in turn will increase demand for crude oil over the coming months and already has for long haul crude oil deliveries. The return of refineries from seasonal maintenance and healthy demand, together with the high conformity observed in OPEC and non-OPEC production adjustments, should enhance market stability and reduce the volatility seen in recent weeks.

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

	<u>Feb 17</u>	<u>Mar 17</u>	<u>Change</u> <u>Mar/Feb</u>	<u>%</u>	<u>Year-to-date</u> <u>2016</u>	<u>2017</u>
<b>Basket</b>	<b>53.37</b>	<b>50.32</b>	<b>-3.05</b>	<b>-5.7</b>	<b>30.16</b>	<b>51.95</b>
Arab Light	53.63	50.68	-2.95	-5.5	30.16	52.13
Basrah Light	52.66	49.82	-2.84	-5.4	28.61	51.31
Bonny Light	55.24	51.91	-3.33	-6.0	33.92	53.96
Es Sider	53.46	50.00	-3.46	-6.5	33.10	52.10
Girassol	55.21	51.89	-3.32	-6.0	33.76	53.75
Iran Heavy	53.16	50.27	-2.89	-5.4	28.41	51.71
Kuwait Export	52.85	49.87	-2.98	-5.6	28.11	51.33
Qatar Marine	54.14	50.89	-3.25	-6.0	30.83	52.74
Merey	47.03	44.14	-2.89	-6.1	22.80	45.92
Murban	56.31	52.96	-3.35	-5.9	35.45	55.00
Oriente	50.08	46.83	-3.25	-6.5	26.92	48.44
Rabi Light	54.04	50.63	-3.41	-6.3	33.10	52.52
Sahara Blend	55.06	51.40	-3.66	-6.6	34.85	53.67
<b>Other Crudes</b>						
Dated Brent	55.06	51.60	-3.46	-6.3	34.10	53.66
Dubai	54.41	51.21	-3.20	-5.9	30.67	53.03
Isthmus	56.09	52.26	-3.83	-6.8	31.53	54.35
LLS	55.15	51.36	-3.79	-6.9	35.22	53.43
Mars	51.30	47.88	-3.42	-6.7	30.09	49.58
Minas	51.19	48.35	-2.84	-5.5	31.74	49.98
Urals	53.67	49.94	-3.73	-6.9	32.49	52.25
WTI	53.40	49.58	-3.82	-7.2	33.36	51.73
<b>Differentials</b>						
Brent/WTI	1.66	2.02	0.36	-	0.74	1.93
Brent/LLS	-0.09	0.24	0.33	-	-1.12	0.23
Brent/Dubai	0.65	0.39	-0.26	-	3.43	0.63

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

**ORB component values** dropped across the board along with relevant crude oil benchmarks, along with the monthly changes in their respective official selling price (OSP) differentials. The crude oil physical benchmarks, namely Dated Brent, Dubai and WTI spot prices declined in March by \$3.46/b, \$3.20/b and \$3.82/b, respectively.

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

Sources: Argus Media, OPEC Secretariat and Platts.

Despite late March light sweet crudes supply turmoil and open arbitrage to Asia, plentiful Atlantic basin supply continued to pressure the price differentials for light sweet crudes from West and North African Basket components. Saharan Blend, Es Sider, Girassol, Bonny Light and Rabi Light values slipped \$3.44/b on average, or 6.3%, to \$51.17/b. Physical crude differentials for these grades have come under renewed pressure as supply surged. Given the drop in crude oil benchmarks more than outweighed the uplift in OSP offsets and the healthy global sour markets, the value of multiple regions destination grades, Arab Light, Basrah Light, Iran Heavy and Kuwait Export decreased \$2.91/b on average for the month, or 5.5% to \$50.16/b. The Middle Eastern spot components, Murban and Qatar Marine, saw their values deteriorate by \$3.30/b, or 6.0%, to \$51.93/b. The Latin American ORB components, Venezuelan Merey settled \$2.89, or 6.1% lower, at \$44.14/b. Ecuador's Oriente also slipped \$3.25, or 6.5%, to settle at \$46.83/b.

On 11 April, the ORB was up 23¢ at \$53.36/b, over \$3.04 above the March average.

## The oil futures market

For the first time this year, oil futures on both sides of the Atlantic were down m-o-m, but were up sharply for the quarter and the year. Both fell to their lowest monthly value since November 2016. Crude oil futures dropped over the month on concerns about the pace of the decline in the global crude glut and seasonal refinery maintenance. Amid worries about the pace and timing of the expected balanced market, speculators exited from record high positions on the futures markets as investors contended with bearish market fundamentals, focused mainly on growing US oil output and high US crude oil inventories.

Rising US domestic production, lower exports and seasonal lower refiner runs boosted US crude stocks to a record high of just over 534 mb in the last week of March. Some of the stock build took place at Cushing, Oklahoma, the midcontinent pricing point of WTI, where inventories are also near record highs. The US oil rig count reached 662 in the week to 31 March, up from 362 active oil rigs during the same week a year ago. The rig count increase came despite a collapse in US crude futures over the month. US tight crude oil production is expected to rise by 109 tb/d to 4.96 mb/d in April, its biggest monthly increase since October, according to a US Energy Information Administration report.

**ICE Brent** ended March \$3.46 lower, a drop of 6.2%, to stand at \$52.54/b on a monthly average basis, while **NYMEX WTI** decreased a hefty \$3.79, or 7.1%, to stand at \$49.67/b. In contrast, ICE Brent ended 1Q17 \$3.51 higher, an increase of 6.9%, to reach \$54.57/b on average, while NYMEX WTI increased \$2.49, or 5.1%, to reach \$51.78/b. Y-t-d, ICE Brent is \$19.37, or 55% higher, while NYMEX WTI surged \$18.16, or 54% higher.

Crude oil futures prices improved in the second week of April. On 11 April, ICE Brent stood at \$56.23/b and NYMEX WTI at \$53.40/b.

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

	<u>Feb 17</u>	<u>Mar 17</u>	<u>Change</u> <u>Mar/Feb</u>	<u>%</u>	<u>Year-to-date</u> <u>2016</u>	<u>2017</u>
<b>NYMEX WTI</b>	53.46	49.67	-3.79	-7.1	33.63	51.78
<b>ICE Brent</b>	56.00	52.54	-3.46	-6.2	35.21	54.61
<b>Transatlantic spread</b>	<b>2.53</b>	<b>2.86</b>	<b>0.33</b>	<b>0.91</b>	<b>1.58</b>	<b>2.83</b>

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

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

With the market heading into peak seasonal refinery maintenance, hedge funds liquidated their large bullish position in crude, contributing to the sharp drop in oil prices starting on 8 March. By 28 March, the net position of hedge funds in ICE Brent and NYMEX WTI had been adjusted to 617 mb, down from a record 921 mb on 21 February. This development reversed more than half of the extra net long positions accumulated between the middle of November and the end of February. In the five weeks to 28 March, hedge funds adjusted long positions by 167 mb, while adding 137 mb on the short side. The result is that the ratio of long to short positions in Brent and WTI has fallen to 3.8:1, down from a recent high of 10.3:1 on 21 February. Speculative net length in NYMEX WTI dropped 169,022 contracts, or 41%, from its level the week of 21 February, to 244,615 contracts in the week to 28 March. Similarly, in ICE Brent futures and options, speculators adjusted net long positions by 134,853 contracts, or 27%, to 372,756 lots. The total

## OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids are estimated to average 6.09 mb/d in 2016, representing growth of 0.14 mb/d over the previous year. In 2017, OPEC NGLs and non-conventional liquids production is projected to average 6.21 mb/d, representing an increase of 0.13 mb/d over the previous year, unchanged from last month's *MOMR*.

**Table 5 - 6: OPEC NGLs + non-conventional oils, 2014-2017\*, mb/d**

	<u>2014</u>	<u>2015</u>	<u>Change</u> <u>15/14</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>2016</u>	<u>Change</u> <u>16/15</u>	<u>2017</u>	<u>Change</u> <u>17/16</u>
<b>Total OPEC</b>	<b>5.83</b>	<b>5.94</b>	0.11	6.05	6.08	6.11	6.11	<b>6.09</b>	0.14	<b>6.21</b>	0.13

Note: \* 2016 = Estimate and 2017 = Forecast.

Source: OPEC Secretariat.

## OPEC crude oil production

According to secondary sources, OPEC crude oil production in March decreased by 153 tb/d from the previous month to average 31.93 mb/d.

**Table 5 - 7: OPEC crude oil production based on secondary sources, tb/d**

	<u>2015</u>	<u>2016</u>	<u>3Q16</u>	<u>4Q16</u>	<u>1Q17</u>	<u>Jan 17</u>	<u>Feb 17</u>	<u>Mar 17</u>	<u>Mar/Feb</u>
<b>Algeria</b>	1,107	1,090	1,093	1,091	1,054	1,053	1,052	1,056	4.5
<b>Angola</b>	1,755	1,725	1,756	1,623	1,635	1,658	1,633	1,614	-18.7
<b>Ecuador</b>	543	546	547	542	528	530	529	526	-2.8
<b>Gabon</b>	225	220	221	211	199	203	196	198	1.9
<b>Iran, I.R.</b>	2,836	3,505	3,643	3,735	3,795	3,780	3,819	3,790	-28.7
<b>Iraq</b>	3,961	4,389	4,406	4,600	4,430	4,475	4,411	4,402	-8.5
<b>Kuwait</b>	2,764	2,853	2,880	2,874	2,712	2,722	2,712	2,702	-9.5
<b>Libya</b>	404	390	309	574	660	678	683	622	-60.8
<b>Nigeria</b>	1,862	1,578	1,412	1,572	1,550	1,533	1,575	1,545	-29.8
<b>Qatar</b>	663	656	651	642	609	620	595	612	16.6
<b>Saudi Arabia</b>	10,142	10,406	10,596	10,541	9,917	9,809	9,952	9,994	41.6
<b>UAE</b>	2,906	2,975	3,045	3,079	2,927	2,958	2,928	2,895	-32.7
<b>Venezuela</b>	2,375	2,159	2,103	2,057	1,993	2,007	1,998	1,972	-25.9
<b>Total OPEC</b>	<b>31,542</b>	<b>32,492</b>	<b>32,663</b>	<b>33,142</b>	<b>32,009</b>	<b>32,026</b>	<b>32,081</b>	<b>31,928</b>	<b>-152.7</b>

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

Source: OPEC Secretariat.

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

	2015	2016	3Q16	4Q16	1Q17	Jan 17	Feb 17	Mar 17	Mar/Feb
<b>Algeria</b>	1,157	1,146	1,162	1,168	1,087	1,091	1,084	1,085	1.0
<b>Angola</b>	1,767	1,722	1,736	1,610	1,638	1,615	1,649	1,652	3.0
<b>Ecuador</b>	543	549	551	543	533	534	535	531	-4.5
<b>Gabon</b>	..	..	..	..	..	..	..	..	..
<b>Iran, I.R.</b>	3,152	3,651	3,653	3,993	..	3,920	3,870	..	..
<b>Iraq</b>	3,504	4,648	4,666	4,802	..	4,630	4,566	..	..
<b>Kuwait</b>	2,859	2,954	2,969	2,915	2,705	2,710	2,705	2,700	-5.0
<b>Libya</b>	..	..	..	..	..	..	..	..	..
<b>Nigeria</b>	1,748	1,427	1,227	1,401	1,408	1,533	1,426	1,269	-156.9
<b>Qatar</b>	656	652	644	632	595	615	545	621	76.5
<b>Saudi Arabia</b>	10,193	10,460	10,651	10,602	9,882	9,748	10,011	9,900	-111.0
<b>UAE</b>	2,989	3,089	3,174	3,201	3,010	3,060	2,995	2,973	-22.0
<b>Venezuela</b>	2,654	2,373	2,326	2,265	2,244	2,250	2,248	2,235	-13.2
<b>Total OPEC</b>	..	..	..	..	..	..	..	..	..

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

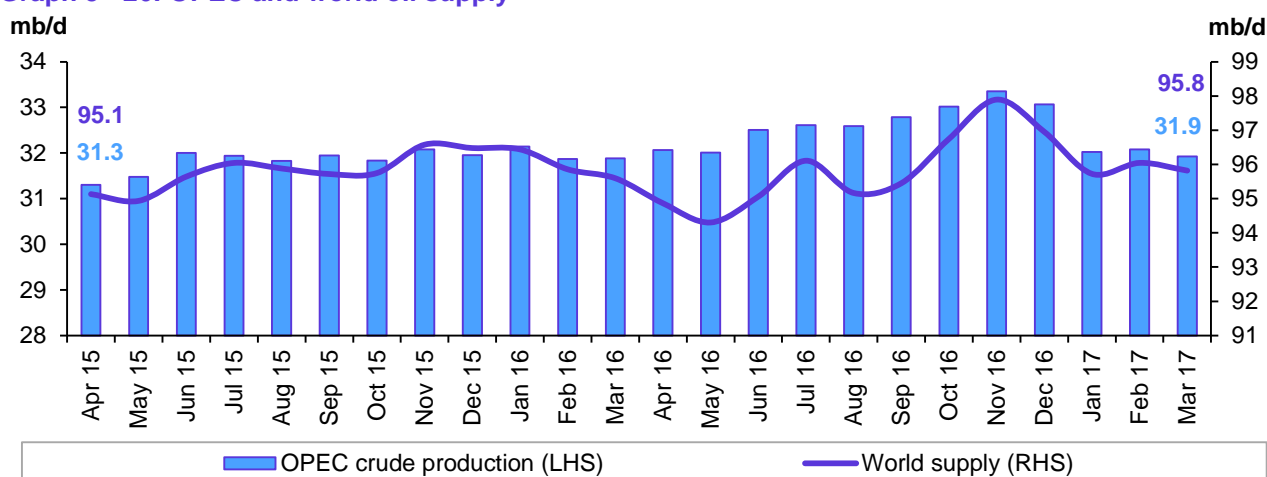
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Source: OPEC Secretariat.

## World oil supply

Preliminary data indicates that global oil supply decreased by 226 tb/d in March to average 95.82 mb/d, higher by 0.22 mb/d y-o-y. A decrease in non-OPEC supply, including OPEC NGLs, of 0.07 mb/d and from OPEC crude of 0.15 mb/d, further reduced the overall global oil output in March. The share of OPEC crude oil in total global production stood at 33.3% in March, a decrease of 0.08 pp from the month before. Estimates are based on preliminary data for non-OPEC supply, direct communication for OPEC NGLs and non-conventional liquids, and secondary sources for OPEC crude oil production.

Graph 5 - 26: OPEC and world oil supply



Source: OPEC Secretariat.



Table 12 - 5: World rig count, units

				Change							Change
	2014	2015	2016	2016/15	2Q16	3Q16	4Q16	1Q17	Feb 17	Mar 17	Mar/Feb
US	1,862	977	509	-468	420	479	586	739	744	789	45
Canada	380	192	131	-61	49	122	180	299	342	253	-89
Mexico	86	52	26	-26	22	25	19	17	16	18	2
OECD Americas	2,327	1,221	665	-556	490	626	785	1,054	1,102	1,060	-42
Norway	17	17	17	-1	17	18	13	14	16	15	-1
UK	16	14	9	-5	9	9	9	9	11	8	-3
OECD Europe	145	117	96	-21	92	94	94	100	107	94	-13
OECD Asia Pacific	26	17	7	-11	6	5	6	14	14	13	-1
<b>Total OECD</b>	<b>2,499</b>	<b>1,355</b>	<b>768</b>	<b>-587</b>	<b>588</b>	<b>724</b>	<b>885</b>	<b>1,168</b>	<b>1,223</b>	<b>1,167</b>	<b>-56</b>
Other Asia*	228	202	180	-22	178	185	181	184	182	185	3
Latin America	172	145	68	-77	62	64	64	61	60	64	4
Middle East	108	102	88	-14	92	85	75	74	72	78	6
Africa	47	30	18	-12	19	15	17	16	16	16	0
<b>Total DCs</b>	<b>555</b>	<b>479</b>	<b>354</b>	<b>-126</b>	<b>351</b>	<b>349</b>	<b>337</b>	<b>335</b>	<b>330</b>	<b>343</b>	<b>13</b>
<b>Non-OPEC rig count</b>	<b>3,053</b>	<b>1,834</b>	<b>1,122</b>	<b>-712</b>	<b>939</b>	<b>1,073</b>	<b>1,223</b>	<b>1,503</b>	<b>1,553</b>	<b>1,510</b>	<b>-43</b>
Algeria	48	51	54	3	54	55	53	51	50	51	1
Angola	15	11	6	-5	9	4	3	3	3	2	-1
Ecuador	24	12	4	-8	3	5	6	7	7	7	0
Gabon	7	4	1	-3	1	0	0	0	0	0	0
Iran**	54	54	57	3	59	60	61	61	61	61	0
Iraq**	79	52	43	-9	42	39	41	41	40	43	3
Kuwait**	38	47	44	-2	42	47	46	55	59	54	-5
Libya**	10	3	1	-2	1	1	1	1	1	1	0
Nigeria	34	30	25	-5	25	24	23	27	26	29	3
Qatar	10	8	8	0	7	7	10	11	11	11	0
Saudi Arabia	134	155	156	1	154	155	157	152	151	150	-1
UAE	34	42	51	8	50	51	52	50	49	50	1
Venezuela	116	110	100	-10	103	93	92	95	96	96	0
<b>OPEC rig count</b>	<b>603</b>	<b>578</b>	<b>549</b>	<b>-29</b>	<b>551</b>	<b>542</b>	<b>546</b>	<b>553</b>	<b>554</b>	<b>555</b>	<b>1</b>
<b>World rig count***</b>	<b>3,656</b>	<b>2,412</b>	<b>1,670</b>	<b>-742</b>	<b>1,490</b>	<b>1,615</b>	<b>1,769</b>	<b>2,056</b>	<b>2,107</b>	<b>2,065</b>	<b>-42</b>
<i>of which:</i>											
Oil	2,795	1,727	1,170	-557	1,043	1,135	1,235	1,446	1,489	1,473	-16
Gas	743	563	370	-193	315	343	400	477	485	466	-19
Others	95	100	111	11	112	119	116	115	114	107	-7

Note: \* Other Asia includes Indonesia.

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

\*\*\* Data excludes China and FSU.

Totals may not add up due to independent rounding.

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