

10 August 2018

## HIGHLIGHTS

- Following strong demand growth in 1Q18, in 2Q18 and 3Q18 the pace has slowed dramatically to a relatively subdued 1 mb/d. In 4Q18 we expect a rebound and demand will be 100.2 mb/d.
- For 2018, our global demand growth outlook is unchanged at 1.4 mb/d. In 2019 growth accelerates slightly to 1.5 mb/d, but there are risks to the forecast from escalating trade disputes and rising prices if supply is constrained.
- Global oil supply rose by 300 kb/d in July to 99.4 mb/d, 1.1 mb/d above a year-ago. Compliance with the Vienna Agreement eased to 97% in July as output cuts were relaxed. Non-OPEC production is expected to grow by 2 mb/d in 2018 and by 1.85 mb/d next year.
- OPEC crude oil output was steady in July, at 32.18 mb/d. An unexpected decline in Saudi Arabian supply was offset by higher production from the UAE, Kuwait and Nigeria. OPEC compliance was unchanged in July at 121%.
- OECD commercial stocks fell seasonally by 7.2 mb in June to 2 823 mb and were 32 mb below the five-year average. Stocks at the end of 2Q18 were up 6.6 mb versus end-1Q18, the first quarterly increase seen since 1Q17. Outside the OECD, inventories were also mostly higher during the quarter.
- ICE Brent prices fell in July on higher global output, while NYMEX WTI prices rose on strong US refining and exports. Both benchmarks are up 50% y-o-y. The Brent/WTI differential in July narrowed sharply versus June.
- Global refinery throughputs in 2H18 are expected to be 2 mb/d higher than in 1H18. Due to high summer demand, refined products stocks will draw before building again in 4Q18. The outlook will be heavily influenced by Iranian crude flows and resulting changes to crude prices and margins.

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## **Cooling down**

As suggested in last month's *Report*, the northern hemisphere summer has proved to be anything but quiet. Record high temperatures are causing various disruptions: low water levels in the Rhine are hampering barge traffic, refinery operations are impacted in certain locations, warm water is affecting nuclear power plants, and air-conditioning demand is soaring. Record temperatures are unlikely to influence significantly road and air transport demand one way or the other as holiday plans were typically made many weeks or months ago, but the sunny weather might provide a short-lived, modest boost. New data will show us in due course.

Meanwhile, concerns about the stability of oil supply have cooled down somewhat, at least for now. We have seen increases in production, mainly in Saudi Arabia and Russia, a surge in US exports in June that saw a record weekly average level of 3 mb/d, and a partial, but fragile, recovery in Libya. Ample supply has contributed to the Brent price falling from just over \$79/bbl at the end of June to below \$72/bbl earlier this week. This cooling down in prices is clearly welcome for consumers: the biggest single product market in the world is US gasoline and the national average price increase seen during the spring seems to have stalled for the time being.

With so much focus on geopolitics in recent months, underlying demand trends have perhaps received less attention but there are interesting developments. As far as *growth* is concerned, the global number for 2018 looks solid for now at 1.4 mb/d. However, this is heavily influenced by demand in 1Q18 when growth was more than 1.8 mb/d, mainly due to low temperatures in the northern hemisphere. As we move through 2Q18 and 3Q18, growth is estimated at only 1 mb/d, partly due to comparisons with high year-ago demand levels and because prices (based on Brent crude) have typically been about 45% higher. In OECD Europe, oil demand fell below last year's level in 2Q18, and in the US falling gasoline demand has contributed to more than the halving of total demand growth in 2Q18 versus 1Q18. The two leading non-OECD oil markets, China and India, both remain on course to grow solidly this year, although data issues with respect to China cloud the picture to some extent. As mentioned in recent editions of this *Report*, some developing countries are taking steps to shield consumers from higher prices. An example is Indonesia where plans are being made to increase sharply subsidies to maintain diesel and gasoline prices at current levels.

For 2019 demand growth, we have actually revised our outlook slightly upwards by 110 kb/d, partly influenced by the downward move of the forward price curve. Even so, there are considerable uncertainties. The risks to stable supply that will grow later this year could cause higher prices and thus impact demand growth. Another factor to consider is that trade tensions might escalate and lead to slower economic growth, and in turn lower oil demand. Trade tensions partly explain why the International Monetary Fund, in its recent *World Economic Outlook Update*, said, *"The balance of [economic] risks has shifted further to the downside, including in the short term"*. For now, we have made no changes to our underlying economic and oil demand assumptions, but we are mindful that demand growth could cool down later this year and into 2019. If this does happen, it might dampen to some extent the impact on prices of any supply pressures.

The recent cooling down of the market, with short term supply tensions easing, currently lower prices, and lower demand growth might not last. When we publish our next report in mid-September, we will be only six weeks away from the US's deadline for Iran's customers to cease oil purchases. As oil sanctions against Iran take effect, perhaps in combination with production problems elsewhere, maintaining global supply might be very challenging and would come at the expense of maintaining an adequate spare capacity cushion. Thus, the market outlook could be far less calm at that point than it is today.

# DEMAND

## Summary

After a very strong start to the year, with 1Q18 global oil demand growth of 1.8 mb/d, recent data point to a sharp slowdown in 2Q18, largely due to slower OECD demand. Data for May and June showed a significant year-on-year (y-o-y) decline in European oil demand and a slowdown in US growth. European oil demand is estimated to have declined by 120 kb/d y-o-y in 2Q18, and in the US, growth has slowed from 745 kb/d in 1Q18 to 245 kb/d in 2Q18. Overall, world demand growth in 2Q18 is estimated at only 750 kb/d. The strong y-o-y increase in oil prices is partly responsible for the slowdown. Brent crude oil prices in 2Q18 were on average 50 % higher than last year, and this was partly passed through to end-users. In addition, currency depreciation in some countries amplified the impact of higher oil prices.

Oil demand growth is expected to remain relatively subdued in 3Q18 before rebounding in 4Q18. Growth is projected to slow to below 1 mb/d in 1Q19, from a high 2018 base, on the assumption of a return to normal weather conditions. As the impact of rising prices in 2018 falls away, robust economic growth will support an acceleration of close to 2 mb/d y-o-y in 2Q19. Overall, world oil demand is expected to increase by 1.4 mb/d in 2018 and 1.5 mb/d in 2019.



OECD Americas oil demand growth is projected at around 400 kb/d in 2018, supported by a very strong start to the year reflecting harsh weather conditions and the start-up of petrochemical projects in the US. More ethane crackers coming on stream should support OECD Americas growth at 160 kb/d in 2019. OECD Europe demand is set to remain stagnant in 2018, and to increase by 140 kb/d in 2019. OECD Asia Oceania oil demand will post small declines in both 2018 and 2019. Overall, total OECD oil demand growth should slow from 360 kb/d in 2018 to 250 kb/d in 2019.

				(n	nillion ba	rrels per	day)*								
_	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
Africa	4.4	4.3	4.2	4.3	4.3	4.4	4.3	4.2	4.4	4.3	4.5	4.4	4.3	4.5	4.4
Americas	30.9	31.5	31.6	31.6	31.4	31.6	31.7	31.9	31.9	31.8	31.5	32.0	32.2	32.2	32.0
Asia/Pacific	34.1	34.0	33.4	34.5	34.0	35.1	34.7	34.2	35.6	34.9	35.8	35.6	34.9	36.5	35.7
Europe	14.5	15.0	15.5	15.2	15.0	14.8	14.9	15.4	15.2	15.1	14.8	15.2	15.6	15.3	15.2
FSU	4.3	4.5	4.8	4.7	4.6	4.4	4.7	4.8	4.7	4.7	4.5	4.7	4.9	4.8	4.7
Middle East	8.2	8.6	8.8	8.2	8.5	8.0	8.5	9.0	8.4	8.5	8.2	8.7	9.1	8.5	8.6
World	96.5	98.0	98.4	98.5	97.8	98.3	98.7	99.6	100.2	99.2	99.2	100.7	101.1	101.7	100.7
Annual Chg (%)	1.0	2.1	1.5	1.6	1.5	1.9	0.8	1.2	1.7	1.4	0.9	2.0	1.5	1.5	1.5
Annual Chg (mb/d)	1.0	2.0	1.4	1.5	1.5	1.8	0.7	1.2	1.7	1.4	0.9	2.0	1.5	1.5	1.5
Changes from last OMR (mb/d)	0.1	0.1	0.1	0.1	0.1	-0.1	0.0	0.3	0.1	0.1	0.1	0.4	0.2	0.1	0.2

#### Global Oil Demand (2017-2019)

\* Including biofuels

Non-OECD oil consumption should increase by 1 mb/d in 2018, slightly lower than the 1.12 mb/d level seen in 2017, as rising prices cap growth. In 2019, however, as the impact of higher prices ebbs, non-OECD demand growth is set to accelerate to 1.23 mb/d. Asia will be the largest contributor, with growth of 0.93 mb/d in 2018 and 0.87 mb/d in 2019.

	010	bai Dema		ouuci				
		(thousand b	arrels per day	)				
		Demand		Annual Cho	g (kb/d)	Annual Chg (%)		
	4Q17	1Q18	2Q18	1Q18	2Q18	1Q18	2Q18	
LPG & Ethane	12,032	12,830	11,947	698	308	5.8	2.6	
Naphtha	6,609	6,455	6,171	-111	-40	-1.7	-0.6	
Motor Gasoline	25,808	25,435	26,041	233	-198	0.9	-0.8	
Jet Fuel & Kerosene	7,562	7,739	7,584	228	282	3.0	3.9	
Gas/Diesel Oil	28,547	27,971	28,402	733	131	2.7	0.5	
Residual Fuel Oil	7,005	6,961	6,951	-492	-207	-6.6	-2.9	
Other Products	10,935	10,912	11,632	525	472	5.1	4.2	
Total Products	98,498	98,304	98,728	1,815	748	1.9	0.8	

#### **Global Demand by Product**

## **Fundamentals**

The economic assumptions used in our forecast remain mainly unchanged. The oil price assumptions have been revised down slightly, following a drop in Brent futures prices. The baseline for historical demand data has been revised up slightly following publication of non-OECD annual data for 2016 (see *Revisions to non-OECD demand*).

Global economic growth is still expected to be 3.9% in 2018 and 2019. In an update to its *World Economic Outlook* projections, published mid-July, the International Monetary Fund made minor revisions to several countries that offset each other. The IMF noted that the growth was becoming less even and that risks are mounting. In particular, an escalation of trade disputes could derail the economic recovery and depress medium-term growth prospects. Growth in major European countries has been revised slightly down, and is close to the OECD's May 2018 *Outlook* (which are the quarterly assumptions we use for OECD countries). Growth in some large non-OECD countries has also been revised slightly up (Nigeria) or down (Brazil, India).

Risks introduced by trade tensions have further increased, threatening to significantly reduce growth in some exporting countries. The US plans to start collecting 25% tariffs on \$16bn of Chinese goods on 23 August and China has announced similar additional tariffs on \$16bn worth of US imports from the same day. The US appears also considering to increase to 25% tariffs on \$200 billion of Chinese imports, up from an initial proposal of 10%. In response, China has proposed retaliatory measures on \$60bn of US goods. A trade dispute will have a negative impact on world GDP growth, and thus impact oil demand. This takes the form of a direct reduction in bunker fuel demand and diesel used in the transportation of traded goods. Tariffs could also impact the trade of oil and petrochemical feedstocks and products. Several Asian economies are already showing signs of weakness, possibly reflecting the impact of trade tensions. China's Caixin/Markit Purchasing Manager Index (PMI) fell from 51 in June to 50.8 in July, the lowest since November 2017, and new orders weakened, possibly on lower external demand. Several Japan's PMI slowed significantly in July. PMIs contracted in Korea, Malaysia and slowed in Taiwan. The threat of trade disruption could recede as fast as they are mounting, however, and it is difficult at this stage to make adjustments to our base case assumptions for the economy and oil demand.

We updated our price assumption using the ICE Brent futures curve as of early August. This assumes that in 2018 the price will average \$71.80/bbl, falling slightly to \$71.65/bbl in 2019. This is about \$2/bbl

below the prices used in our July *Report*, potentially adding 140 kb/d to 2H18 demand and 80 kb/d to demand in 2019. While higher prices exert a negative impact on demand in 2018, their impact will likely be more or less neutral in 2019.

In this *Report*, historical non-OECD oil demand data have been revised based on new annual data published by the IEA in *World Energy Statistics 2018*. Overall, revisions to annual data and new adjustment factors resulted in upwards revisions of 155 kb/d for 2015, 160 kb/d for 2016 and 120 kb/d for 2017. For further details see *Revisions to non-OECD demand*.

## OECD

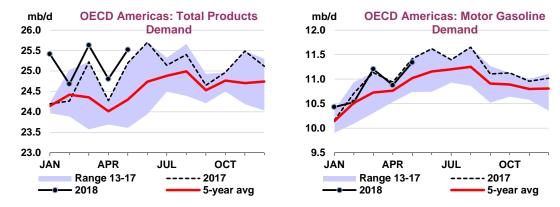
We have complete data for OECD countries for May 2018. Preliminary estimates are available for Mexico, Japan, Korea and some European countries for June 2018. US weekly data are available through the end of July.

				(r	nillion bar	rels per d	lay)							
	Gase	oline	Jet/Ke	rosene	Die	sel	Other	Gasoil	RFO		Other		Total Products	
	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa	mb/d	% pa
OECD Americas*	11.51	-1.0	2.07	0.7	4.77	1.0	0.45	-6.8	0.59	-25.6	6.21	3.09	25.60	-0.4
US50	9.65	-1.2	1.77	0.4	3.84	0.0	0.13	0.0	0.27	-36.3	4.82	5.37	20.47	-0.1
Canada	0.87	-3.2	0.15	3.7	0.28	-2.2	0.26	-7.0	0.07	0.0	0.77	-1.21	2.40	-2.4
Mexico	0.85	4.5	0.09	3.7	0.43	15.3	0.04	-23.7	0.15	-25.4	0.49	-9.23	2.05	-0.8
OECD Europe	2.00	-1.8	1.58	0.8	5.24	-0.9	1.16	-12.9	0.84	-1.0	3.51	-3.51	14.33	-2.6
Germany	0.43	-2.9	0.22	-5.6	0.79	-1.1	0.22	-39.9	0.06	-9.3	0.50	-14.99	2.22	-11.0
United Kingdom	0.30	-1.4	0.33	2.6	0.54	-0.7	0.14	-2.9	0.03	4.5	0.30	-2.27	1.63	-0.6
France	0.21	3.0	0.17	1.2	0.72	-4.2	0.18	-14.5	0.05	9.5	0.36	-3.55	1.68	-3.6
Italy	0.17	-3.4	0.14	10.3	0.51	1.5	0.08	-12.9	0.07	-15.3	0.33	-5.33	1.30	-2.1
Spain	0.12	-4.5	0.15	-0.8	0.49	-3.8	0.14	-1.4	0.15	4.8	0.25	-3.60	1.30	-2.3
OECD Asia & Oceania	1.53	0.2	0.65	-5.2	1.47	2.8	0.45	-9.4	0.50	1.1	2.79	-4.91	7.39	-2.4
Japan	0.86	0.0	0.28	-13.3	0.43	0.7	0.30	-7.9	0.26	11.1	1.09	-16.36	3.22	-7.3
Korea	0.23	2.3	0.16	3.2	0.42	1.7	0.08	-23.9	0.21	-8.1	1.43	5.29	2.54	1.8
Australia	0.31	-1.3	0.16	1.0	0.56	5.6	0.00	0.0	0.02	-8.3	0.18	-3.82	1.22	1.5
OECD Total	15.04	-1.0	4.30	-0.2	11.48	0.3	2.06	-10.9	1.93	-9.6	12.51	-0.68	47.32	-1.4

#### OECD Demand based on Adjusted Preliminary Submissions - June 2018

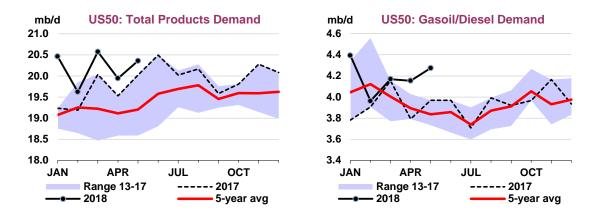
\* Including US territories

## Americas



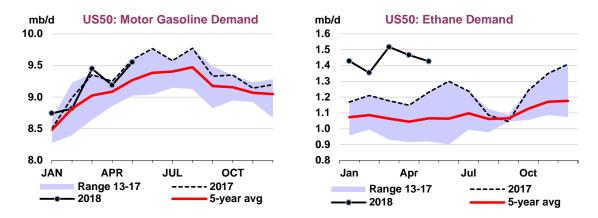
North American oil demand growth is estimated to have slowed to 250 kb/d y-o-y in 2Q18 after a very strong 1Q18 (690 kb/d). LPG/ethane demand was up 450 kb/d y-o-y in 1Q18 and is estimated 250 kb/d higher than last year in 2Q18. Gasoline demand growth is estimated to have slowed from 60 kb/d y-o-y in 1Q18 to a decline of 80 kb/d in 2Q18 due to the impact of higher prices. Gasoil demand growth, benefiting from a strong freight transport sector and severe winter weather conditions, was 250 kb/d in 1Q18 and around 280 kb/d in 2Q18.

**US** oil demand increased by 340 kb/d y-o-y in May after growth of 415 kb/d in April. LPG/ethane demand growth slowed to 155 kb/d y-o-y, but is expected to remain strong in the coming months, thanks to the start-up of new petrochemical projects. Gasoil remained very strong in May, up 305 kb/d y-o-y, although growth was slightly down on the 365 kb/d seen in April. Diesel demand continues to be supported by growing global trade, and the CPB World Trade Monitor (Netherland's Bureau for Economic Policy Analysis) shows an increase of 4.0% y-o-y in the volume of US imports in May. Growth in manufacturing production accelerated to 3.8% in June from 3.2% y-o-y in May, further supporting diesel demand. Gasoil demand also benefited from strong activity in the oil industry, led by shale oil production. The American Trucking Association Truck Tonnage Index rose 7.8% y-o-y in May after growth of 9.9% in April. Off-road gasoil demand may also have been supported by the agricultural sector, in particular in PADD2, as the planting season this year occurred later than in 2017.



Gasoline demand fell by 40 kb/d y-o-y in May after a decline of 60 kb/d y-o-y in April. This may reflect the impact of higher prices on driving behaviours, as the Department of Transportation reported an increase of 0.8% y-o-y in US road traffic. Preliminary weekly data point to a drop of 120 kb/d y-o-y in gasoline demand in June, but to an increase of 105 kb/d y-o-y in July.

LPG/ethane demand growth slowed to 155 kb/d y-o-y in May. Ethane demand growth remained strong, 195 kb/d y-o-y, reflecting the start-up of Dow Chemical's 1.5 mt/year ethane cracker at Freeport, Texas in September 2017 and the commissioning of similar facilities in 1Q18 by Exxon-Mobil at Baytown, and Chevron Phillips at Cedar Bayou.



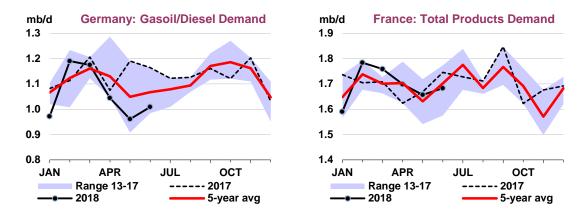
Jet fuel demand rose by 40 kb/d y-o-y in May, after growth of 10 kb/d in April. The International Air Transport Association reported an increase of 5.5% y-o-y in US domestic air traffic in May. Weekly data point to lower growth in June, close to 5 kb/d.

**Canada's** oil demand dropped by 5 kb/d y-o-y in May, on poor naphtha, gasoline, and LPG/ethane demand. **Mexico's demand** dropped by 40 kb/d y-o-y in May and 15 kb/d y-o-y in June. **Total North American** oil demand, after growing by 400 kb/d in 2018, should increase by 155 kb/d in 2019, with ethane crackers coming on stream accounting for 150 kb/d of the growth.

## Europe

European oil demand fell by 240 kb/d y-o-y in May. For June, preliminary data point to steeper decline of 380 kb/d. Gasoil was the product the most affected.

After an increase of 190 kb/d y-o-y in April, gasoil deliveries declined by 270 kb/d y-o-y in May and dropped by 220 kb/d in June, according to preliminary data. The drop mainly affected off-road gasoil deliveries (down by 180 kb/d on average for May-June). In Germany, gasoil demand fell by 155 kb/d on average in the same period. One possibility is that German consumers have delayed their annual restocking of heating oil discouraged by higher prices or in expectation of a drop in prices. The last time German oil demand recorded such a large drop was in Apr-Jun 2014, when total deliveries fell 215 kb/d on average due to a drop of 165 kb/d y-o-y in other gasoil deliveries.



**German** oil demand declined by 275 kb/d in both May and June. In addition to gasoil, naphtha and diesel demand have both slowed significantly y-o-y in the past few months. Concerns about pollution and falling resale value have penalised diesel car sales. The share of diesel cars in total vehicle sales fell from 41.3% in 1H17 to 31.1 % in 1H18, and in May sales fell by 27% y-o-y. Oil demand in **France** fell by 10 kb/d in May on poor gasoil deliveries. Preliminary data suggest that demand declined by 65 kb/d in June, on lower diesel and heating oil deliveries. The heatwave has halted or reduced activity at several nuclear power plants due to cooling difficulties. These disruptions are expected to have a very limited impact on fuel oil demand at a time of low electricity demand and when hydroelectric dams benefit from having been well filled during the winter. In **Italy**, oil demand rose by 30 kb/d in May, but is believed to have contracted by 30 kb/d in June, according to preliminary data.

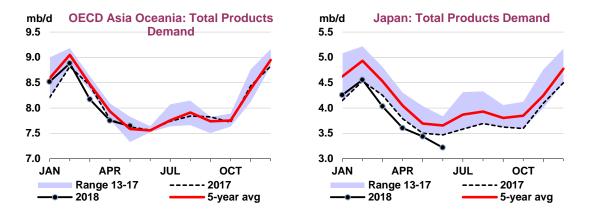
Overall, we expect European oil demand to drop by 120 kb/d in 2Q18. For the year as a whole, demand should decline by 5 kb/d, and then see a rebound of 140 kb/d in 2019.

## Asia Oceania

OECD Asia Oceania demand rose by 20 kb/d y-o-y in May. Preliminary data point to a drop of 180 kb/d in June. Weak naphtha and other gasoil deliveries explain the decline.

**Japanese** oil demand fell by 65 kb/d in May, on lower deliveries of almost all products. The decline is likely to have accelerated in June, to 250 kb/d, according to preliminary data. Since the end of July, however, there has been a heatwave, leading to a jump in air conditioning demand and forcing some

companies to restart oil-fired power plants that had been mothballed or to increase the use of oil, gas or coal-fired plants. Kansai Electric Power has re-started two oil oil-fired units with total capacity of 1.2 GW. Tokyo Electric Power is running its oil, coal and gas plant above their usual maximum capacity. The heatwave is expected to last until the end of August and will likely increase crude oil for direct burning and fuel oil consumption in the coming weeks by an estimated 30 kb/d to 50 kb/d. Korea is also experiencing a heat wave and has decided to restart two nuclear units that were offline for maintenance.



As far as the annual picture is concerned, Japanese oil demand fell by 115 kb/d in 2017 and we expect further declines of 100 kb/d in 2018 and 95 kb/d 2019.

**South Korean** demand rose by 40 kb/d in May and 45 kb/d in June, on strong gasoil deliveries. In **Australia**, oil demand rose by 30 kb/d y-o-y in May on strong diesel deliveries

OECD Asia Oceania oil demand declined by 60 kb/d in 2Q18. For the year as a whole, oil demand in the region should contract by 35 kb/d and by a further 45 kb/d in 2019.

### Non-OECD

#### **Revisions to non-OECD Demand**

New annual data published by the IEA in *World Energy Statistics 2018 (WES)* with annual data to 2016 triggered revisions to historical data used in this report. Monthly oil statistics used for non-OECD countries are generally based on domestic sources and the Joint Oil Data Initiative and re-based using an annual adjustment factor when the WES is published. Revisions arise from (1) WESchanges to their 2015 estimates and (2) differences between Oil Market Report estimates for 2016 and the latest WES data.

The OMR uses WES data for most countries but there are some exceptions. For example, the OMR does not use WES naphtha data for Russia as exports are not reported thus overinflating consumption levels. Last year the OMR did not use WES data for Nigeria, but following revisions to gasoil and gasoline demand, WES data are used to re-base Nigerian demand. By contrast, WES numbers for gasoil demand in Indonesia are no longer used, following a sharp revision in the 2018 publication. Instead, the OMR uses total gasoil demand reported in the table "Domestic Oil Fuels Sales" in Indonesia's *Handbook of Energy & Economic Statistics*. OMR estimates for Venezuela, based on GDP growth, are also used as no reliable hard data is available for 2016 demand.

This year, WES published large revisions to Iran's demand data. LPG/ethane demand was revised up by 145 kb/d for 2015, resulting in a larger changes for 2016 of 200 kb/d.

Other important revisions to OMR monthly data following differences between 2016 estimates from OMR and WES statistics affected China (with an upward revision to demand for other products and fuel oil and a downward revision for LPG); India where there were downward revisions to other products and to gasoil; Brazil (with downward revisions to most products) and Russia (with a downward revision to fuel oil). Overall, revisions to annual data and new adjustment factors resulted in upward revisions to global oil demand of 155 kb/d in 2015, 160 kb/d for 2016, and 120 kb/d for 2017.

		(thousand b	arrels per da	ay)				
		Demand		Annual Chg (F	(b/d)	Annual Chg (%)		
	4Q17	1Q18	2Q18	1Q18	2Q18	1Q18	2Q18	
Africa	4,335	4,413	4,327	-3	11	-0.1	0.3	
Asia	26,223	26,540	27,065	937	760	3.7	2.9	
FSU	4,654	4,414	4,654	112	120	2.6	2.7	
Latin America	6,446	6,338	6,367	0	-93	0.0	-1.4	
Middle East	8,171	8,045	8,525	-196	-124	-2.4	-1.4	
Non-OECD Europe	757	733	752	18	1	2.5	0.1	
Total Products	50,587	50,484	51,689	867	674	1.7	1.3	

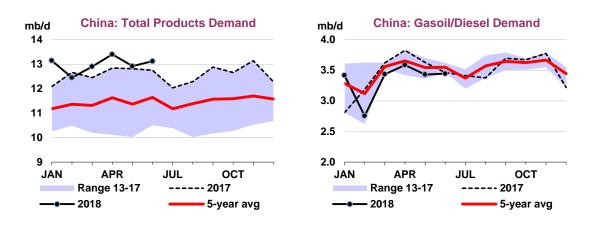
#### Non-OECD: Demand by Region

#### **Non-OECD: Demand by Product**

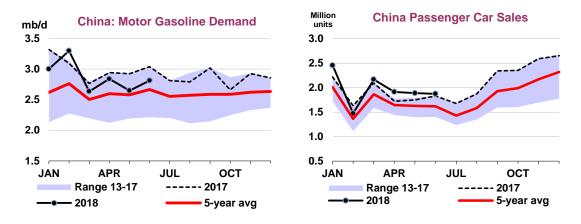
		(thousand b	arrels per day	)				
		Demand		Annual Cho	j (kb/d)	Annual Chg (%)		
	4Q17	1Q18	2Q18	1Q18	2Q18	1Q18	2Q18	
LPG & Ethane	6,702	6,780	6,767	220	64	3.4	0.9	
Naphtha	2,939	2,976	2,933	85	108	2.9	3.8	
Motor Gasoline	11,357	11,383	11,313	87	-127	0.8	-1.1	
Jet Fuel & Kerosene	3,078	3,248	3,318	77	174	2.4	5.5	
Gas/Diesel Oil	14,707	14,195	14,812	280	-64	2.0	-0.4	
Residual Fuel Oil	4,777	4,785	4,896	-413	-152	-7.9	-3.0	
Other Products	7,026	7,117	7,651	531	672	8.1	9.6	
Total Products	50,587	50,484	51,689	867	674	1.7	1.3	

## China

**Chinese** oil demand is estimated to have increased by 370 kb/d in June and by 340 kb/d y-o-y in 2Q18. Our estimates since April are, however, more uncertain as we are missing some data normally used in the computation of apparent demand.



Gasoline apparent demand fell by 230 kb/d y-o-y in June and diesel demand dropped by 20 kb/d. Gasoline demand in 2Q18 is believed to have been 200 kb/d below last year's level. Car sales slowed in June, increasing by only 2.3% y-o-y. Diesel demand in 2Q18 is estimated to be down by 150 kb/d y-o-y. Kerosene demand rose by 90 kb/d y-o-y in 2Q18, supported by a very strong aviation sector. Domestic air traffic rose by 11.9% y-o-y in May after a 16.1% increase in April.



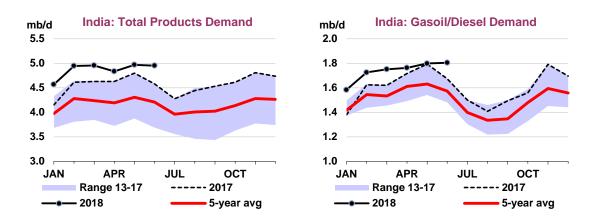
In 2017, total Chinese oil demand growth was 580 kb/d and for this year we expect growth to be 495 kb/d, followed by a slightly slower rate in 2019 of 420 kb/d.

				ouuot				
		(thousand b	arrels per day	r)				
		Demand		Annual Chg	j (kb/d)	Annual Chg (%)		
	2017	2018	2019	2018	2019	2018	2019	
LPG & Ethane	1,523	1,612	1,708	90	96	5.9	5.9	
Naphtha	1,171	1,219	1,276	48	58	4.1	4.7	
Motor Gasoline	2,928	2,936	3,043	8	107	0.3	3.7	
Jet Fuel & Kerosene	714	770	820	56	49	7.8	6.4	
Gas/Diesel Oil	3,474	3,450	3,468	-24	18	-0.7	0.5	
Residual Fuel Oil	437	419	428	-17	8	-4.0	2.0	
Other Products	2,324	2,659	2,745	335	86	14.4	3.2	
Total Products	12,570	13,064	13,487	494	422	3.9	3.2	

### China: Demand by Product

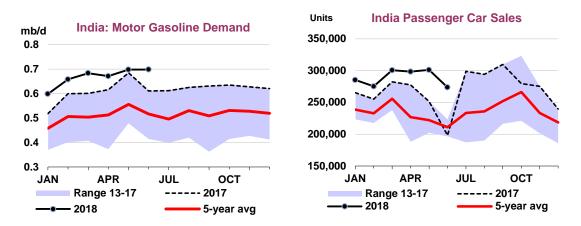
#### India

**Indian** oil demand jumped by 370 kb/d in June following growth of 170 kb/d in May. Gasoil deliveries rose 130 kb/d in June and gasoline demand growth accelerated to 90 kb/d. For 2Q18 as a whole, total demand growth is estimated to be 250 kb/d. LPG demand grew by 20 kb/d in June, as government policies continue to support the introduction of the fuel to replace kerosene in the residential sector. For this reason, growth is expected to remain very strong through the end of 2019. Jet kerosene demand growth is boosted by the booming aviation sector. In May, revenue passenger kilometers rose by 16.6% versus last year.



Total oil demand grew by 125 kb/d in 2017, and this rate is expected to accelerate to 285 kb/d this year before slowing to 205 kb/d in 2019. In 2018, Indian demand growth benefited from the comparison with

weak growth in 2017 after the demonetisation experience and the introduction of a new tax. In 2019, growth should return to a more normal pattern.



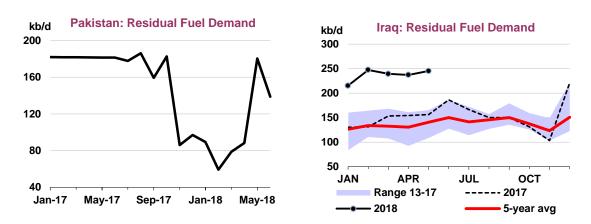
#### India: Demand by Product

		Demand		Annual C	hg (kb/d)	Annual Chg (%)		
	2017	2018	2019	2018	2019	2018	2019	
LPG & Ethane	740	815	854	74	39	10.1	4.8	
Naphtha	283	294	304	10	10	3.7	3.4	
Motor Gasoline	615	659	692	44	33	7.1	4.9	
Jet Fuel & Kerosene	242	249	266	8	16	3.3	6.6	
Gas/Diesel Oil	1,605	1,704	1,751	99	47	6.2	2.8	
Residual Fuel Oil	145	145	150	0	5	0.2	3.5	
Other Products	938	985	1,041	47	56	5.0	5.6	
Total Products	4,568	4,851	5,057	283	206	6.2	4.2	

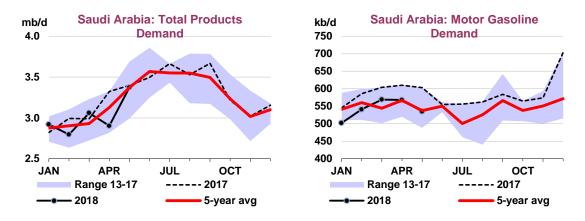
## Other Non-OECD

Data from the **Pakistan** Oil Companies Advisory Council show a slowdown in fuel oil demand, from 180 kb/d in May to 140 kb/d in June. More fuel oil is normally used in the summer to meet higher electricity demand. The ministry estimated that power producers would use 115 kb/d of fuel between April and September. In April the government lifted the ban on fuel oil imports for the power sector introduced in December 2017 to fight pollution.

**Iraq's** fuel oil demand rose by 90 kb/d y-o-y in May and the direct use of oil fell by 145 kb/d, as crude oil used in the power sector is replaced by natural gas and fuel oil. A further slowdown in fuel oil and crude oil demand is expected at the end of 2018, as more natural gas from Iran becomes available.

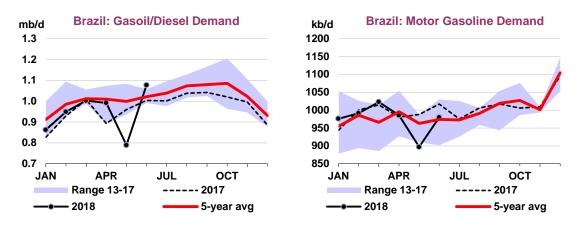


**Saudi Arabian** oil demand declined by 25 kb/d y-o-y in May, with sharp drops in gasoil, gasoline and crude oil demand offset by a strong increase for fuel oil. Gasoline demand declined by 70 kb/d y-o-y, partly reflecting a sharp increase in domestic prices at the start of the year. Gasoil demand remained very weak, down 120 kb/d. By contrast, fuel oil use rose by 255 kb/d. The 50% increase in oil prices we have seen since a year ago has made a major contribution to repairing Saudi finances, and government spending is set to increase by 20% in 2018, to its highest level ever. Capital expenditure will double. Strong public spending should support economic activity and oil demand. Nevertheless, we expect oil demand to decline by 10 kb/d in 2018, after a drop of 115 kb/d in 2016 and 30 kb/d in 2017. With the boost from government spending, we expect to see demand return to growth in 2019 at 70 kb/d.



**Russian** oil demand increased by 60 kb/d y-o-y in June, led by fuel oil, which grew by 65 kb/d. For the year as a whole we expect demand to grow by 55 kb/d, followed by 40 kb/d of growth in 2019.

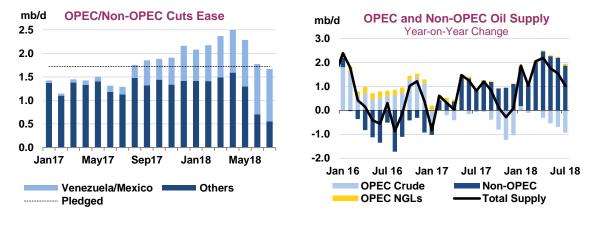
**Brazilian** oil demand rebounded by 50 kb/d y-o-y in June after a spectacular drop of 300 kb/d y-o-y in May due to the strike by truck drivers. Gasoil demand in particular rose by 75 kb/d y-o-y. However, gasoline demand remained below last year, contracting by 40 kb/d. Overall, Brazilian oil demand is projected to contract by 20 kb/d in 2018 and to increase by 5 kb/d in 2019.



**Egyptian** oil demand declined by 10 kb/d y-o-y in May. Gasoline demand was flat, gasoil demand was unchanged, and fuel oil demand was 5 kb/d lower. The fall in fuel oil demand results from the increase of natural gas in the power sector. Egypt just completed the construction of three 4.8 GW gas-fired power plants. These mega projects (the largest gas-fired power plants ever built) were completed by Siemens in record time. Each plant consists of eight 600 MW units. At the same time, ENI is ramping up output at the Zohr gas field, taking capacity to 1.6 billion cubic feet per day. Lower gasoline deliveries reflect demand reaction to last summer's cuts to subsidies cuts as part of an IMF-backed reform program. Since November 2016, Egypt has cut energy subsidies twice, increasing gasoline and diesel prices by 40% to 50%.

## SUPPLY

Global oil supply rose in July by 300 kb/d to 99.4 mb/d as Russia, Kuwait and the UAE pumped more after Vienna Agreement producers decided to relax output curbs. Saudi Arabia surprised by lowering output – apparently because of slower demand for its crude. The 24 countries party to the January 2017 pact agreed to work towards 100% compliance with supply cuts of 1.72 mb/d from July and, according to IEA estimates, overall compliance fell to 97% in July. Non-OPEC compliance sank to 44%, thanks to Russia's sharp production increase and continued non-compliance by Kazakhstan while OPEC's rate remained at 121%.



Saudi Arabia and Russia said the accord would result in an actual supply increase of around 1 mb/d from those with the capacity to produce it – largely four countries: Saudi Arabia, Russia, the UAE and Kuwait. Since April, when unintentional declines in Venezuela, Angola and Mexico raised the overall cut to 2.5 mb/d, these four producers increased output by nearly 900 kb/d by July. However, the overall increase by the producer alliance was just 100 kb/d m-o-m from June.

	Jun 2018 Supply	Jul 2018 Supply	Supply Baseline <sup>2</sup>	Agreed Cut	July Actual Cut	June Compliance	July Compliance	Average Compliance	Sustainable Production Capacity <sup>6</sup>	Spare Capacity vs Jul Supply
Algeria	1.05	1.06	1.09	-0.05	-0.03	78%	58%	99%	1.08	0.02
Angola	1.45	1.47	1.75	-0.08	-0.28	386%	360%	200%	1.58	0.11
Ecuador	0.53	0.53	0.55	-0.03	-0.02	69%	69%	77%	0.54	0.01
Equatorial Guinea	0.12	0.12	0.14	-0.01	-0.02	167%	167%	117%	0.13	0.01
Gabon	0.20	0.18	0.20	-0.01	-0.02	22%	244%	43%	0.21	0.03
Iran <sup>3</sup>	3.79	3.75	3.71	0.09	0.04	NA	NA	NA	3.85	0.10
Iraq	4.54	4.56	4.56	-0.21	0.00	10%	0%	41%	4.80	0.24
Kuwait	2.72	2.80	2.84	-0.13	-0.04	90%	29%	97%	2.93	0.13
Qatar	0.62	0.62	0.65	-0.03	-0.03	93%	93%	132%	0.63	0.01
Saudi Arabia	10.46	10.35	10.54	-0.49	-0.19	17%	40%	111%	12.04	1.69
UAE	2.90	2.98	3.01	-0.14	-0.03	81%	24%	73%	3.20	0.22
Venezuela <sup>7</sup>	1.30	1.26	2.07	-0.10	-0.81	807%	849%	317%	1.26	0.00
Total OPEC 12	29.68	29.68	31.11	-1.18	-1.43	121%	121%	114%		
Libya <sup>4</sup>	0.71	0.67							1.02	0.35
Nigeria <sup>4</sup>	1.46	1.52							1.74	0.22
Congo <sup>4</sup>	0.33	0.31							0.33	0.02
Total OPEC	32.18	32.18							35.34	3.16
Azerbaijan	0.79	0.80	0.815	-0.04	-0.01	61%	29%	72%		
Kazakhstan	1.94	1.93	1.805	-0.02	0.12	-670%	-618%	-361%		
Mexico	2.09	2.09	2.400	-0.10	-0.31	305%	311%	205%		
Oman	0.98	0.98	1.019	-0.05	-0.04	85%	80%	93%		
Russia	11.45	11.60	11.597	-0.30	0.00	50%	0%	75%		
Others <sup>5</sup>	1.29	1.25	1.253	-0.05	-0.01	-83%	16%	45%		
Total Non-OPEC	18.55	18.65	18.888	-0.55	-0.24	63%	44%	82%		

#### OPEC / Non-OPEC Output Compliance

1 OPEC figures are crude oil only, Non-OPEC figures are total oil supply (including NGLs).

2 OPEC based on Oct 2016 OPEC secondary source figures, except Angola which is based on Sep 2016. Non-OPEC based on IEA Oct total supply estimates. Kazakhstan Nov estimate

3 Iran was given a slight increase. 4 Libya, Nigeria, Congo are exempt from cuts. 5 Bahrain, Brunei, Malaysia, Sudan and South Sudan.

6 Capacity levels can be reached within 90 days and sustained for an extended period. 7 If Venezuelan compliance were 100%, OPEC overall compliance would be 61% in July.

The challenge for these four producers will be to compensate for further losses that could tip the global market into imbalance. A cash crisis and chronic mismanagement have already cut Venezuelan crude supply by 350 kb/d since the start of this year and there is no sign of recovery. While there has been minimal impact so far on Iran's crude production ahead of renewed US sanctions, Washington's move to apply the toughest ever measures on Iran could result in an even steeper reduction than the 1.2 mb/d seen during the previous round of sanctions.

Global oil supply for now looks healthy. Strong non-OPEC growth, fuelled by the US, has pushed output up 1.1 mb/d year-on-year (y-o-y). Non-OPEC supplies in July were up 1.9 mb/d on a year ago. For 2018 as a whole, non-OPEC output is expected to expand by nearly 2.0 mb/d, with growth easing only marginally to 1.85 mb/d in 2019. In July, OPEC's total oil supply was down 850 kb/d compared to a year ago, with Venezuela lower by 810 kb/d, Libya 330 kb/d and Angola by 200 kb/d. Reduced Saudi flows and further declines elsewhere were largely offset by higher output from Kuwait, the UAE and Nigeria – keeping crude output steady month-on-month (m-o-m) at 32.18 mb/d.

#### Oil companies maintain capital discipline despite higher oil prices

Second quarter financial results released so far by majors and US independents reiterate a commitment to capital discipline and increasing returns to shareholders via higher dividends and share buy-back programmes. However, for the most part, earnings growth failed to meet expectations. Despite oil prices that are up over 50% y-o-y, major companies, with the exception of ExxonMobil and ConocoPhillips, kept their short and medium term upstream investment plans flat. The results announcements reinforce a key message from the IEA's recently published *World Energy Investment 2018* (WEI 2018). The report sees upstream spending growing by 5% this year to \$472 billion, a continuation of the modest recovery that started last year. This remains well below the peak of \$780 billion spent in 2014, reflecting lower activity but also sustained cost control and efficiency improvements.

Unsurprisingly, given record-breaking production levels, the US shale industry is leading the way. In 2Q18, the large independent companies saw up to 50% production growth. The majors are increasing their exposure to US LTO. BP recently acquired BHP's US shale acreage and ExxonMobil and Chevron both ranked in the top five in terms of drilling activity in the Permian Basin. Rising spend on US LTO, forecast to increase by 20% this year, offsets subdued global activity in conventional oil and gas plays and in particular greenfield and offshore projects. The industry's shift towards short-cycle projects is part of a continued strategy to reduce risk and cost.

Despite the decline in offshore spend there are some signs of recovery. In 2017, the volume of conventional resources sanctioned increased to 18 billion boe (up 20%) as companies used the low cost environment to lock in savings. While rising activity will lead to a rebound in spending from next year, investments in the offshore will remain subdued as new projects fail to offset developments now reaching completion. Sanctioned projects continue to be relatively small and focused on brownfields to sustain production. As reported in *Oil 2018 – Analysis and Forecasts to 2023*, this has successfully slowed global decline rates, contrary to fears that these would steepen following years of lower investment.

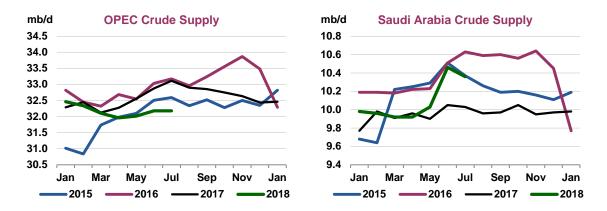
Following a sharp decline of 30% since 2014, WEI 2018 forecasts a small rise in lifting costs this year as increased activity pressures the supply of raw materials, labour and services. The offshore services sector, obliged to make pricing concessions during the downturn, is seeing some optimism return to the industry. Both Schlumberger and Haliburton's 2Q18 results showed a pick-up in international revenues, particularly from shallow-water activities, and this is expected to continue.

In the US, the IEA's Upstream Shale Investment Cost Index was up 9% in 2017 and further increases are expected this year. In their 2Q18 results, operators announced some revised spending plans in response to inflation in the range of 10% to 15%, while for the most part, production guidance is little changed. Spending increases nevertheless remain limited due to strict capital discipline and due to physical factors as rising output runs against bottlenecks in pipeline and other infrastructure capacity. Overall, the upstream industry is looking decidedly healthier on higher oil prices, sustained cost reductions and improved finances. Furthermore, the US shale industry looks likely to finally turn a profit this year. The majors' focus on cost control and efficiency improvements has had remarkable results, as despite a 49% fall in spend between 2014 and 2018, their oil and gas output has risen by 11%.

# OPEC crude oil supply

OPEC output held steady in July after an unexpected drop from Saudi Arabia and further declines in Venezuela, Libya and Iran were largely offset by higher production from Kuwait, the UAE and Nigeria. July marked the official start to an OPEC/non-OPEC deal to strive for 100% compliance with its existing pact, which implies an increase in supply. Those OPEC members that are party to the Vienna Agreement delivered a compliance rate of 121%, unchanged from June. Total OPEC crude production, now including new member Congo, was steady in July at 32.18 mb/d. Although OPEC is producing at the highest rate since February, overall supply in July was down 930 kb/d y-o-y due to sharply lower output from Venezuela, Libya and Angola.

Saudi Arabia said that 100% compliance with the Vienna Agreement would translate into about 1 mb/d of extra barrels from those able to pump more. Within OPEC, this mainly means Saudi Arabia, the UAE and Kuwait, who held a combined 2.04 mb/d of spare capacity based on July output. Iran disputes this explanation and is adamant the deal still requires countries to stick to individual supply targets.



While **Saudi Arabia** had said a "measureable" increase of several hundred thousand barrels a day was in motion for July, which implied output near a record-breaking 10.8 mb/d, production in the end eased by 110 kb/d to 10.35 mb/d as exports declined. However, crude supply stood 320 kb/d above a year ago and was well below 100% compliance for a second straight month.

According to *Kpler* tanker tracking data, Saudi crude shipments fell 590 kb/d m-o-m to 7.14 mb/d in July. Saudi Aramco reportedly offered additional barrels of lighter grades to customers in Asia, but buying interest apparently was subdued. "Saudi Arabia only exports barrels that are earmarked to match confirmed lifting requests by end-users, and does not try to push more oil into the market beyond its customers' needs," according to Saudi OPEC Governor Adeeb al-Aama. Perhaps in a bid to make its barrels more competitive, Saudi Aramco cut the formula price for its September loading Arab Light crude to Asia by \$0.70/bbl versus August to a premium of \$1.20/bbl to the Oman/Dubai average.

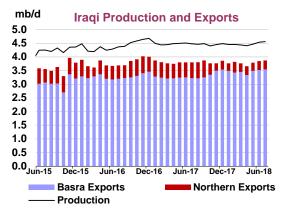
Oil shipping routes in the Middle East were in the spotlight after Saudi Arabia in late July suspended sailings via the Red Sea's Bab al-Mandab strait in response to an attack on two of its tankers by Yemeni Houthi militants. Other exporters did not follow suit and on 4 August shipments resumed. A full blockage of the waterway would have halted nearly 5 mb/d of crude and refined product exports. In that event, the Kingdom could use the Petroline, or East-West Pipeline, through which it moves crude from Eastern Province oil fields to the Red Sea port of Yanbu. Saudi Arabia ships about 10%, or roughly 700 kb/d, of its total crude exports to Europe through the Red Sea.

The latest data from the Joint Organisations Data Initiative (JODI) show exports of Saudi crude for May fell 330 kb/d m-o-m to just below 7 mb/d. Product shipments rose 220 kb/d in May to roughly 1.9 mb/d. Total oil sales declined by 110 kb/d m-o-m to 8.9 mb/d. On the domestic front, some 410 kb/d of crude

was burned in power plants, up 20 kb/d from April, and this will rise sharply in the summer when air conditioning use peaks. The average amount of crude used from May-September 2017 was 650 kb/d.

**Kuwait** and the **UAE** raised output in July in a bid to bring overall OPEC compliance towards 100%. Output in the UAE climbed 80 kb/d to 2.98 mb/d, while production in Kuwait rose by a similar amount to 2.8 mb/d. As it presses ahead with plans to boost output capacity, Abu Dhabi has awarded contracts worth \$1.6 billion to BGP, a unit of China National Petroleum Corp (CNPC), for the world's largest continuous 3-D seismic survey. Capacity in Kuwait and Saudi Arabia could meanwhile get a material lift as efforts appear to be intensifying to end a four-year disagreement and restart up to 500 kb/d of output from oil fields in the shared Neutral Zone. The *Kuwait Times* reported that a committee has been meeting to resolve the issue and that oil ministers will meet in November for further discussions. If the go-ahead is given, industry sources reckon it could take six to 12 months to ramp up towards capacity. Supply from **Qatar** held steady at 620 kb/d.

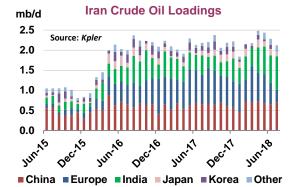
**Iraqi** output crept up to 4.56 mb/d in July as exports from Gulf outlets reached the highest ever. Shipments of Basra Light edged up 20 kb/d to 3.54 mb/d. This came despite the unrest over basic services and jobs that is sweeping across the southern region. The vast majority of Iraqi oil is shipped from southern terminals, which can handle up to 3.7 mb/d. Exports of northern crude via the Kurdistan Regional Government (KRG) pipeline to Turkey held at 330 kb/d during July. Iraqi flows could rise significantly if there were a lasting political deal to utilise fully the 700 kb/d Kurdish pipeline.



Iraq's oil minister has meanwhile instructed the state-run Dhi Qar Oil Co and Iraq Drilling Co to develop the southern Nassiriya oil field. Iraq has earmarked \$140 million to boost output from 90 kb/d to 200 kb/d in a year. Iraq has failed to attract foreign investors for the project, which includes a refinery.

**Iranian** production declined in July by 40 kb/d m-o-m to 3.75 mb/d, the lowest level since April 2017. Crude oil exports fell 90 kb/d to 2.19 mb/d as customers in Europe continued to reduce purchases and South Korea completely cut liftings ahead of the US sanctions renewal in early November. Loadings of crude oil nonetheless were a touch above average 2017 rates of 2.16 mb/d. The first set of US sanctions targeting Iran's financial sector was enforced on 6 August, which is expected to make it more difficult for refiners to buy Iranian crude. During the last round of sanctions, crude oil exports fell by 1.2 mb/d and this time the impact could be even more severe.

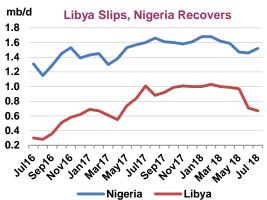
According to *Kpler* tanker tracking data, Iran's exports to Europe, including Turkey, decreased by 140 kb/d m-o-m to 410 kb/d in July. That compares to average 2017 levels of 750 kb/d. Deliveries to France dried up entirely. The US Administration has officially rejected France's request for an exemption to US sanctions, which would have allowed Total to continue doing business in Iran and remain in the \$4.8 billion South Pars Phase 11 gas project. Crude oil shipments to Italy and Spain declined further. Loadings to Turkey held broadly steady at 140 kb/d.



Shipments to Asia rose 50 kb/d to 1.65 mb/d in July as China stepped up buying and purchases by India rose to record levels. China lifted 775 kb/d in July, up 120 kb/d m-o-m and the highest since April 2016. India loaded an unprecedented 770 kb/d, up 90 kb/d from June. Shipments to Japan slowed by 50 kb/d to 110 kb/d in July. The final destination of 70 kb/d of exports was still unknown at the time of publishing. Condensate shipments in July dropped by 160 kb/d to 110 kb/d as Korean liftings fell to zero.

**Libyan** production slipped by 40 kb/d m-o-m to 670 kb/d in July, the lowest level since April 2017. Eastern oil fields restarted output after a blockade ended at export terminals, but supply was reduced in mid-July at El Sharara. A kidnapping at Libya's largest oil field briefly cut flows, but output climbed back towards capacity by the end of the month – boosting overall flows towards 900 kb/d.

Output in **Nigeria** climbed 60 kb/d m-o-m to 1.52 mb/d after Royal Dutch Shell's Nigerian unit lifted a force majeure on shipments of Bonny Light that had been declared

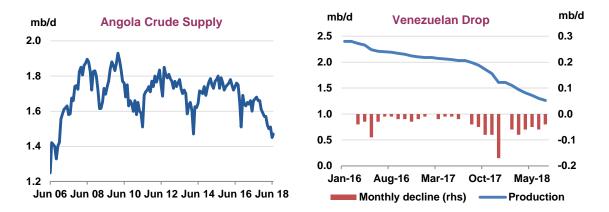


majeure on shipments of Bonny Light that had been declared in mid-May.

**Algerian** supply inched up to 1.06 mb/d, while production from **Equatorial Guinea** was unchanged versus June. Output in **Congo** dipped to 310 kb/d in July, while supply in **Gabon** edged down to 180 kb/d. Total Gabon sold its 32.9% share in the Rabi-Kounga field for around \$100 million to Assala Upstream Gabon at the end of July. Earlier in the month, the Gabon oil workers' union ended an 11-day strike at facilities run by Total.

Production in **Angola** edged up to 1.47 mb/d in July, down 200 kb/d on a year ago. Supply has dropped sharply because of natural declines at ageing oil fields and technical issues at offshore blocks. However, higher output is expected later this year thanks to Total's \$16 billion ultra-deep water Kaombo project, which started to flow at the end of July.

Output from the Kaombo Norte floating production, storage and offloading (FPSO) unit is expected to reach 115 kb/d within six months. A second FPSO, the Kaombo Sul, is set to start up next year and boost production towards full capacity of 240 kb/d. Exports of medium-sweet Jindungo crude from the Kaombo Norte FPSO are due to start loading in September.

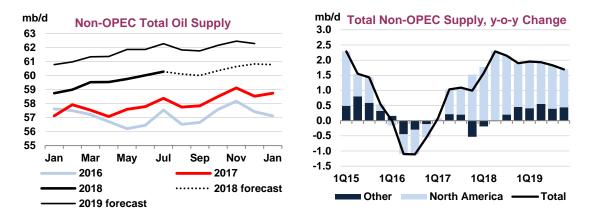


Supply in **Venezuela** slipped a further 40 kb/d in July to 1.26 mb/d, down 770 kb/d on a year ago, and it could fall below 1 mb/d by the end of 2018. Output from mature conventional oil fields is falling fast and upgraders operated by foreign joint venture partners in the vast Orinoco heavy oil belt are breaking down and running below capacity. Output from **Ecuador** was unchanged from June at 530 kb/d.

### **Non-OPEC** overview

Non-OPEC oil output rose by 260 kb/d in July, to 60.3 mb/d, 1.9 mb/d higher than a year earlier. A further increase in Russian output to near record-highs led the gains, as producers were quick to open the taps following the Vienna OPEC/non-OPEC meeting. US liquids production was also higher, while North Sea and Brazilian flows likely rebounded from maintenance lows.

Final data for May and June raised production estimates by roughly 300 kb/d compared with last month's *Report*, with both US NGL and Canadian oil sands output higher. Adjustments to historical data, published in *World Energy Statistics 2018* that includes updated annual statistics to 2016, lowered historical data only marginally.

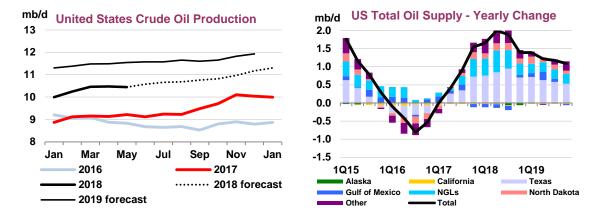


The forecast for non-OPEC supply growth for 2018 has been raised by 80 kb/d since last month's *Report*, to 2 mb/d while the estimate for 2019 has been slightly lowered to 1.85 mb/d. Higher expectations for Russian production is partly offset by a downgrade to Brazilian output due to heavier than expected maintenance outages over the first half of 2018. Brazilian oil supplies are nevertheless expected to expand by 350 kb/d next year, second only to the United States. The growth forecast for US oil supply is largely unchanged for both 2018 and 2019, at 1.7 mb/d and 1.2 mb/d, respectively.

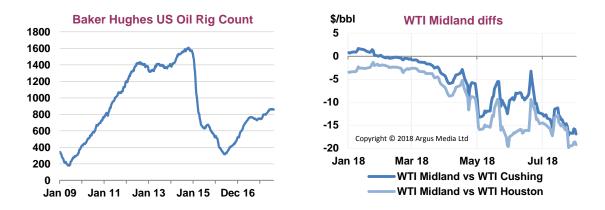
			Non-	OPEC S	upply						
			(milli	on barrels p	er day)						
	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
Americas	20.3	21.7	22.1	22.1	22.7	22.2	23.3	23.4	23.6	23.9	23.5
Europe	3.5	3.5	3.3	3.3	3.5	3.4	3.5	3.3	3.3	3.4	3.4
Asia Oceania	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Total OECD	24.2	25.7	25.8	25.8	26.6	26.0	27.1	27.1	27.3	27.9	27.4
Former USSR	14.3	14.4	14.5	14.6	14.7	14.5	14.8	14.8	14.7	14.8	14.8
Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.9	3.8	3.9	3.8	3.8	3.8	3.7	3.8	3.7	3.7	3.7
Other Asia	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2
Latin America	4.5	4.5	4.5	4.6	4.7	4.6	4.8	4.9	5.0	5.0	4.9
Middle East	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2
Africa	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Total Non-OECD	29.0	29.0	29.1	29.2	29.3	29.1	29.3	29.4	29.3	29.5	29.4
Processing Gains	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Global Biofuels	2.5	2.1	2.6	2.8	2.5	2.5	2.2	2.7	2.9	2.6	2.6
Total Non-OPEC	57.9	59.1	59.8	60.1	60.6	59.9	61.0	61.6	62.0	62.3	61.7
Annual Chg (mb/d)	0.8	1.6	2.3	2.1	1.9	2.0	1.9	1.8	1.8	1.7	1.8
Changes from last OMR (mb/d)	-0.03	-0.02	0.15	0.08	-0.04	0.04	0.07	0.08	-0.02	-0.11	0.00

In May, **US** total oil supply increased by 130 kb/d m-o-m, to 15.03 mb/d, despite marginally lower crude oil production. Output of natural gas liquids rose 60 kb/d m-o-m to 4.3 mb/d, 600 kb/d higher than a year ago as new petrochemical plants have increased demand for ethane. Output of other liquids, including additives and oxygenates, but excluding biofuels, also rose by 95 kb/d m-o-m to 266 kb/d.

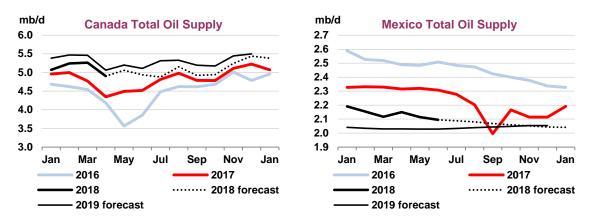
US crude oil production dropped by 30 kb/d m-o-m to 10.44 mb/d as a decline of 75 kb/d in the Gulf of Mexico more than offset higher onshore output. The biggest increase came from North Dakota, which saw production rise by 25 kb/d m-o-m to a new all-time high of 1.24 mb/d. Output in Texas; home to the Permian and Eagle Ford shale plays, rose by a smaller than expected 20 kb/d as pipeline constraints saw producers slow completion rates. At 4.24 mb/d, output nevertheless also set a new record. In May, US crude oil output was 1.23 mb/d higher than a year earlier.



For the year as a whole, US crude oil production growth is expected to average 1.2 mb/d before slowing to 1 mb/d in 2019, as infrastructure bottlenecks put a cap on gains. These blockages, most notably takeaway constraints out of the Permian, saw the discount of WTI priced in Midland to Houston reach as much as \$20/bbl during July. Companies have held back on expansions, and according to Baker Hughes the number of rigs deployed in the US has held steady at around 860 since the end of May. Furthermore, the inventory of drilled but uncompleted wells (DUCs) has risen to a new all-time high of 8 000, nearly 2 000 more than a year ago, according to the EIA's *Drilling Productivity Report*. Of the DUCs, 42% are in the Permian where activity has increased the most over the past year or so.



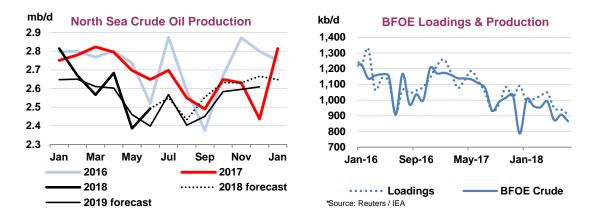
**Canadian** oil output is estimated to have fallen by only 120 kb/d m-o-m in June, despite extensive reported maintenance and an outage at the 360 kb/d Syncrude upgrader from 20 June. At 4.94 mb/d, output was 420 kb/d higher than a year earlier, extending year-on-year gains, which averaged nearly 400 kb/d during the first half of the year. Alberta oil sands output inched 20 kb/d higher m-o-m in June, as higher throughputs from upgraders offset declines in raw bitumen output. From a seasonal low of 840 kb/d in April, synthetic production rose to 960 kb/d in May and 1 050 kb/d in June. Raw bitumen



**Mexico's** oil output dropped by 20 kb/d in June, as production from Ku-Maloob-Zaap and other offshore fields slipped further. At 2.09 mb/d, total output was 212 kb/d lower than a year ago and 305 kb/d below the October 2016 reference level. Declines are expected to average 130 kb/d in 2018 and 60 kb/d next year, considerably less than the loss of 235 kb/d seen in 2017.

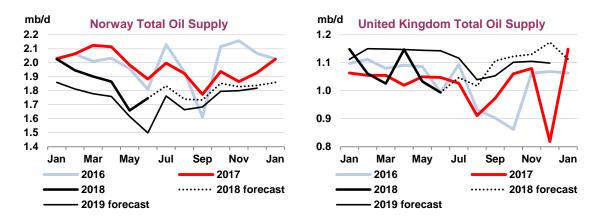
President-elect Andres Manuel Lopez Obrador (Amlo) is proposing to boost spending on new oil and gas wells by 75 billion pesos (\$4 billion) in the next year in an effort to stem production declines. He said that the goal is to boost crude production by 600 kb/d over the next two years, with the aim of restoring output to 2.5 mb/d. This is part of a four-point plan that earmarks 175 billion pesos (\$9.39 billion) in next year's federal budget for a "rescue" of the energy sector. In addition, Amlo plans to rehabilitate Mexico's six refineries, build a new refinery in the Dos Bocas region of Tabasco starting in 2019, and to produce more electricity.

Having declined by 320 kb/d in May, **North Sea** oil production rose only marginally in June, as a rebound in Norway was partly offset by lower UK supplies. At just over 2.83 mb/d, regional output stood 220 kb/d lower than a year ago, taking 1H18 declines to 180 kb/d on average. Loading schedules suggest output rose further in July, as shipments from the Troll and Gullfaks installations improved, before falling once again in August on lower Forties shipments.



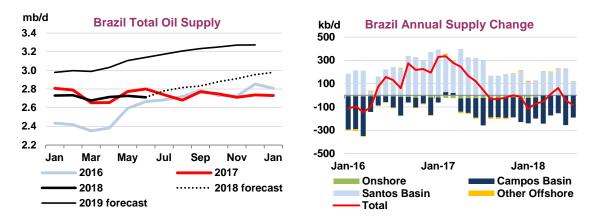
**Norwegian** oil output partially recovered in June from a 21-month low hit in May. Production of crude, condensates and NGLs rose by 88 kb/d, to 1.75 mb/d. Output likely rose further in July as maintenance wound down and unscheduled stoppages were resolved. Industrial action by offshore union workers had a limited impact on output with only Shell's 30 kb/d Knarr platform shut in. August and September,

normally the high season for maintenance work, will likely see output fall once again before it rises again towards year-end. Production is expected to decline by 140 kb/d on average in 2018 and by a further 90 kb/d next year to 1.74 mb/d. Equinor and partners are on track to start up the Johan Sverdrup field late next year, which will provide a significant boost to Norwegian output from 2020 onwards. **UK** oil output fell by 40 kb/d m-o-m, to 995 kb/d. A strike shut Total's Alwyn, Elgin and Dunbar platforms for 12 hours on 30 July. Other 12-hour and 24-hour stoppages were planned for August.



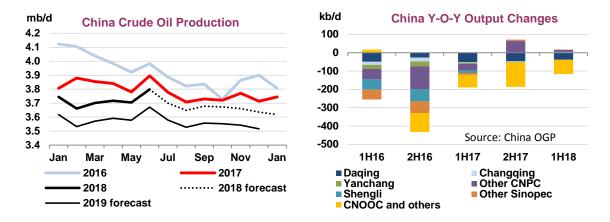
Contrary to expectations, **Brazilian** oil supply eased by a marginal 17 kb/d in June. At just over 2.7 mb/d, output was 90 kb/d lower than a year earlier, its largest annual decline in seven months. Petrobras noted maintenance stoppages at the FPSO Cidade de Paraty, located in the Lula field in the Santos pre-salt basin, as a key reason for the drop. Lula production fell by 37 kb/d m-o-m to 835 kb/d, but remained some 70 kb/d higher than a year ago. The Tartaruga Verde field that started up in May produced 3 kb/d, while Búzios that started in June flowed at 33 kb/d. With production growth undermined by maintenance stoppages and domestic refining rates picking up, Brazilian crude oil exports dropped from 855 kb/d in May to 670 kb/d in June according to ANP data. Exports were at their lowest since November and some 780 kb/d, or 53.9%, below a year ago.

Given the heavier than expected outages and steep declines seen in recent months, we have lowered our forecast for 2018 and 2019 output growth by 35 kb/d and 75 kb/d, respectively. Brazil is nevertheless expected to provide the second largest contribution to non-OPEC supply growth next year, adding 350 kb/d. In addition to the new systems that started up in recent months, growth will come from another two FPSOs that will be deployed at the Búzios field before year-end as well as two additional units in Lula North and Lula Extreme South that also will come on line this year.



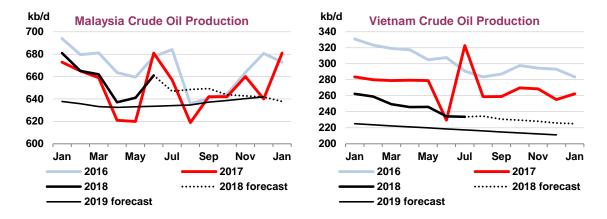
**Chinese** crude oil output was reported 94 kb/d higher in June than a month earlier by China's National Bureau of Statistics, to just shy of 3.8 mb/d. The increase came almost entirely from the Shaanxi province, where the Yangchang and Changqing fields are located. It is likely that the increase reflects a

reporting adjustment, rather than an actual increase in output as monthly production figures are normally not revised. Production is expected to have fallen back in July and August, as has been the case in recent years. In June, total crude oil production was 98 kb/d lower than a year ago.

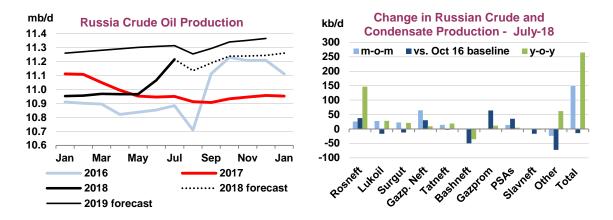


Field level production data published by *China Oil Gas and Petrochemicals* show 1H18 crude supply 100 kb/d lower than the same period a year earlier, at 3.75 mb/d. CNOOC and 'other producers' accounted for 70% of the decline CNPC's domestic output dropped by around 30 kb/d to roughly 2 mb/d, while Sinopec's production held steady at around 680 kb/d. CNPC's Daqing field produced 640 kb/d, 40 kb/d lower than the same period a year earlier.

Elsewhere in Asia, **Malaysian** output bounced back from maintenance-affected lows in April and May. In June, crude and condensate output was 661 kb/d, 20 kb/d higher than in May and 20 kb/d below a year earlier. **Indonesian** crude and condensate production held steady at 780 kb/d in May, down 24 kb/d on a year earlier, while **Vietnam**'s crude output stood at 234 kb/d in July, unchanged from June. Over the first seven months of the year, Vietnam's crude output dropped by 32 kb/d, or 10.7%.

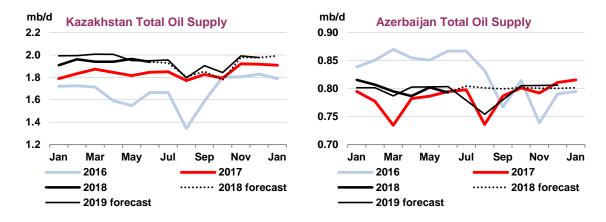


**Russian** crude and condensate production rose by 150 kb/d in July, to 11.21 mb/d, a significantly sharper acceleration than expected. Output was 265 kb/d higher y-o-y and only 14 kb/d less than October 2016's record high. The m-o-m increase stemmed primarily from GazpromNeft, which raised production by 65 kb/d from June to 846 kb/d. Rosneft, which saw the largest increase in June, raised output a further 26 kb/d m-o-m to stand 147 kb/d higher than a year ago. The company said in early August that it would be able to increase daily crude and condensate production in the third quarter by 200 kb/d, 120 kb/d of which was already added between June and July. All other major producers lifted output as production restraints were lifted. Supply is expected to ease slightly in August and September as output from Production Sharing Agreements falls seasonally. Preliminary tanker tracking data for early August showed shipments from Sakhalin already easing from July's levels, in line with seasonal trends.



The energy ministry has increased its forecast for 2018 crude oil production following the OPEC/non-OPEC meeting held in June. Russia is now expected to produce 11.1 mb/d this year, up about 90 kb/d on 2017. Our estimates suggest that in 2019 growth could be 185 kb/d with output reaching 11.28 mb/d.

The estimate for **Kazakhstan**'s oil production in July has been revised slightly higher since last month's *Report*, with loadings from the CPC Marine Terminal largely unchanged from a month earlier. Crude and condensate output had been expected to fall from June's 1.9 mb/d, on lower Kashagan output due to a reported 14-day closure of the Bolashak onshore processing plant. Shipments of Kashagan crude from the CPC terminal held steady at around 290 kb/d, however while Tengiz loadings recovered from June's low when a technical malfunction had curbed output. Scheduled maintenance will weigh on output from Tengiz and Karachaganak from August through October. According to the Ministry of Oil and Gas, production at Tengiz is expected to fall by around 125 kb/d in August and by 100 kb/d in October due to maintenance. Revised CPC loading schedules for August show shipments falling 140 kb/d m-o-m to just under 1.2 mb/d. The Karachaganak field will undertake maintenance lasting 25 days over September and October. In June, Kazkah oil output was up 90 kb/d on a year earlier, and 135 kb/d higher than the November 2016 baseline level.

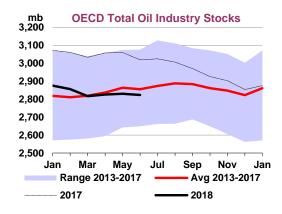


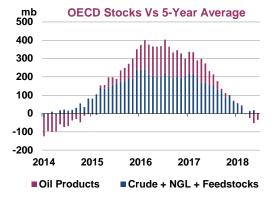
**Azerbaijan's** crude and condensate output inched 9 kb/d lower in June, to 792 kb/d, of which 53 kb/d was condensate. Total output was largely unchanged from a year earlier and 22 kb/d lower than the October 2016 baseline from which output cuts are calculated. BP reported that the Azeri-Chirag-Deepwater Gunashli (ACG) fields produced 596 kb/d during 1H18, 11 kb/d more than in 2017. BP also reported that the Shah Deniz stage 2 project started up on schedule and within budget with commercial deliveries of gas to Turkey commencing on 30 June. Once fully operational, the expansion project will lift condensate output to 120 kb/d, from roughly 55 kb/d currently.

# STOCKS

## Summary

OECD commercial stocks fell 7.2 mb month-on-month (m-o-m) in June to 2 823 mb, the eighth fall in the last 11 months. The reduction was in line with seasonal patterns. OECD stocks were 32 mb below the five-year average at the end of the month, marking another widening of the deficit, and covered 59.2 days of forward demand, down 4.2 days year-on-year (y-o-y). Stocks were broadly unchanged in the OECD Europe and Asia Oceania regions. Instead, most of the action took place in the Americas, where crude stocks declined sharply because of record high refinery throughput and crude exports. This was partially offset by a rise in LPG stocks. Middle distillates gained 2.4 mb m-o-m, but remained below the five-year average, while fuel oil stocks fell 4.6 mb and were close to a historical low.





We now have complete data for 2Q18 showing that OECD commercial oil stocks were up a touch with moderate gains registered in the Americas and Asia Oceania regions and a decrease in Europe. This puts a stop to four consecutive quarters of OECD stock falls since 1Q17 (OECD government stocks fell 6.2 mb during 2Q18, but this was less than commercial inventory gains). Over the first half of 2018, industry stocks were still down 30.6 mb (170 kb/d) due to the reduction registered in 1Q18. Outside the OECD, the data is mixed with lower stocks in Singapore and higher holdings in countries reporting to JODI, Fujairah and in China, as well as

2Q18 v 1Q18 Stock	Estimate			
	mb	mb/d		
Americas Commercial	4.9	0.1		
Asia Oceania Commercial	13.0	0.1		
Europe Commercial	-11.3	-0.1		
Total OECD Commercial	6.6	0.1		
OECD Government Stocks	-6.2	-0.1		
Oil in transit (inc floating storage)	22.8	0.3		
JODI (May)	9.9	0.1		
Fujairah (FEDCom/S&P Global Platts)	2.8	0.0		
Singapore (International Enterprise)	-6.9	-0.1		
Total exc China Balance	28.9	0.3		
China Crude Balance	57.1	0.6		
Total	86.1	0.9		

higher volumes of oil in transit (See *Oil in transit rises in response to Vienna Agreement*). While China has not published commercial stocks data for the past two months, its high crude imports imply a crude build during the first half of 2018, which is nonetheless less significant than the implied crude stock gain registered over 1H17.

	Ρ	relimina	ary Indus	try Stoc	k Change	in June	e 2018 and	d Secon	d Quarter	2018			
				June 201	18 (preliminary	)			Second Quarter 2018				
		(millior	n barrels)			(million bar	rels per day)			(million barrels per day)			
	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	Am	Europe	As. Ocean	Total	
Crude Oil	-21.5	-1.2	-0.6	-23.2	-0.72	-0.04	-0.02	-0.77	-0.10	0.13	0.02	0.05	
Gasoline	-2.1	-0.8	-1.8	-4.7	-0.07	-0.03	-0.06	-0.16	-0.05	-0.13	0.01	-0.17	
Middle Distillates	1.2	0.1	1.0	2.4	0.04	0.00	0.03	0.08	-0.20	-0.08	0.03	-0.25	
Residual Fuel Oil	-3.8	-1.4	0.6	-4.6	-0.13	-0.05	0.02	-0.15	-0.08	-0.01	0.02	-0.07	
Other Products	18.6	2.8	2.7	24.0	0.62	0.09	0.09	0.80	0.43	-0.06	0.00	0.37	
Total Products	14.0	0.7	2.5	17.1	0.47	0.02	0.08	0.57	0.10	-0.29	0.06	-0.13	
Other Oils <sup>1</sup>	-0.8	0.6	-1.0	-1.1	-0.03	0.02	-0.03	-0.04	0.05	0.04	0.06	0.15	
Total Oil	-8.3	0.2	0.9	-7.2	-0.28	0.01	0.03	-0.24	0.05	-0.12	0.14	0.07	

1 Other oils includes NGLs, feedstocks and other hydrocarbons.

Revisions versus July 2018 OII Market Report												
(million barrels)												
Americas		Europe		Asia O	ceania	OECD						
Apr-18	May-18	Apr-18	May-18	Apr-18	May-18	Apr-18	May-18					
0.2	3.8	0.1	6.0	0.1	0.4	0.4	10.2					
0.0	-2.8	0.0	-3.8	0.0	1.0	0.0	-5.6					
0.0	-9.9	-0.8	1.0	0.0	-1.5	-0.8	-10.4					
0.0	-0.2	0.0	0.5	0.0	-0.3	-0.1	-0.1					
-0.2	-6.2	-0.3	-4.3	0.1	0.7	-0.3	-9.8					
-0.2	-19.2	-1.0	-6.5	0.1	-0.2	-1.1	-25.9					
0.2	6.0	-0.1	-0.5	0.0	-0.2	0.2	5.3					
0.3	-9.5	-1.0	-0.9	0.2	0.0	-0.5	-10.3					
	Ameri Apr-18 0.2 0.0 0.0 0.0 -0.2 -0.2 0.2	Americas           Apr-18         May-18           0.2         3.8           0.0         -2.8           0.0         -9.9           0.0         -0.2           -0.2         -6.2           -0.2         -19.2           0.2         6.0	Americas         Euro           Apr-18         May-18         Apr-18           0.2         3.8         0.1           0.0         -2.8         0.0           0.0         -9.9         -0.8           0.0         -0.2         0.0           -0.2         -6.2         -0.3           -0.2         -19.2         -1.0           0.2         6.0         -0.1	(million barrels)           Americas         Europe           Apr-18         May-18         Apr-18         May-18           0.2         3.8         0.1         6.0           0.0         -2.8         0.0         -3.8           0.0         -9.9         -0.8         1.0           0.0         -0.2         0.0         0.5           -0.2         -6.2         -0.3         -4.3           0.2         6.0         -0.1         -0.5	(million barrels)           Americas         Europe         Asia Oc           Apr-18         May-18         Apr-18         May-18         Apr-18           0.2         3.8         0.1         6.0         0.1           0.0         -2.8         0.0         -3.8         0.0           0.0         -9.9         -0.8         1.0         0.0           0.0         -0.2         0.0         0.5         0.0           -0.2         -6.2         -0.3         -4.3         0.1           -0.2         -19.2         -1.0         -6.5         0.1           0.2         6.0         -0.1         -0.5         0.0	(million barrels)           Americas         Europe         Asia Oceania           Apr-18         May-18         Apr-18         May-18         Apr-18         May-18           0.2         3.8         0.1         6.0         0.1         0.4           0.0         -2.8         0.0         -3.8         0.0         1.0           0.0         -9.9         -0.8         1.0         0.0         -1.5           0.0         -0.2         0.0         0.5         0.0         -0.3           -0.2         -6.2         -0.3         -4.3         0.1         0.7           -0.2         -19.2         -1.0         -6.5         0.1         -0.2           0.2         6.0         -0.1         -0.5         0.0         -0.2	(million barrels)           Americas         Europe         Asia Oceania         OE           Apr-18         May-18         Apr-18         Apr-18         Apr-18					

For July, preliminary data show that commercial stocks moved little in the US and Japan, while figures for Europe moved up 3.9 mb.

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1 Other oils includes NGLs, feedstocks and other hydrocarbons.

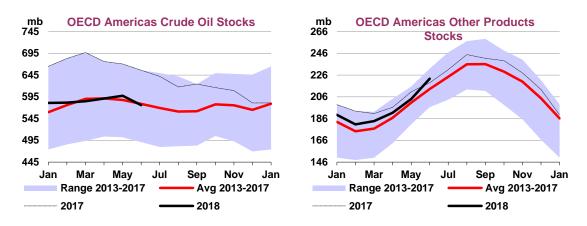
Revised data for OECD oil inventories showed decreases versus preliminary numbers. May OECD stocks were revised down by 10.3 mb largely because of a change in the Americas. April OECD stocks were revised down by just 0.5 mb.

## **Recent OECD industry stock changes**

## **OECD** Americas

Commercial stocks in the OECD Americas fell 8.3 mb in June to 1 473 mb, thanks to a significant drop in crude inventories. They were 576 mb at end-month, 21.5 mb lower m-o-m, thus ending five months of consecutive gains and hitting their lowest level since February 2015. Record high refinery runs and crude exports from the US were behind the stock draw. US crude exports reached new weekly and monthly records. Crude stock gains were partly offset by a larger-than-seasonal gain in other product stocks of 18.6 mb, led by reduced demand for US LPG. At 223 mb, this category was up 3.8 mb y-o-y, one of just two products (together with gasoline) to show a rise on the year.

Fuel oil (-3.8 mb) and gasoline (-2.1 mb) both fell in June, whereas middle distillate holdings rose 1.2 mb, recovering from the more than four-year low reached in May. Total oil stocks in the OECD Americas were 11 mb below the five-year average at end-June. Overall, over 2Q18, commercial oil stocks in the region rose a mere 4.9 mb, as declines in middle distillates (-18.6 mb), crude (-8.7 mb) and gasoline (-4.2 mb) were more than compensated by higher NGL and LPG stocks.

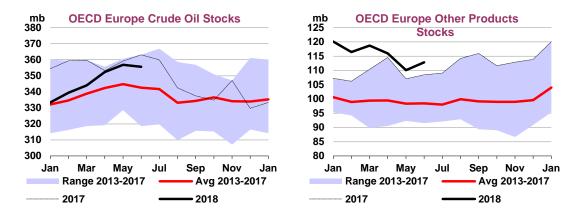


Preliminary data from the US Energy Information Administration for July shows a continuation of the same trends, with crude stocks declining 8.1 mb on the month and oil products gaining 10.7 mb.

Gasoline stockpiles fell by a larger-than-seasonal 7 mb as a result of strong demand, whereas diesel stocks (+7.2 mb) continued to gain. While refining throughput decreased from June's record levels, it remained elevated, helping to drain crude inventories. In July, crude imports fell by over 400 kb/d and exports fell nearly 600 kb/d m-o-m, with decreases to China and India rather than European countries, suggesting that the arbitrage was more difficult to work for traders. It is also likely that the threat of Chinese tariffs on US oil and gas exports reduced interest from Chinese refiners. Preliminary trade data for August point to higher US crude flows to India and reduced volumes to China.

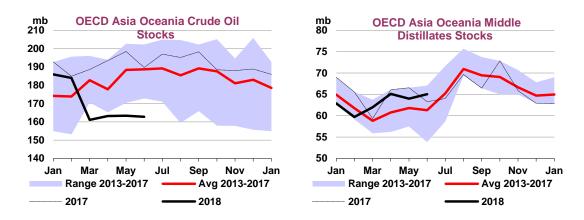
## OECD Europe

Commercial holdings in OECD Europe were little changed in June, rising by a mere 0.2 mb to 959 mb. Crude stockpiles fell 1.2 mb to 356 mb with higher utilisation at refineries, whereas oil product inventories gained 0.7 mb to 519 mb. There were gains in other product stocks, but falls seen in gasoline and fuel oil. Overall, over 2Q18, total OECD Europe oil stocks moved down 11.3 mb, as lower refinery production and higher demand for fuels pressured oil product holdings. Preliminary data from Euroilstock for July show total oil stocks rising 3.9 mb, largely thanks to gains in middle distillates.



## OECD Asia Oceania

As in Europe, commercial stocks in OECD Asia Oceania moved little in June. They increased 0.9 mb overall to reach 391 mb at the end of the month. There were falls in crude (-0.6 mb) and gasoline (-1.8 mb), but gains seen in middle distillates (+1 mb), fuel oil (+0.6 mb) and other products (+2.7 mb). Stocks increased 13 mb during 2Q18 – the most of any OECD regions – largely because of seasonal restocking of kerosene and higher NGL and feedstock inventories. Total oil stocks were 31 mb below the five-year average at the end of the month.



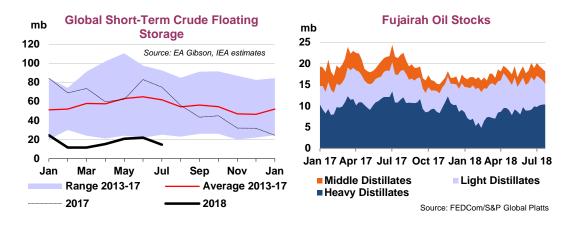
Preliminary data from the *Petroleum Association of Japan* (PAJ) for July showed crude stocks down 2.8 mb m-o-m and oil products up by 1.5 mb. Stocks of naphtha, jet fuel and kerosene gained, whereas

fuel oil and gasoline both declined. Gasoline stocks fell to their lowest level since at least 2003 at one point during the month, but recovered slightly afterwards. Japanese gasoline holdings have been under pressure for most of the past year, following the closure of some refinery capacity.

## Other stock developments

Stockpiles in the 19 non-OECD countries covered by the JODI database gained 6.3 mb m-o-m during May, the last month for which data is available. Crude stocks were up a combined 8.5 mb, NGLs rose 0.3 mb and oil products fell 2.5 mb. The largest overall gains were seen in Chinese Taipei, Nigeria, Romania and Ecuador. Saudi Arabia's crude stocks went up 0.9 mb – the first m-o-m increase since last September – but this was more than offset by a 1.4 mb fall in product holdings. Overall, JODI stocks are up a combined 37.4 mb (250 kb/d) in the first five months of 2018 versus the end of 2017, in contrast with the moderate inventory falls seen in the OECD.

Short-term crude floating storage has remained at reduced levels since the start of 2018. In July, it fell 7.4 mb m-o-m to 14.5 mb and was close to the five-year low hit earlier this year, according to *EA Gibson*. Figures from *Kpler* for ships idle over the past 12 days showed a reduction in crude floating storage in July, by 2 mb to 33 mb. *Kpler* calculations include tankers kept idle due to lack of berth space or storage capacity onshore and are generally higher than those from *Gibson*, which tracks ships specifically hired for storage purposes.

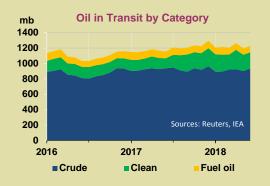


Oil stocks in Fujairah fell 1 mb during July, with large falls in light and middle distillates. Inventories of heavy distillates, the mainstay of Fujairah storage, gained 1.3 mb m-o-m to reach 10 mb, data from *FEDCom/S&P Global Platts* showed. They have nearly doubled since hitting a low in February. Oil stocks in Singapore gained by a modest 0.7 mb to reach 40 mb. However, in stark contrast with Fujairah, fuel oil and bunker fuel stocks have fallen for two months in a row and were at their lowest level since at least 2009, according to *International Enterprise*. This is the result of below-normal fuel oil imports in the last few months but also highlights strong demand for bunker fuel in Asia. This in turn shows that trade remains buoyant, despite the threat of tariffs between some of the world's largest economies.

For the second month running, there are no available figures for Chinese stocks from *China Oil, Gas and Petrochemicals*. Customs data, however, point to a sharp slowdown in Chinese crude imports for June to 8.3 mb/d. In July, we estimate that imports rose by 370 kb/d but remained well below the highs reached between April and May 2018. This, in turn, implies that net crude builds came to a halt in June and were only moderately positive in July. Overall, during the first half of 2018, we estimate that Chinese net crude builds came to 108.2 mb (600 kb/d), down from 158.8 mb (880 kb/d) for the same period in 2017.

#### Oil in transit rises in response to Vienna Agreement

Oil in transit, the quantity of oil on its way from producers to consumers, is likely to rise in the coming months in response to higher production from the US and Vienna Agreement countries. We estimate that crude in transit reached 934 mb at the end of June, up 13 mb (140 kb/d) from the end of March, using data from *Thomson Reuters*. Figures published by *Kpler* show it creeping up a further 31 mb since the end of June, largely thanks to exports from Saudi Arabia, Kuwait and the UAE. This includes volumes of crude held on idle tankers, also known as floating storage, which have been negligible in recent months but were as high as 90 mb in 2015 (and likely even more when slow steaming from ships is taken into account).



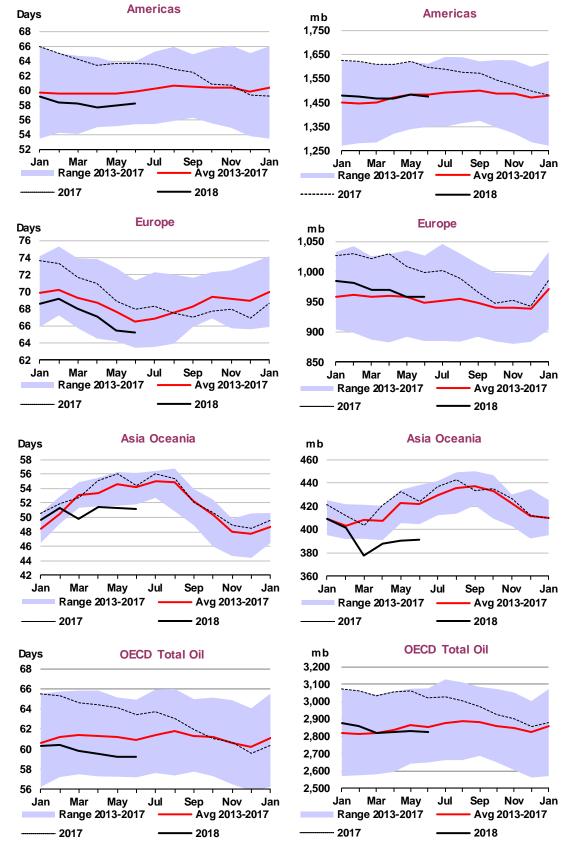
This metric is an often forgotten tool in the analysis of global oil fundamentals. It enables analysts to capture volumes that do not yet show up in official statistics, as the oil has been produced but not used. Most available oil in transit figures only take into account volumes aboard tankers ("oil on water"), whereas oil also moves by pipeline, barge and truck. However, these forms of transportation are less flexible than oil tankers and tend to be largely stable over time.

The IEA uses known OECD crude and oil product stocks as well as oil in transit to assess the gap between global oil

supply and demand. This is part of the miscellaneous to balance line item in Table 1 of this *Report*. However, we have historically only considered crude in transit due to a lack of reliable information on oil product flows. With the development of new ship tracking technology, this is beginning to change. This month we have started to include products in our oil in transit figures, resulting in better coverage, and we have also revised some of our historical crude figures to avoid the risk of double counting volumes in floating storage.

This has led us to revise our historical data for the miscellaneous to balance line item. Based on data from *Thomson Reuters*, we estimate that 291 mb of clean refined products (including LPG) and fuel oil were in transit by tanker at the end of June, a 31% gain on our previous crude-only figures. We acknowledge that not all product transit volumes are yet captured but the coverage will improve with time.

**Million Barrels** 



## Regional OECD End-of-Month Industry Stocks

(in days of forward demand and million barrels of total oil)

Days<sup>1</sup>

1 Days of forw ard demand are based on average demand over the next three months

# PRICES

## **Market overview**

Higher global output, and a continued oversupply of lighter crudes, saw outright ICE Brent prices fall by \$5.19/bbl over the course of the month, to \$74.25/bbl on 31 July. While NYMEX WTI prices declined for four consecutive weeks, on average July prices were up \$3.26/bbl m-o-m, having received a boost early in the month due to an unplanned outage in Canada and strong US refinery activity. The narrowing of the Brent-WTI and Brent-Dubai Exchange of Futures for Swaps (EFS) spreads has increased the competitiveness of crudes linked to Brent prices and we saw a pick-up in demand for North Sea and West African grades. In recent months, these crudes have struggled to find buyers as refiners had turned to relatively cheap US exports that have been flooding onto the market. Now in the season of peak demand, prices for refined products, in particular gasoline, diesel and fuel oil, held up against declining crude oil prices.

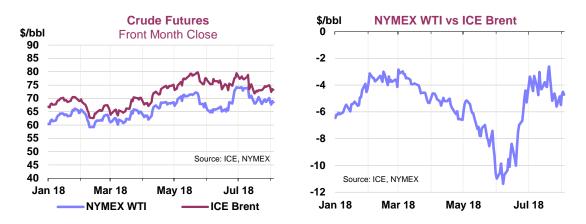
## **Futures markets**

Brent and WTI futures price directions diverged in July, with the North Sea benchmark falling by \$0.99/bbl m-o-m, while NYMEX WTI gained \$3.26/bbl. Higher production from OPEC countries, Russia, Libya and the US, weighed on Brent. The US benchmark, meanwhile, was boosted by domestic factors as stocks at Cushing fell to their lowest level in four years on high refining activity. The Brent-WTI spread has narrowed significantly, averaging \$4.37/bbl in July, half the June average. The spread hit an almost 12-month low of \$2.61/bbl on 20 July, and relatively higher WTI prices enhanced the attractiveness of Brent-linked crudes at the expense of US exports.

	P	rompt l	Month	Oil Futures	s Price	S				
		(monthl	y and wee	ekly averages,	\$/bbl)					
	Мау	Jun	Jul	Jul-Jun	%	Week Commencing:				
				Avg Chg	Chg	02 Jul	09 Jul	16 Jul	23 Jul	30 Jul
NYMEX										
Light Sweet Crude Oil	69.98	67.32	70.58	3.26	4.8	73.71	71.94	68.96	68.80	68.80
RBOB	91.60	87.75	88.24	0.48	0.5	88.83	88.61	85.56	89.33	87.93
ULSD	93.04	90.09	89.78	-0.31	-0.3	91.00	90.51	87.44	90.16	89.54
ULSD (\$/mmbtu)	16.41	15.89	15.83	-0.06	-0.3	16.05	15.96	15.42	15.90	15.79
Henry Hub Natural Gas (\$/mmbtu)	2.83	2.94	2.79	-0.15	-5.2	2.86	2.80	2.75	2.77	2.80
ICE										
Brent	77.01	75.94	74.95	-0.99	-1.3	77.56	76.02	72.51	73.85	73.65
Gasoil	90.87	88.31	88.15	-0.16	-0.2	89.17	89.47	85.45	88.40	87.27
Prompt Month Differentials										
NYMEX WTI - ICE Brent	-7.03	-8.62	-4.37	4.25		-3.85	-4.08	-3.55	-5.05	-4.85
NYMEX ULSD - WTI	23.06	22.77	19.20	-3.57		17.29	18.57	18.48	21.36	20.74
NYMEX RBOB - WTI	21.62	20.43	17.66	-2.78		15.12	16.67	16.60	20.53	19.13
NYMEX 3-2-1 Crack (RBOB)	22.10	21.21	18.17	-3.04		15.85	17.30	17.22	20.81	19.67
NYMEX ULSD - Natural Gas (\$/mmbtu)	13.58	12.95	13.04	0.10		13.19	13.16	12.67	13.14	12.99
ICE Gasoil - ICE Brent	13.86	12.37	13.20	0.83		11.61	13.45	12.94	14.55	13.62

Source: ICE, NYMEX.

Increased crude supply saw Brent futures flip into contango on 17 July suggesting that, in the short-term, there is adequate availability of light sweet crudes. Conversely, WTI time spreads display strong backwardation as US refiners scramble to access crude during the peak summer demand season. Following on from the loss of Canadian Syncrude in early July, WTI spreads again spiked up to \$2.20/bbl on 20 July on news of large stock draws at the Cushing hub.



The Brent-Dubai EFS fell sharply in July, averaging \$2.53/bbl, down \$0.90/bbl on a month earlier, reflecting the changing balance in availability of sweet and sour supply. Surging US exports have successfully competed with North Sea and West African grades in their traditional markets, which pressured the Brent benchmark. At the same time, supplies of sour grades from Venezuela and Iran are declining which is causing Dubai prices to move up. The narrowing EFS, which hit a four-year low in April, will increase the competitiveness of crude sales linked to Brent and, indeed, the differentials for North Sea and West African grades did improve in July on higher demand.

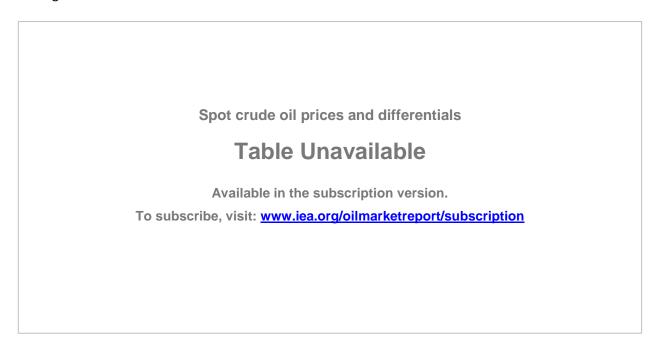


Futures markets for oil products such as ICE gasoil and NYMEX diesel remained in contango as high refinery runs kept markets well supplied. NYMEX RBOB spreads have been backwardated since May, and this trend strengthened in July suggesting some market tightness ahead of upcoming scheduled maintenance.

In July, there was a significant decline in money manager's holdings of net long positions. These fell by 76 mb in the four weeks to 31 July, with the Brent futures market experiencing the bulk of the liquidation. The contango market structure means that there is a cost to maintaining long positions so this encourages a sell-off. Despite this, investment banks raised their 2018 Brent and WTI oil futures price forecasts again, according to a survey by The Wall Street Journal.

## Spot crude oil prices

The relative strength of WTI futures prices impacted the export competitiveness of US crudes and the differentials of Louisiana Light Sweet (LLS), Mars and WTI Houston fell against North Sea Dated in July. Domestically, pipeline constraints in the Permian basin continue to cause WTI Midland to be priced at a significant discount to WTI in Cushing. On 26 July, the discount was \$17.18/bbl, the widest since August 2014. At the same time, the discount of Permian crude to that at the US Gulf Coast (USGC) reached \$19.83/bbl. This situation is unlikely to reverse in the near-term as Permian output continues to grow

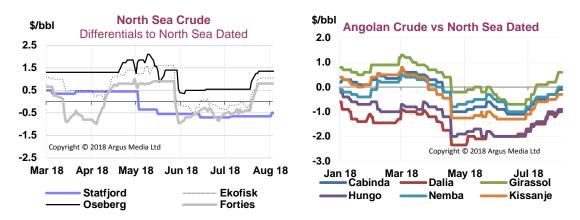




West Canadian Select (WCS) prices in Hardisty, Alberta, received a temporary boost as the Syncrude outage freed-up some pipeline export capacity to the US. However, the price impact was short-lived as the Syncrude exports are expected to return fully in September, and on higher output at other Canadian fields. WCS at Hardisty fell to a \$31.20/bbl discount to WTI Cushing on 3 August, the widest since December 2013.

Asian Pacific demand for North Sea crude picked up in July, helped by the narrowing Brent-Dubai EFS. Differentials to North Sea Dated for Forties, Brent, Ekofisk, Oseberg and Troll grades gained by between \$0.22/bbl and \$0.54/bbl m-o-m. In particular, South Korea, which has recently been importing increasing amounts of US crude, upped its purchases of Forties. North Sea differentials remain relatively suppressed, however, in light of the current abundance of light sweet crude.

The price differentials of key Nigerian and Angolan crudes, sales of which are linked to Brent, increased in July from the multi-year lows seen in June. Chinese demand for heavier crudes, such as Angola's Dalia, grew on the back of healthy fuel oil margins. Dalia's differential to North Sea Dated increased by \$0.70/bbl over the month, while another Angolan heavy crude, Hungo, increased by \$0.90/bbl. Indian demand for Nigerian supplies saw differentials for Forcados and Qua Iboe increase by \$0.44/bbl and \$0.3/bbl m-o-m, respectively.

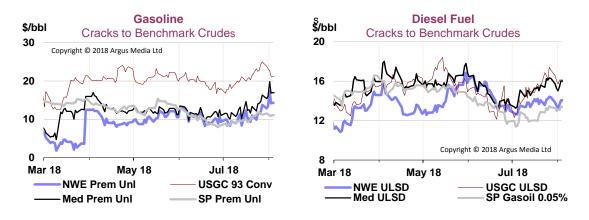


Urals prices fell in early July on higher supply. The discount to North Sea Dated reached a two-month low of \$2.55/bbl on 16 July, and a shipment headed to China for the first time this year. Later in the month, Urals prices strengthened on healthy demand, thanks to the narrowing Brent-Dubai EFS, and lower scheduled loadings for August. CPC Blend fell by \$1.24/bbl m-o-m. Due to quality constraints, few Asian refineries can process CPC Blend and July saw some volumes headed to US markets, on top of the usual European locations. Algeria's Saharan Blend prices received a modest boost when Libyan production dropped in early July, but this was more than offset by falling prices later in the month.

The backwardation of Dubai physical prices relative to swaps continued to flatten in July, as output from OPEC members in the Middle East increased. Plentiful supplies and the narrowing Brent-Dubai EFS saw the spot differentials for key grades from Qatar, Iraq and Iran decline m-o-m. Abu Dhabi's light sweet Murban fell \$0.40/bbl over the month, as the market is well supplied with LTO from the US.

## Spot product prices

Cracks for refined products improved on stronger demand, in particular for gasoline and diesel in the US, thanks to strength in domestic and export markets. In Europe, the market was well supplied, with recent hot weather having only a marginal impact on refinery run rates. However, inland shipping volumes of refined products via the Rhine River have been curbed due to low water levels.



Demand from West Africa and the US saw the price of European premium unleaded gasoline rise. However, with supply abundant, the gains were modest. In the USGC, cracks for super unleaded and unleaded gasoline were up \$1.45/bbl and \$2.84/bbl m-o-m, respectively, as unplanned refinery outages knocked supply during the high demand period. Import demand from Central America also supported prices; however, gasoline margins are still relatively weak as high retail prices are weighing on domestic end-user demand. In Asia Pacific, premium unleaded gasoline cracks held flat m-o-m, with strong demand from Indonesia and lower exports from China, Kuwait and Taiwan offsetting the increase in regional supplies from the commissioning of the second phase of Iran's Persian Star condensate splitter. European ultra-low sulphur diesel (ULSD) prices fell against North Sea Dated by \$0.92/bbl m-o-m in July. Despite high demand, the market was well supplied by Russia and the Middle East Gulf. US diesel markets have seen healthy export and domestic demand thanks, in part, to increasing LTO production in the Permian basin where there has been higher trucking, rail and drilling activity. US diesel stocks are low and unplanned refinery shutdowns on the USGC saw ULSD cracks there increase by \$1.26/bbl m-o-m.

Spot product prices

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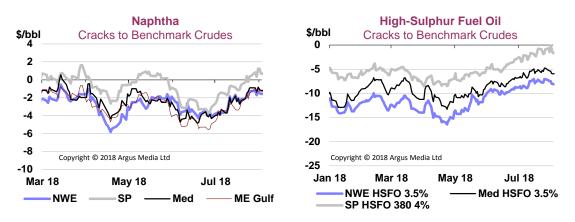
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Globally, naphtha cracks strengthened in July. In Singapore, the price differential to Dubai was up by\$1.84/bbl m-o-m on healthy petrochemicals demand and higher prices for rival feedstock propane. In Europe, cracks rose \$0.96/bbl m-o-m as demand for gasoline blending and exports to Asia picked up later in the month.

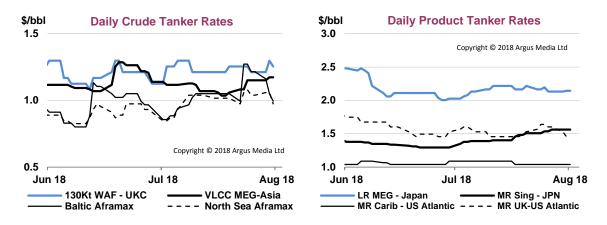
The Singapore regrade spread, the premium of jet fuel to gasoil, hit a three-month high of \$0.80/bbl on 10 July on firm demand for jet fuel. The spread has subsequently fallen to -\$0.25/bbl on 31 July. Singapore jet fuel physical prices relative to swaps flipped into backwardation on 27 July and prompt demand in Europe and the US pushed cracks up \$0.89/bbl m-o-m. As such, imports kept the European market well supplied and quotes for Rotterdam barge quotes were little changed. In Asia Pacific, gasoil cracks fell \$0.83/bbl m-o-m as supplies to the region grew after refinery turnarounds were completed. Furthermore, Indian industrial activity has declined during the monsoon season, reducing demand.

Fuel oil markets drew strength again in July and prices and cracks rose in all regions. Demand is typically elevated in the northern hemisphere summer due to increased use in the Middle East and Asian power generation sectors. Fuel oil markets display strong backwardation on lower global supplies of heavy crudes, high temperatures in the Middle East and declining stock levels in Singapore. Prompt prices for 180cst fuel oil and 380cst fuel oil reached a premium of \$1.32/bbl and \$1.55/bbl over second month prices, respectively, highs not seen since mid-2015.



## Freight

Little changed in freight markets in July. The market remained well supplied with tonnage and shipping rates, for the most part, are below owners' operating costs. Saudi Arabia's temporary halt of shipments through the Red Sea's Bab al-Mandeb strait had no discernible impact on freight rates. A heatwave and lack of rain in Europe has caused water levels in the Rhine River to decline to such an extent that barges, used to transport products such as gasoline, diesel, propane and heating oil within Europe, were unable to fully load. Subsequently, barge freight rates surged and this increase in cost weighed on demand in Germany and Switzerland.



Freight rates to ship crude were flat in July. While demand for Very Large Crude Carriers (VLCCs) on the Middle East Gulf (MEG) to Asia route increased on higher exports, the fleet was easily able to absorb this and rates fell \$0.05/bbl m-o-m. Likewise, a modest increase in demand for Suezmaxes travelling between the UK continent and West Africa was met by plentiful supply. Rates for Baltic and North Sea Aframaxes gained \$0.11/bbl and \$0.15/bbl, respectively over July on a temporary tightening of tonnage.

In clean freight markets, rates for Medium Range (MR) vessels travelling between Singapore and Japan came up in July by \$0.27/bbl. Low trade between the US and UK kept rates for MRs on this route at very low levels, averaging \$1.53/bbl for July. Higher US domestic demand is reducing exports to Mexico and Brazil, pressuring rates for MRs in the Caribbean.

#### WTI Houston: from local to regional to global benchmark?

While many headlines have focused on a possible global crude oil benchmark based in China, in the US a new regional marker has become prominent. WTI Houston, a benchmark established just over three years ago, has recently gained traction.

Open interest in the Argus Houston versus NYMEX WTI differential swap traded on the Chicago Mercantile Exchange (CME) reached a record 146 000 lots in late July, a more than four-fold rise on a year ago. Physical trading volumes reported by Argus averaged 330 kb/d during July, twice as much as Light Louisiana Sweet

### WTI Houston: from local to regional to global benchmark? (continued)

(LLS), the price previously used by international market participants to gauge US Gulf Coast crude fundamentals. While LLS continues to be used by local refiners and for pricing Gulf of Mexico grades, it has lost some relevance. Increased interest in WTI Houston has coincided with the wider price spread between crude produced in the Permian and Eagle Ford basins, and crude delivered in the Gulf Coast, in the last few months. As swaps are an effective tool to hedge the difference, they have become popular with traders.

A similar trend has been seen in WTI Midland, which represents the price of crude further inland, at the shale crude hub of Midland. When traded against Houston, WTI Midland enables traders to bet on transport costs between Permian oil fields and the coast. Open interest in the Argus Midland versus NYMEX WTI differential on the CME was 182 000 lots in late July, higher than WTI Houston and close to a record high, even if overall trade volumes remain puny relative to WTI futures . It gained sharply in late 2017, presumably as market participants factored in Permian takeaway capacity constraints. Average physical traded volumes in July were 510 kb/d, according to Argus, also higher than for WTI Houston, and in some recent months have approached 800 kb/d. Liquidity is made up of deals communicated post-factum to Argus.



The question now is whether interest in WTI Houston pricing will outlast the construction of more pipeline capacity from the Permian, which will occur between now and the second half of 2019 and should eventually reduce the differentials between the Permian, Cushing and the coast. Supporters argue that Houston is a more natural hub to establish a crude marker than Cushing, which currently hosts the NYMEX WTI crude futures contract. We expect that by the end of 2020, the Gulf Coast could have 8.1 mb/d of incoming pipeline capacity, compared with Cushing's 4.1 mb/d. Cushing made sense as a contract delivery point, when WTI was created in 1983. However, at various times, pipeline capacity out of Cushing has been constrained, in turn temporarily disconnecting the hub from the wider fundamentals of the US crude market. Such disruptions have been a regular feature of the Cushing market ever since 2010, even if the construction of more pipeline capacity has partly alleviated the problem. There is also an issue of quality in Cushing where large volumes of crude are blended, thus creating an uncertainty – and an inherent price discount – for market participants, who favour crude directly from Permian oil fields.

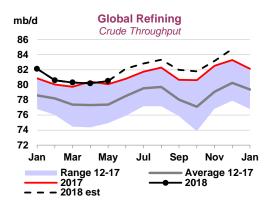
Competition between exchanges, on the one hand, and price reporting agencies, on the other, is heating up. S&P Global Platts have recently turned their WTI Houston assessment from a pipeline into a waterborne index taking into account activity occurring at all major Gulf Coast loading ports. This includes Corpus Christi, which is already the largest crude exporter and will steadily overtake Houston over the next few years. The assessment follows a 15-45 day loading period (instead of a calendar month pipeline schedule) comparable to what happens in other seaborne markets such as the North Sea. It also eliminates the \$0.50-1.00/bbl price differential that exists between current WTI Houston prices, which are set at the Magellan East Houston terminal, and the coast, and opens participation to new players, not just those with physical access to pipelines around the Magellan terminal. Intercontinental Exchange (ICE), NYMEX's main competitor, said in July it would soon launch an outright price futures contract priced at Magellan's East Houston terminal in a bid to bypass the requirement to trade futures combined with Houston swaps to hedge a crude sale.

For now, moving the US crude benchmark from Cushing looks difficult, given the amount of open interest and trade volume linked to the contract several years out. CME presumably have little interest in disrupting a big money earner. The drive to a new location is unlikely to come from financial players, who flock where trading is more active. Physical market participants, who are often behind benchmark changes, for now appear content with trading WTI Cushing futures as well as the Argus Midland and Houston swaps on top to hedge locational differences. Given this fragmentation, WTI Houston's ability to become a truly global oil benchmark remains an open question.

# REFINING

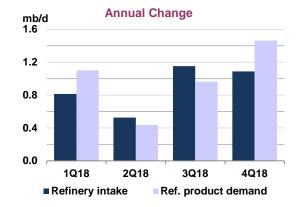
# Summary

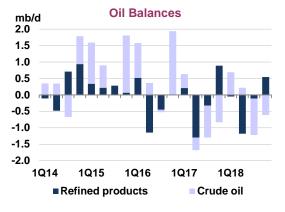
Global refining intake has accelerated as it enters the usually more active second half of the year. Even with an upward revision to our 1Q18 and 2Q18 throughput estimates (170 kb/d and 60 kb/d, respectively) and a 160 kb/d downward revision to 3Q18 forecast, runs in the second half of 2018 are almost 2 mb/d higher than in the first half. Throughput is forecast to peak in 4Q18 with the expectation of maintenance concentrated in September and new capacity ramping up towards the end of the year. This will help replenish refined product inventories, resulting in a stock build in 4Q18 (the only one this year), while for the



year as a whole refined products will draw by 0.2 mb/d. In 2018, refining throughput is forecast to increase by 0.9 mb/d, just under the 1 mb/d growth in refined products demand.

Our throughput forecast in 4Q18 may yet be revised downward, depending on crude pricing and refining margins under the US sanctions against Iranian exports. An absence of product builds in 4Q18 will further stretch market fundamentals in 2019, prior to the International Maritime Organisation's fuel specification changes to be implemented in 2020.





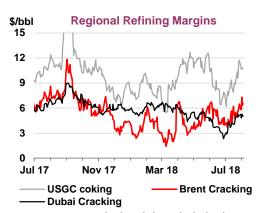
### Global Refinery Crude Throughput<sup>1</sup>

				(million b	arrels per	day)					
	1Q18	Apr 18	May 18	Jun 18	2Q18	Jul 18	Aug 18	Sep 18	3Q18	4Q18	2018
Americas	18.9	18.9	19.2	20.2	19.4	20.2	20.1	19.3	19.9	19.5	19.4
Europe	11.9	11.8	11.6	12.0	11.8	12.3	12.6	12.4	12.4	12.5	12.1
Asia Oceania	7.2	6.9	6.7	6.3	6.6	6.9	7.0	6.9	7.0	7.1	7.0
Total OECD	38.0	37.6	37.4	38.4	37.8	39.4	39.7	38.7	39.2	39.1	38.5
FSU	7.0	6.6	6.9	7.1	6.9	7.0	6.9	6.6	6.8	7.0	6.9
Non-OECD Europe	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
China	11.9	12.1	11.9	12.1	12.1	11.9	11.9	12.0	11.9	11.9	12.0
Other Asia	10.7	10.2	10.6	10.8	10.5	10.7	10.7	10.6	10.7	10.8	10.7
Latin America	3.6	3.8	3.7	3.4	3.7	3.5	3.7	3.7	3.7	3.8	3.7
Middle East	7.3	7.2	7.5	7.8	7.5	7.7	7.7	7.8	7.7	7.9	7.6
Africa	1.9	2.1	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0
Total Non-OECD	42.9	42.5	43.0	43.6	43.1	43.4	43.5	43.2	43.4	44.0	43.3
Total	80.9	80.1	80.4	82.0	80.9	82.7	83.2	81.9	82.6	83.1	81.9
Year-on-year change	0.8	-0.2	0.4	1.3	0.5	1.1	1.0	1.3	1.2	1.1	0.9

<sup>1</sup> Preliminary and estimated runs based on capacity, know n outages, economic runcuts and global demand forecast

# Margins

Refining margins were generally stronger in July amid particularly mixed developments in spot crude and refined products values. The only declines were seen in the WTI margins in the US Midcontinent, due to the increase in the benchmark crude value. US Gulf Coast refiners profited from the widening discount of sour crudes and stronger gasoline prices. In Europe, as benchmark North Sea Dated and Urals prices were almost unchanged m-o-m, the support came mainly from stronger fuel oil cracks. Middle distillates suffered from low Rhine water levels, which severely restricted barge flows to inland markets during the summer



restocking season for winter heating fuel. In Singapore, the margins were helped by slightly lower feedstock costs, but the real drivers were the fuel oil and naphtha cracks. Gasoil cracks, meanwhile, continued moving lower m-o-m as it is the main product export out of China.

# IEA/KBC Global Indicator Refining Margins<sup>1</sup>

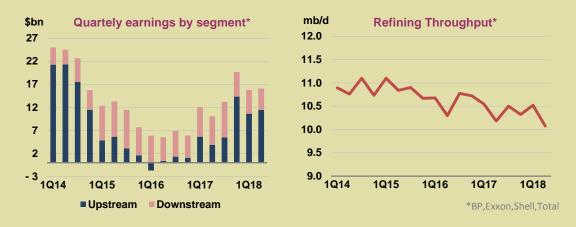
				(\$/bbl)							
		I	Monthly Av	erage		Change		Averag	ge for w eel	cending:	
	Apr 18	May 18	Jun 18	Jul 18	J	lul 18-Jun 18	06 Jul	13 Jul	20 Jul	27 Jul	03 Aug
NW Europe											
Brent (Cracking)	4.26	4.65	5.05	5.06	♠	0.01	4.13	4.71	5.39	5.71	6.38
Urals (Cracking)	6.00	5.77	6.01	6.53	♠	0.52	5.46	6.45	7.26	6.90	7.13
Brent (Hydroskimming	) -1.03	-0.31	0.82	1.02	♠	0.20	0.14	0.69	1.45	1.60	1.87
Urals (Hydroskimming	) 0.19	0.29	1.21	2.09	↑	0.88	1.10	2.05	2.91	2.35	2.23
Mediterranean											
Es Sider (Cracking)	6.73	6.85	7.54	7.69	↑	0.15	6.70	7.21	8.06	8.42	8.97
Urals (Cracking)	6.92	6.44	5.97	6.86	↑	0.89	5.71	6.42	7.21	7.78	7.88
Es Sider (Hydroskimm	ing) 0.00	0.00	0.00	0.00	٠	0.00	0.00	0.00	0.00	0.00	0.00
Urals (Hydroskimming	) 0.49	0.44	0.85	2.09	♠	1.25	1.05	1.66	2.47	2.91	2.90
US Gulf Coast											
50/50 HLS/LLS (Crack	ing) 10.05	10.44	8.29	11.34	↑	3.05	8.65	10.76	11.35	13.43	12.24
Mars (Cracking)	4.24	5.62	4.32	7.24	1	2.92	6.08	7.44	6.94	8.18	6.90
ASCI (Cracking)	3.81	5.22	3.98	6.91	1	2.93	5.74	7.08	6.62	7.92	6.51
50/50 HLS/LLS (Cokin	g) 12.09	12.46	10.03	12.62	1	2.59	9.94	12.09	12.63	14.68	13.62
50/50 Maya/Mars (Cok	ing) 11.42	11.48	8.25	9.11	1	0.86	7.14	8.87	8.71	10.63	10.78
ASCI (Coking)	9.88	10.58	8.44	10.67	♠	2.22	9.14	10.74	10.32	11.93	11.08
US Midcon											
WTI (Cracking)	12.91	17.65	16.53	14.49	$\mathbf{\Psi}$	-2.04	12.37	13.65	13.88	16.43	17.27
30/70 WCS/Bakken (C	racking) 14.13	18.69	17.46	19.28	↑	1.82	17.15	16.16	19.24	22.43	22.44
Bakken (Cracking)	15.76	20.46	16.30	17.62	↑	1.32	16.03	15.76	17.62	19.83	19.79
WTI (Coking)	15.00	19.96	18.58	16.11	$\mathbf{\Psi}$	-2.47	14.01	15.27	15.47	18.05	19.02
30/70 WCS/Bakken (C	oking) 17.73	22.15	20.44	21.87	1	1.44	19.53	18.63	21.78	25.20	25.59
Bakken (Coking)	16.55	21.34	17.06	18.15	1	1.09	16.57	16.29	18.14	20.36	20.38
Singapore											
Dubai (Hydroskimmin	g) -0.02	0.21	-0.28	1.05	↑	1.32	0.13	0.72	1.23	1.79	1.92
Tapis (Hydroskimming	J) 0.71	1.11	1.84	2.23	1	0.40	1.11	1.99	3.29	2.40	2.76
Dubai (Hydrocracking)	5.27	5.09	3.53	4.25	1	0.72	3.31	3.93	4.37	5.09	5.11
Tapis (Hydrocracking)	4.65	4.78	4.66	4.78	1	0.12	3.62	4.52	5.78	5.04	5.32

1 Global Indicator Refining Margins are calculated for various complexity configurations, each optimised for processing the specific crude(s) in a specific refining centre. Margins include energy cost, but exclude other variable costs, depreciation and amortisation. Consequently, reported margins should be taken as an indication, or proxy, of changes in profitability for a given refining centre. No attempt is made to model or otherwise comment upon the relative economics of specific refineries running individual crude slates and producing custom product sales, nor are these calculations intended to infer the marginal values of crude for pricing purposes.

Source: IEA, KBC Advanced Technologies (KBC)

## 2Q18 financial results point at lower refining earnings

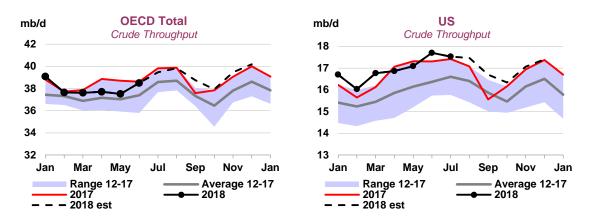
Refining margins in 2Q18 in Europe and the US increased from 1Q18 levels in parallel with an estimated 1.2 mb/d draw in refined products stocks. However, since product draws were caused by peak refining maintenance rather than strong demand growth, refiner profits generally declined both q-o-q and y-o-y. The combined refining earnings of four western oil majors (BP, Exxon, Shell and Total) were at the lowest quarterly value since 4Q14, as throughput was also at its lowest levels in many years, due in part, to refinery asset divestments. The share of refining earnings in total corporate earnings also declined, although it was higher than in 4Q17, when upstream profits were particularly strong. US independent refiners, such as Valero, Marathon and Phillips 66, however, reported stronger results in 2Q18, benefitting from advantageously priced local and imported feedstocks and higher operating rates.



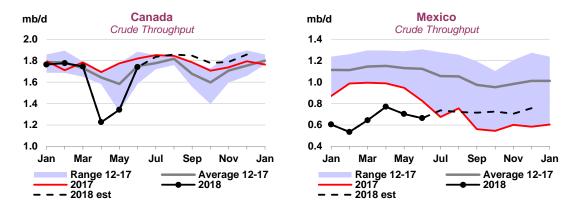
It is also interesting to note the gap between the margins reported by companies. Even if these calculations are only indicative and usually do not reflect the actual realised margins, there seem to be substantial differences in the feedstock/configuration assumptions and methodology. In 2Q18, for example, Shell's assessment of the European complex margin was just \$2.7/bbl, compared to Total's \$4.7/bbl. Chevron reported US Gulf Coast margins at \$23.8/bbl, much higher than Shell's \$8.2/bbl or Phillips 66's \$9.9/bbl. In Singapore, Shell assessed 2Q18 margins at \$1.6/bbl while Chevron saw \$7.4/bbl.

# **OECD** refinery throughput

Actual data for 2Q18 OECD throughput show the largest annual decline since 4Q13 at 800 kb/d y-o-y due to large maintenance programmes in Canada and Turkey and low activity levels in Mexico, France and Belgium. OECD Europe and Asia are expected to continue declining y-o-y in the second half of this year, but this will be more than offset by strong growth in the US and some recovery in Mexico. For 2018 as a whole, OECD intake is expected to be 80 kb/d lower y-o-y.



**US** refiners in July eased slightly from June's record capacity utilisation rates, with throughput down 200 kb/d m-o-m from June's all-time high of 17.6 mb/d. Seasonal record runs are expected in the second half of the year at 17.1 mb/d and 16.8 mb/d, respectively, for 3Q18 and 4Q18.



Data for **Canadian** throughput in May were finalised even lower due to a larger impact from refinery turnarounds. Preliminary data for June and weekly data for July indicate a rebound to normal levels. Our forecast for 4Q18 includes the ramp-up of the 80 kb/d first phase of the Sturgeon refinery in Alberta. In **Mexico**, throughput declined in June for the second consecutive month proving April's recovery to be somewhat premature. Our forecast for the second half of 2018 has been revised down by 60 kb/d. In response to the newly elected President Lopez Abrador's plans to boost refining activity and build new refineries, a Pemex executive, Carlos Murrieta, reiterated the company's decision to maintain reduced refining rates due to low margins. In an interview to the *Financial Times*, he said that exporting crude and importing products is a better solution given the fuel oil high yields from domestic refineries.

600000000000000000000000000000000000000			(m	illion barrels	s per day)					
							Chang	e from	Utilisatio	on rate <sup>1</sup>
	Jan 18	Feb 18	Mar 18	Apr 18	May 18	Jun 18	May 18	Jun 17	Jun 18	Jun 17
US <sup>2</sup>	16.60	15.93	16.67	16.77	16.99	17.60	0.61	0.40	93%	91%
Canada	1.75	1.77	1.74	1.22	1.33	1.73	0.40	-0.08	86%	94%
Chile	0.19	0.20	0.20	0.20	0.16	0.18	0.02	-0.01	80%	86%
Mexico	0.59	0.52	0.63	0.76	0.69	0.65	-0.04	-0.16	40%	49%
OECD Americas <sup>3</sup>	19.14	18.42	19.23	18.94	19.18	20.17	0.99	0.14	88%	88%
France	1.17	1.17	1.03	0.99	0.78	1.04	0.26	-0.12	84%	94%
Germany	1.95	1.93	1.79	1.83	1.83	1.93	0.11	0.16	96%	88%
Italy	1.36	1.34	1.35	1.38	1.34	1.28	-0.05	-0.13	74%	81%
Netherlands	1.19	1.18	1.05	1.12	1.09	1.14	0.05	0.01	88%	87%
Spain	1.41	1.28	1.32	1.38	1.35	1.21	-0.14	-0.03	86%	88%
United Kingdom	1.05	0.82	0.93	1.07	0.98	1.07	0.10	-0.06	85%	89%
Other OECD Europe	4.32	4.20	3.94	4.00	4.19	4.27	0.08	-0.04	88%	89%
OECD Europe	12.45	11.92	11.42	11.78	11.55	11.95	0.40	-0.19	87%	88%
Japan	3.30	3.25	3.27	3.16	2.83	2.53	-0.29	-0.23	71%	78%
South Korea	3.24	3.12	2.74	2.93	3.13	3.03	-0.10	0.24	96%	88%
Other Asia Oceania	0.86	0.84	0.85	0.79	0.73	0.72	-0.01	-0.07	83%	91%
OECD Asia Oceania	7.39	7.21	6.87	6.89	6.69	6.29	-0.40	-0.07	83%	84%
OECD Total	38.98	37.55	37.51	37.61	37.42	38.40	0.99	-0.12	87%	87%

### **Refinery Crude Throughput and Utilisation in OECD Countries**

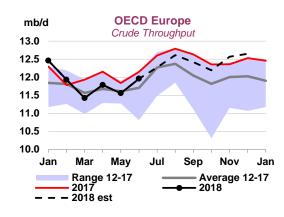
<sup>1</sup> Expressed as a percentage, based on crude throughput and current operable refining capacity

<sup>2</sup> US50

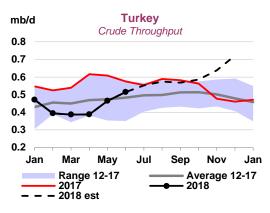
<sup>3</sup> OECD Americas includes Chile and OECD Asia Oceania includes Israel. OECD Europe includes Slovenia and Estonia, though neither country has a refinery

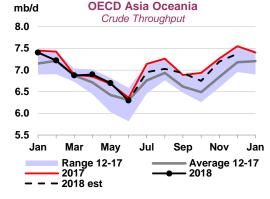
OECD Europe June throughput came in 120 kb/d lower than our estimate, and, due to a flurry of unplanned shutdowns, our 3Q18 forecast has been revised down by 150 kb/d. In 2018, throughput will

only see y-o-y growth in 4Q18, as the 200 kb/d STAR refinery in **Turkey** starts operations after commissioning in September. If the ramp-up goes as planned, Turkish refinery intake in December will be almost double the low levels observed in March, resulting in increased crude import requirements. Turkey is the largest buyer of Iranian crude in Europe and has so far not reduced imports. **Germany** might also see the partial restart of Wilhelmshaven refinery by the end of this year, where a 60 kb/d vacuum distillation unit is planned to be operated as a sweet crude distillation unit. However, given possible delays in bringing back online equipment that has long remained idle, we have not yet incorporated this project into our forecast.



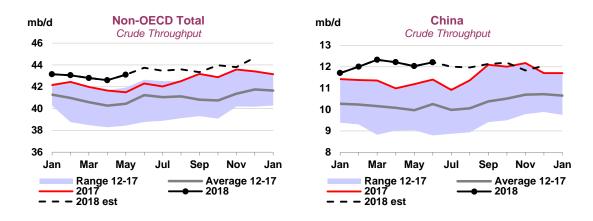
**Korean** throughput was significantly higher in June than expected, and offset lower numbers elsewhere in OECD Asia Oceania. **Japanese** runs declined another 300 kb/d m-o-m on seasonal maintenance work. Throughput at **New Zealand**'s sole refinery was at minimum levels for the second consecutive month on major maintenance work but was expected to be back up from July. Regional throughput is expected to climb 340 kb/d q-o-q in 3Q18, with another 140 kb/d increase into 4Q18, but for the year as a whole runs decline by 90 kb/d.



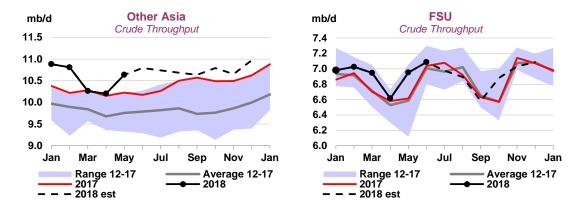


# Non-OECD refinery throughput

Recent data updates resulted in an upward revision of non-OECD throughput. This was mainly due to newly arrived Indonesian data for the first five months of the year and on higher than expected Chinese and Indian throughputs in June. Runs are expected to grow by almost 1 mb/d y-o-y for the year as a whole, although the pace slows down into the second half of 2018.

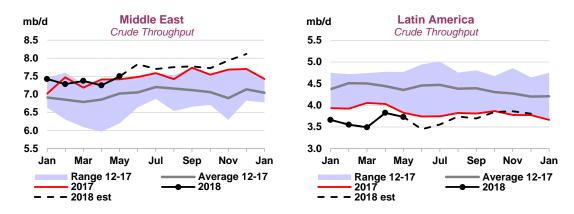


Instead of the expected slowdown, Chinese throughput rebounded in June to above 12 mb/d. This was despite to reportedly lower independent refining activity and a noticeable slowdown in crude imports, resulting in almost 250 kb/d of implied crude stock draws. The long stretch of annual growth in crude processing comes to halt in 4Q18, as domestic product oversupply will likely delay the ramp-up of new capacity to next year.



**India's** June throughput was 170 kb/d higher than estimated, increasing by 80 kb/d m-o-m to a nearrecord 5.3 mb/d. Runs are expected to grow by 200 kb/d this year. **Indonesia** reported data for the first five months of 2018, with actual runs some 100 kb/d higher than our estimates.

**Russia** continued ramping up throughput in June, adding some 160 kb/d. May and June refinery runs in **Kazakhstan** were stronger than expected, with little impact from announced maintenance works. Led by Russia, FSU's throughput is expected to grow by a modest 80 kb/d this year.



Throughput in the Middle East in May is estimated at 7.5 mb/d, some 300 kb/d above the figure shown in JODI data. Throughput in **Qatar** was indicated at an abnormally low 74 kb/d, compared to April's 414 kb/d, which would imply shutdown of the whole of Ras Laffan condensate splitting complex, one of the main jet fuel producers in the region. However, product output in the JODI database, and clean product loadings from *Kpler* showed no significant change from April, prompting us to use our own estimate instead. **Saudi** throughput was 110 kb/d lower than expected in May, but did recover 400 kb/d to 2.6 mb/d. **Kuwait** has announced the start of the commissioning of the new 800 kb/d refining complex formed by merging the basis of Mina Abdullah and Mina al-Ahmadi refineries.

In Latin America, **Brazil's** June throughput number held above 1.8 mb/d as Petrobras increased runs to benefit from diesel pricing changes, which were introduced after truckers' strikes in May and reduced the incentives to import the product. **Argentina** saw the lowest monthly throughput rate on record, at just above 425 kb/d. We also revised down our estimate for **Venezuelan** runs in 4Q18 to just 250 kb/d.

Table 1
WORLD OIL SUPPLY AND DEMAND

(million barrels per day)

	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
OECD DEMAND																	
Americas	24.6	24.9	24.6	25.1	25.1	25.2	25.0	25.3	25.3	25.4	25.5	25.4	25.2	25.6	25.6	25.7	25.5
Europe	13.8	14.0	13.8	14.3	14.7	14.4	14.3	14.0	14.1	14.6	14.4	14.3	14.0	14.4	14.8	14.5	14.4
Asia Oceania	8.1	8.1	8.5	7.7	7.8	8.3	8.1	8.5	7.6	7.8	8.2	8.0	8.4	7.6	7.7	8.2	8.0
Total OECD	46.5	47.0	46.9	47.0	47.6	47.9	47.3	47.8	47.0	47.8	48.1	47.7	47.6	47.6	48.1	48.4	47.9
NON-OECD DEMAND																	
FSU	4.6	4.5	4.3	4.5	4.8	4.7	4.6	4.4	4.7	4.8	4.7	4.7	4.5	4.7	4.9	4.8	4.7
Europe	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8
China	11.6	12.0	12.4	12.8	12.4	12.7	12.6	12.8	13.1	12.9	13.4	13.1	13.2	13.6	13.3	13.8	13.5
Other Asia	12.5	13.0	13.2	13.5	13.2	13.5	13.4	13.7	13.9	13.6	14.0	13.8	14.2	14.4	14.0	14.5	14.3
Americas	6.7	6.4	6.3	6.5	6.6	6.4	6.5	6.3	6.4	6.5	6.4	6.4	6.3	6.4	6.5	6.5	6.4
Middle East	8.5	8.5	8.2	8.6	8.8	8.2	8.5	8.0	8.5	9.0	8.4	8.5	8.2	8.7	9.1	8.5	8.6
Africa	4.2	4.3	4.4	4.3	4.2	4.3	4.3	4.4	4.3	4.2	4.4	4.3	4.5	4.4	4.3	4.5	4.4
Total Non-OECD	48.7	49.4	49.6	51.0	50.8	50.6	50.5	50.5	51.7	51.8	52.1	51.5	51.6	53.1	53.0	53.3	52.7
Total Demand <sup>1</sup>	95.3	96.4	96.5	98.0	98.4	98.5	97.8	98.3	98.7	99.6	100.2	99.2	99.2	100.7	101.1	101.7	100.7
OECD SUPPLY																	
Americas <sup>4</sup>	20.0	19.5	20.0	19.8	20.2	21.2	20.3	21.7	22.1	22.1	22.6	22.2	23.3	23.5	23.6	23.9	23.6
Europe	3.5	3.5	3.7	3.5	3.4	3.4	3.5	3.5	3.3	3.3	3.5	3.4	3.5	3.3	3.3	3.4	3.4
Asia Oceania	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Total OECD	23.9	23.4	24.0	23.7	24.0	25.0	24.2	25.7	25.8	25.8	26.5	26.0	27.2	27.2	27.3	27.8	27.4
NON-OECD SUPPLY																	
FSU	14.0	14.2	14.4	14.3	14.2	14.4	14.3	14.4	14.5	14.6	14.7	14.5	14.8	14.8	14.7	14.8	14.8
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	0.1	0.1	0.1	0.1
China	4.3	4.0	3.9	3.9	3.8	3.8	3.9	3.8	3.9	3.8	3.8	3.8	3.7	3.8	3.7	3.7	3.7
Other Asia <sup>2</sup>	3.6	3.6	3.5	3.4	3.4	3.4	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2
Americas <sup>2,4</sup>	4.6	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.7	4.6	4.8	4.9	5.0	5.0	4.9
Middle East	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2
Africa <sup>2</sup>	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Total Non-OECD	29.4	29.1	29.2	29.0	28.9	29.0	29.0	29.0	29.1	29.2	29.3	29.1	29.3	29.4	29.3	29.5	29.4
Processing gains <sup>3</sup>	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Global Biofuels	2.3	2.4	2.0	2.5	2.9	2.5	2.5	2.1	2.6	2.8	2.5	2.5	2.2	2.7	2.9	2.6	2.6
Total Non-OPEC Supply	57.8	57.1	57.5	57.5	58.0	58.7	57.9	59.1	59.8	60.1	60.6	59.9	61.0	61.7	62.0	62.3	61.8
OPEC																	
Crude	32.1	33.0	32.3	32.6	33.0	32.6	32.6	32.3	32.1								
NGLs	6.6	6.8	6.8	6.9	6.9	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Total OPEC	38.6	39.8	39.1	39.5	39.9	39.4	39.5	39.2	39.0								
Total Supply <sup>4</sup>	96.5	96.9	96.6	96.9	97.8	98.1	97.4	98.3	98.8								
STOCK CHANGES AND MISCELI		JS															
Reported OECD																	
Industry	0.8	0.0	0.3	-0.2	-0.5	-1.3	-0.4	-0.5	0.1								
Government	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.1	-0.1								
Total	0.8	0.0	0.3	-0.3	-0.6	-1.4	-0.5	-0.4	0.0								
Floating storage/Oil in transit	0.3	0.2	0.0	-0.1	0.5	1.0	0.4	-1.0	0.3								
Miscellaneous to balance <sup>5</sup>	0.1	0.4	-0.2	-0.7	-0.4	0.0	-0.3	1.4	-0.2								
Total Stock Ch. & Misc	1.2	0.6	0.2	-1.0	-0.5	-0.3	-0.4	0.0	0.0								
Memo items:																	
Call on OPEC crude + Stock ch. <sup>6</sup>	30.9	32 /	22.1	33.6	22 E	22.0	22.4	20.0	32.0	00 4	00.0	22.2	24.0	22.0	22.4	22.2	31.9

Measured as deliveries from refineries and primary stocks, comprises inland deliveries, international marine bunkers, refinery fuel, crude for direct burning, oil from non-conventional sources and other sources of supply. Includes Biofuels.
 Other Asia includes Indonesia throughout. Latin America excludes Ecuador throughout. Africa excludes Angola, Congo, Gabon and Equatorial Guinea throughout.
 Net volumetric gains and losses in the refining process and marine transportation losses.
 Comprises crude oil, condensates, NGLs, oil from non-conventional sources and other sources of supply.
 Includes changes in non-reported stocks in OECD and non-OECD areas.
 Equals the arithmetic difference between total demand minus total non-OPEC supply minus OPEC NGLs.

# Table 1a WORLD OIL SUPPLY AND DEMAND: CHANGES FROM LAST MONTH'S TABLE 1

(million barrels per day)

	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
OECD DEMAND																	
Americas	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	-	0.2	-	-	0.1
Europe	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-0.1	-0.1	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	0.1	0.1	0.1	0.1
Total OECD	-	-	-	-	-	-	-	-	-0.1	0.1	0.1	-	-	0.3	0.1	0.1	0.1
NON-OECD DEMAND																	
FSU	-	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other Asia	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-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	-0.1	-0.1	-0.1
Middle East	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1
Africa		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OECD	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-	-	0.1	0.1	0.1	-	0.1	0.1	0.1	0.1
Total Demand	0.2	0.2	0.1	0.1	0.1	0.1	0.1	-0.1	-	0.3	0.1	0.1	0.1	0.4	0.2	0.1	0.2
OECD SUPPLY																	
Americas	-	-	-	-	-	-	-	-	0.2	-	-0.1	-	-	0.2	-	-0.1	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OECD	-	-	-	-	-	-	-	-	0.2	-	-0.1	-	0.1	0.2	-	-0.1	-
NON-OECD SUPPLY																	
FSU	-	-	-	-	-	-	-	-	-	0.1	0.1	-	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1
Middle East Africa	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
		-	-	-	-	-	-		-	-	-				-	-	-
Total Non-OECD	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Biofuels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Non-OPEC Supply	-	-0.1	-	-	-	-	-	-	0.2	0.1	-0.1	0.1	0.1	0.2	0.1	-0.1	0.1
OPEC																	
Crude	-	-	-	-	-	-	-	-	-								
NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total OPEC	-	-	-	-	-	-	-	-	-								
Total Supply	-	-	-	-	-	-	-	-	0.2								
STOCK CHANGES AND MISCEL	LANEOU	IS															
REPORTED OECD																	
Industry	-	-	-	-	-	-	-	-									
Government	-	-	-	-	-	-	-	-									
Total	-	-	-	-	-	-	-	-									
Floating storage/Oil in transit	-	-	0.3	0.3	1.3	0.7	0.6	-0.8									
Miscellaneous to balance	-0.2	-0.2	-0.5	-0.4	-1.4	-0.9	-0.8	0.9									
Total Stock Ch. & Misc	-0.2	-0.2	-0.1	-0.1	-0.1	-0.2	-0.1	0.1	0.2								
Memo items: Call on OPEC crude + Stock ch.	0.2	0.2	0.1	0.1	0.1	0.2	0.1	-0.1	-0.2	0.2	0.2		-	0.2	0.1	0.2	0.1
				U. I date data								-	-	0.2	0.1	0.2	0.1

When submitting their monthly oil statistics, OECD Member countries periodically update data for prior periods. Similar updates to non-OECD data can occur. Changes do not reflect move from Non-OPEC to OPEC by Congo

Table 2
SUMMARY OF GLOBAL OIL DEMAND

	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19	4Q19	2019
Demand (mb/d)																
Americas	24.88	24.57	25.06	25.07	25.19	24.97	25.26	25.31	25.43	25.48	25.37	25.16	25.58	25.64	25.72	25.53
Europe	13.99	13.82	14.25	14.70	14.40	14.30	14.05	14.13	14.60	14.39	14.29	14.02	14.42	14.81	14.47	14.43
Asia Oceania	8.11	8.48	7.65	7.80	8.33	8.06	8.51	7.60	7.76	8.25	8.03	8.44	7.63	7.66	8.22	7.98
Total OECD Asia	46.97 24.97	46.87 25.60	46.96 26.31	47.57 25.62	47.91 26.22	47.33 25.94	47.82	47.04 27.06	47.79 26.47	48.11 27.38	47.69 26.87	47.62	47.63	48.11 27.27	48.41 28.24	47.95 27.74
Middle East	8.49	8.24	8.65	8.85	8.17	8.48	8.05	8.52	8.99	8.38	8.49	8.20	8.70	9.10	8.46	8.61
Americas	6.44	6.34	6.46	6.57	6.45	6.46	6.34	6.37	6.47	6.44	6.40	6.30	6.43	6.54	6.51	6.45
FSU	4.51	4.30	4.53	4.77	4.65	4.57	4.41	4.65	4.85	4.70	4.66	4.47	4.73	4.93	4.80	4.73
Africa	4.25	4.42	4.32	4.23	4.34	4.33	4.41	4.33	4.21	4.37	4.33	4.50	4.44	4.33	4.48	4.44
	0.72	0.72	0.75	0.76	0.76	0.75	0.73	0.75	0.78	0.78	0.76	0.75	0.77	0.79	0.79	0.77
Total Non-OECD	49.39	49.62	51.02	50.80	50.59	50.51	50.48	51.69	51.77	52.05	51.51	51.61	53.09	52.96	53.27	52.74
World of which: US50	<b>96.36</b> 19.69	<b>96.49</b> 19.49	97.98 20.01	98.37 19.92	<b>98.50</b> 20.05	97.85 19.87	98.30 20.24	<b>98.73</b> 20.26	<b>99.56</b> 20.34	<b>100.17</b> 20.36	<b>99.20</b> 20.30	99.23 20.12	<b>100.71</b> 20.51	<b>101.07</b> 20.51	<b>101.68</b> 20.58	<b>100.69</b> 20.43
Europe 5*	8.15	8.16	8.28	8.44	8.24	8.28	8.17	8.11	8.32	8.25	8.21	8.15	8.28	8.44	8.28	8.29
China	11.99	12.39	12.80	12.40	12.69	12.57	12.84	13.14	12.92	13.35	13.06	13.24	13.62	13.31	13.77	13.49
Japan	4.01	4.30	3.58	3.63	4.06	3.89	4.27	3.42	3.59	3.90	3.79	4.13	3.40	3.43	3.83	3.70
India	4.44	4.46	4.67	4.42	4.72	4.57	4.82	4.92	4.66	5.01	4.85	5.03	5.15	4.84	5.21	5.06
Russia	3.33	3.15	3.33	3.54	3.39	3.35	3.23	3.41	3.58	3.42	3.41	3.26	3.46	3.64	3.45	3.45
Brazil Saudi Arabia	2.98 3.30	2.92 2.93	2.96 3.41	3.08 3.62	3.04 3.13	3.00 3.27	2.95 2.93	2.91 3.26	3.03 3.64	3.03 3.23	2.98 3.27	2.89 3.01	2.95 3.43	3.05 3.68	3.05 3.22	2.98 3.34
Canada	2.47	2.33	2.36	2.52	2.52	2.45	2.33	2.36	2.48	2.48	2.41	2.35	2.35	2.49	2.48	2.42
Korea	2.61	2.62	2.49	2.52	2.65	2.58	2.63	2.55	2.56	2.70	2.61	2.68	2.58	2.61	2.73	2.65
Mexico	2.05	2.02	2.03	1.95	1.93	1.98	1.99	2.02	1.95	1.95	1.98	1.99	2.04	1.97	1.97	1.99
Iran	1.96	2.13	2.02	1.98	1.95	2.02	1.95	1.99	1.98	1.97	1.97	2.00	2.01	2.01	2.01	2.01
Total	66.98	66.95	67.95	68.09	68.39	67.85	68.34	68.36	69.02	69.66	68.85	68.84	69.80	69.97	70.58	69.80
% of World	69.5%	69.4%	69.3%	69.2%	69.4%	69.3%	69.5%	69.2%	69.3%	69.5%	69.4%	69.4%	69.3%	69.2%	69.4%	69.3%
Annual Change (% p	er annum)															
Americas	1.1	-0.6	1.8	-0.5	0.8	0.4	2.8	1.0	1.4	1.2	1.6	-0.4	1.1	0.8	0.9	0.6
Europe	1.2 0.0	2.0 -1.4	2.7 -0.3	2.2 0.0	1.8 -0.2	2.2 -0.5	1.6	-0.8	-0.7	-0.1 -1.0	0.0 -0.4	-0.2	2.0 0.4	1.4 -1.4	0.6 -0.3	1.0
Asia Oceania Total OECD	1.0	-1.4	-0.3	0.0	-0.2	-0.5	0.4	-0.8 0.2	-0.5 0.5	-1.0	-0.4	-0.9	1.3	-1.4	-0.3	-0.6 0.5
Asia	4.0	2.8	3.9	4.5	4.3	3.9	3.7	2.9	3.3	4.4	3.6	3.3	3.5	3.0	3.1	3.2
Middle East	-0.4	2.0	-0.1	-0.8	-1.7	-0.2	-2.4	-1.4	1.6	2.6	0.1	1.9	2.0	1.1	0.9	1.5
Americas	-4.1	-0.2	0.0	0.5	0.6	0.2	0.0	-1.4	-1.5	-0.2	-0.8	-0.6	1.0	1.0	1.1	0.6
FSU	-1.3	-0.9	4.2	1.6	0.1	1.2	2.6	2.7	1.6	1.0	2.0	1.2	1.5	1.7	2.1	1.6
Africa	1.1	3.1	0.4	2.1	1.2	1.7	-0.1	0.3	-0.6	0.8	0.1	1.9	2.7	3.0	2.6	2.5
	4.8	1.7	2.2	4.2	4.3	3.1	2.5	0.1	1.6	3.6	1.8	2.0	2.1	2.2	0.8	1.9
Total Non-OECD	1.4 <b>1.2</b>	2.0	2.4 2.1	2.5	2.2	2.3 1.5	1.7	1.3	1.9	2.9	2.0	2.2 0.9	2.7	2.3 1.5	2.3	2.4 1.5
World		1.0	2.1	1.5	1.6	1.5	1.9	0.8	1.2	1.7	1.4	0.9	2.0	1.5	1.5	1.5
Annual Change (mb/		0.16	0.45	0.12	0.21	0.10	0.60	0.25	0.26	0.20	0.40	0.10	0.27	0.21	0.24	0.16
Americas Europe	0.28 0.16	-0.16 0.27	0.45	-0.12 0.31	0.21 0.26	0.10	0.69 0.22	0.25 -0.12	0.36 -0.10	0.29 -0.01	0.40	-0.10 -0.03	0.27 0.29	0.21 0.21	0.24 0.09	0.16
Asia Oceania	0.00	-0.12	-0.02	0.00	-0.02	-0.04	0.03	-0.06	-0.04	-0.08	-0.04	-0.08	0.03	-0.11	-0.03	-0.04
Total OECD	0.45	0.00	0.80	0.20	0.45	0.36	0.95	0.07	0.22	0.20	0.36	-0.20	0.59	0.32	0.30	0.25
Asia	0.95	0.70	0.98	1.10	1.09	0.97	0.94	0.76	0.86	1.16	0.93	0.87	0.96	0.80	0.86	0.87
Middle East	-0.04	0.16	-0.01	-0.07	-0.14	-0.01	-0.20	-0.12	0.15	0.21	0.01	0.15	0.17	0.10	0.07	0.12
Americas FSU	-0.28 -0.06	-0.01	0.00	0.03	0.04	0.02	0.00	-0.09 0.12	-0.10	-0.01	-0.05	-0.04	0.06	0.06	0.07	0.04
Africa	-0.06	-0.04 0.13	0.18 0.02	0.08 0.09	0.00 0.05	0.06 0.07	0.11 0.00	0.12	0.08 -0.03	0.05 0.03	0.09 0.00	0.05 0.08	0.07 0.12	0.08 0.12	0.10 0.11	0.08 0.11
Europe	0.03	0.01	0.02	0.03	0.03	0.07	0.00	0.01	0.03	0.03	0.00	0.00	0.12	0.12	0.01	0.01
Total Non-OECD	0.66	0.96	1.19	1.25	1.08	1.12	0.87	0.67	0.97	1.47	1.00	1.13	1.40	1.19	1.22	1.23
World	1.11	0.96	1.98	1.45	1.53	1.48	1.81	0.75	1.19	1.67	1.36	0.93	1.98	1.51	1.51	1.49
Revisions to Oil Den	nand from L	.ast Mon	th's Rep	oort (mb	/d)											
Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.12	0.03	0.06	0.02	0.20	0.01	0.01	0.06
Europe	0.00	0.00	0.00	0.00	0.00	0.00	-0.04	-0.13	-0.10	-0.04	-0.08	-0.05	-0.01	-0.03	-0.03	-0.03
Asia Oceania	0.00	0.01	0.01	0.00	0.01	0.01	0.01	-0.01	0.12	0.05	0.04	0.07	0.09	0.08	0.11	0.09
Total OECD	0.00	0.01	0.01	0.00	0.01	0.01	-0.04	-0.05	0.14	0.05	0.03	0.03	0.28	0.05	0.09	0.11
Asia Middle Feet	0.23	0.17	0.17	0.16	0.16	0.17	0.14	0.16	0.28	0.21	0.20	0.17	0.18	0.20	0.16	0.18
Middle East Americas	0.24 -0.12	0.18 -0.08	0.16 -0.08	0.18 -0.09	0.21 -0.09	0.18 -0.08	0.11 -0.09	0.11 -0.08	0.12 -0.10	0.16 -0.10	0.13 -0.09	0.11 -0.10	0.14 -0.10	0.17 -0.11	0.18 -0.12	0.15 -0.11
FSU	-0.12	-0.08	-0.08	-0.09 -0.18	-0.09	-0.08	-0.09	-0.08	-0.10	-0.10	-0.09	-0.10	-0.10	-0.11	-0.12	-0.11
Africa	-0.04	0.00	0.00	0.00	0.00	0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.03	-0.02	-0.02	-0.02
Europe	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Total Non-OECD	0.16	0.14	0.11	0.07	0.13	0.11	-0.04	0.03	0.13	0.10	0.06	0.02	0.10	0.12	0.06	0.08
World	0.16	0.14	0.11	0.08	0.14	0.12	-0.07	-0.02	0.28	0.15	0.09	0.05	0.38	0.18	0.15	0.19
Revisions to Oil Den	nand Growt	h from L	ast Mor	th's Rep	oort (mb	o/d)										
World	0.01	-0.04	-0.08	-0.07	0.02	-0.04	-0.22	-0.13	0.20	0.01	-0.03	0.13	0.41	-0.10	0.00	0.11
* France Cormony Italy Sr																_

\* France, Germany, Italy, Spain and UK

# Table 2a OECD REGIONAL OIL DEMAND<sup>1</sup>

(million barrels per day)

										Latest m	onth vs.
	2016	2017	2Q17	3Q17	4Q17	1Q18	Mar 18	Apr 18	May 18 <sup>2</sup>	Apr 18	May 17
Americas											
LPG and ethane	3.32	3.28	3.11	3.00	3.49	3.99	3.79	3.54	3.17	-0.37	0.11
Naphtha	0.34	0.34	0.36	0.34	0.33	0.28	0.28	0.28	0.26	-0.03	-0.09
Motor gasoline	11.09	11.10	11.32	11.39	11.03	10.73	11.20	10.88	11.34	0.46	-0.07
Jet and kerosene	1.90	1.98	1.97	2.04	2.02	1.95	2.04	1.93	2.03	0.09	0.07
Gasoil/diesel oil	5.13	5.14	5.09	5.09	5.25	5.39	5.38	5.32	5.57	0.25	0.37
Residual fuel oil	0.63	0.70	0.72	0.63	0.73	0.63	0.59	0.73	0.70	-0.03	-0.05
Other products	2.47	2.42	2.48	2.58	2.34	2.31	2.35	2.12	2.46	0.33	-0.01
Total	24.87	24.97	25.06	25.07	25.19	25.26	25.63	24.80	25.52	0.72	0.32
Europe											
LPG and ethane	1.16	1.12	1.10	1.08	1.11	1.24	1.27	1.14	1.12	-0.02	0.03
Naphtha	1.10	1.18	1.10	1.17	1.22	1.16	1.03	1.04	1.01	-0.03	-0.06
Motor gasoline	1.88	1.89	1.96	1.98	1.85	1.82	1.86	1.94	1.98	0.04	0.04
Jet and kerosene	1.37	1.46	1.47	1.65	1.41	1.36	1.40	1.47	1.55	0.08	0.09
Gasoil/diesel oil	6.31	6.48	6.42	6.54	6.64	6.44	6.68	6.37	6.20	-0.18	-0.27
Residual fuel oil	0.88	0.89	0.85	0.89	0.93	0.89	0.90	0.91	0.87	-0.04	0.00
Other products	1.29	1.28	1.34	1.38	1.25	1.14	1.18	1.24	1.25	0.01	-0.07
Total	13.99	14.30	14.25	14.70	14.40	14.05	14.32	14.10	13.97	-0.13	-0.24
Asia Oceania											
LPG and ethane	0.78	0.75	0.72	0.69	0.73	0.82	0.82	0.72	0.73	0.01	0.01
Naphtha	1.98	2.04	1.93	2.01	2.13	2.04	1.90	2.03	1.97	-0.06	0.02
Motor gasoline	1.55	1.54	1.52	1.62	1.56	1.51	1.54	1.49	1.51	0.02	-0.03
Jet and kerosene	0.90	0.91	0.72	0.71	1.05	1.18	0.96	0.78	0.76	-0.02	0.08
Gasoil/diesel oil	1.82	1.89	1.88	1.87	1.95	1.95	1.99	1.90	1.87	-0.04	-0.01
Residual fuel oil	0.65	0.58	0.53	0.54	0.58	0.66	0.61	0.53	0.50	-0.02	-0.01
Other products	0.42	0.35	0.35	0.36	0.32	0.35	0.36	0.30	0.31	0.01	-0.05
Total	8.11	8.06	7.65	7.80	8.33	8.51	8.17	7.75	7.65	-0.11	0.02
OECD											
LPG and ethane	5.25	5.15	4.93	4.77	5.33	6.05	5.87	5.40	5.02	-0.38	0.15
Naphtha	3.43	3.56	3.39	3.52	3.67	3.48	3.21	3.35	3.24	-0.11	-0.13
Motor gasoline	14.53	14.54	14.80	14.99	14.45	14.05	14.60	14.31	14.83	0.53	-0.06
Jet and kerosene	4.17	4.35	4.16	4.40	4.48	4.49	4.39	4.17	4.33	0.16	0.24
Gasoil/diesel oil	13.26	13.52	13.39	13.50	13.84	13.78	14.06	13.60	13.63	0.03	0.09
Residual fuel oil	2.16	2.16	2.11	2.06	2.23	2.18	2.10	2.16	2.07	-0.09	-0.06
Other products	4.18	4.06	4.18	4.33	3.91	3.80	3.89	3.67	4.02	0.35	-0.13
Total	46.97	47.33	46.96	47.57	47.91	47.82	48.12	46.66	47.14	0.48	0.10

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils. North America comprises US 50 states, US territories, Mexico and Canada.
 Latest official OECD submissions (MOS).

### Table 2b OIL DEMAND IN SELECTED OECD COUNTRIES<sup>1</sup> (million barrels per day)

										Latest m	onth vs.
	2016	2017	2Q17	3Q17	4Q17	1Q18	Mar 18	Apr 18	May 18 <sup>2</sup>	Apr 18	May 17
United States <sup>3</sup>											
LPG and ethane	2.47	2.49	2.36	2.26	2.66	3.12	2.98	2.75	2.44	-0.31	0.15
Naphtha	0.22	0.23	0.24	0.21	0.22	0.21	0.21	0.21	0.20	-0.01	-0.04
Motor gasoline	9.32	9.32	9.54	9.56	9.23	9.01	9.45	9.19	9.55	0.36	-0.04
Jet and kerosene Gasoil/diesel oil	1.62 3.88	1.69 3.94	1.69 3.91	1.72 3.87	1.73 4.02	1.65 4.18	1.72 4.17	1.64 4.15	1.72 4.27	0.08 0.12	0.04 0.31
Residual fuel oil	0.33	0.36	0.37	0.30	0.39	0.28	0.22	0.41	0.31	-0.10	-0.06
Other products	1.86	1.85	1.91	2.01	1.79	1.78	1.83	1.60	1.87	0.26	-0.03
Total	19.69	19.87	20.01	19.92	20.05	20.24	20.57	19.94	20.36	0.42	0.34
Japan											
LPG and ethane	0.42	0.39	0.37	0.34	0.39	0.46	0.45	0.38	0.36	-0.02	-0.01
Naphtha	0.75	0.77	0.74	0.73	0.79	0.75	0.69	0.74	0.69	-0.06	-0.04
Motor gasoline	0.90	0.88	0.86	0.94	0.89	0.84	0.87	0.84	0.85	0.01	-0.01
Jet and kerosene Diesel	0.51 0.44	0.51 0.43	0.36 0.42	0.34 0.43	0.62 0.44	0.73 0.43	0.56 0.46	0.39 0.44	0.38 0.42	-0.01 -0.02	0.06
Other gasoil	0.44	0.43	0.42	0.43	0.44	0.43	0.46	0.44	0.42	-0.02	0.01 -0.04
Residual fuel oil	0.33	0.28	0.26	0.27	0.28	0.34	0.31	0.24	0.24	0.00	0.01
Other products	0.32	0.28	0.26	0.28	0.28	0.31	0.31	0.25	0.22	-0.03	-0.04
Total	4.01	3.89	3.58	3.63	4.06	4.27	4.03	3.60	3.44	-0.17	-0.06
Germany											
LPG and ethane	0.10	0.13	0.13	0.13	0.12	0.11	0.12	0.12	0.12	0.00	-0.02
Naphtha Matar gasalina	0.37	0.38	0.37	0.37	0.38	0.32	0.25	0.30	0.31	0.02	-0.04
Motor gasoline Jet and kerosene	0.42 0.20	0.43 0.22	0.44 0.22	0.44 0.24	0.42 0.21	0.44 0.19	0.45 0.21	0.44 0.21	0.45 0.23	0.00 0.02	0.01 0.02
Diesel	0.20	0.22	0.22	0.24	0.21	0.19	0.21	0.21	0.23	-0.04	-0.02
Other gasoil	0.36	0.37	0.37	0.35	0.36	0.41	0.45	0.30	0.25	-0.04	-0.16
Residual fuel oil	0.09	0.08	0.07	0.07	0.10	0.09	0.09	0.09	0.07	-0.02	0.02
Other products	0.09	0.09	0.10	0.11	0.09	0.07	0.08	0.08	0.08	-0.01	-0.03
Total	2.38	2.46	2.48	2.49	2.43	2.33	2.38	2.29	2.22	-0.07	-0.27
Italy											
LPG and ethane	0.10	0.10	0.09	0.09	0.11	0.12	0.12	0.10	0.09	-0.01	0.00
Naphtha	0.08	0.09	0.08	0.10	0.09	0.09	0.09	0.08	0.06	-0.02	-0.02
Motor gasoline Jet and kerosene	0.17 0.09	0.16 0.11	0.17 0.12	0.17 0.13	0.15 0.09	0.15 0.09	0.16 0.09	0.16 0.11	0.16 0.12	0.00 0.00	0.01 0.00
Diesel	0.03	0.47	0.12	0.46	0.48	0.03	0.52	0.49	0.50	0.02	0.00
Other gasoil	0.08	0.08	0.07	0.08	0.09	0.07	0.08	0.08	0.08	0.00	0.00
Residual fuel oil	0.08	0.08	0.07	0.09	0.07	0.08	0.07	0.08	0.08	0.00	0.01
Other products	0.16	0.15	0.16	0.16	0.16	0.15	0.15	0.17	0.18	0.01	0.02
Total	1.24	1.24	1.24	1.27	1.25	1.25	1.28	1.27	1.26	-0.01	0.03
France											
LPG and ethane	0.12	0.11	0.10	0.10	0.11	0.14	0.14	0.11	0.10	-0.01	0.00
Naphtha	0.11	0.11	0.11	0.11	0.08	0.12	0.12	0.14	0.13	0.00	0.02
Motor gasoline Jet and kerosene	0.17 0.15	0.18 0.16	0.19 0.16	0.20 0.18	0.18 0.15	0.17 0.15	0.18 0.15	0.19 0.16	0.20 0.17	0.01 0.01	0.01 0.01
Diesel	0.13	0.72	0.72	0.73	0.13	0.13	0.13	0.71	0.70	-0.01	-0.02
Other gasoil	0.25	0.25	0.21	0.25	0.26	0.27	0.27	0.21	0.18	-0.03	-0.02
Residual fuel oil	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.05	0.05	0.00	0.00
Other products	0.12	0.12	0.14	0.13	0.11	0.10	0.10	0.13	0.12	-0.01	-0.01
Total	1.65	1.71	1.68	1.76	1.66	1.71	1.76	1.70	1.66	-0.04	-0.01
United Kingdom	0.45	0.44		0.40	0.40	0.14	0.45	0.40	0.40	0.00	0.00
LPG and ethane Naphtha	0.15 0.03	0.14 0.03	0.14 0.03	0.13 0.03	0.13 0.03	0.14 0.03	0.15 0.04	0.13 0.02	0.13 0.03	0.00 0.01	0.00 0.00
Motor gasoline	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.02	0.03	-0.01	0.00
Jet and kerosene	0.32	0.32	0.31	0.33	0.33	0.34	0.34	0.34	0.32	-0.02	0.02
Diesel	0.52	0.52	0.53	0.52	0.54	0.52	0.51	0.54	0.50	-0.05	0.00
Other gasoil	0.13	0.14	0.14	0.15	0.14	0.13	0.14	0.16	0.14	-0.02	0.02
Residual fuel oil	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00
Other products	0.12	0.12	0.12	0.13	0.12	0.11	0.12	0.12	0.11	0.00	-0.01
Total Canada	1.58	1.58	1.59	1.61	1.60	1.57	1.57	1.63	1.55	-0.09	0.03
LPG and ethane	0.41	0.39	0.35	0.35	0.43	0.42	0.37	0.36	0.32	-0.04	-0.06
Naphtha	0.10	0.33	0.09	0.33	0.40	0.42	0.06	0.06	0.05	-0.04	-0.02
Motor gasoline	0.84	0.85	0.86	0.89	0.84	0.78	0.78	0.79	0.84	0.05	-0.03
Jet and kerosene	0.14	0.15	0.14	0.17	0.15	0.14	0.15	0.16	0.16	0.01	0.02
Diesel	0.30	0.29	0.29	0.29	0.29	0.26	0.25	0.28	0.26	-0.02	-0.03
Other gasoil Residual fuel oil	0.28	0.27	0.23	0.29	0.30	0.28	0.27	0.21	0.32	0.11	0.06
Residual fuel oil Other products	0.05 0.36	0.06 0.35	0.07 0.33	0.05 0.37	0.05 0.36	0.06 0.32	0.05 0.30	0.07 0.32	0.08 0.39	0.01 0.07	0.00 0.06
Total	2.47	2.45	2.36	2.52	2.52	2.32	2.24	2.25	2.43	0.07	-0.01
1 Demand measured as deliveri										0110	0.01

Demand, measured as deliveries from refineries and primary stocks, comprises inland deliveries, international bunkers and refinery fuel. It includes crude for direct burning, oil from non-conventional sources and other sources of supply. Jet/kerosene comprises jet kerosene and non-aviation kerosene. Gasoil comprises diesel, light heating oil and other gasoils.
 Latest official OECD submissions (MOS).
 US figures exclude US territories.

OPEC Crude Oil Saudi Arabia Iran Iraq UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria Congo	9.96 3.80 4.47 2.93 2.71 0.00 0.61 1.64	2018	2019	9.95 3.81 4.45	2Q18 10.14 3.81	3Q18	4Q18	1Q19	10.03	Jun 18 10.46	Jul 18
Crude Oil Saudi Arabia Iran Iraq UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	3.80 4.47 2.93 2.71 0.00 0.61			3.81							10.3
Saudi Arabia Iran Iraq UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	3.80 4.47 2.93 2.71 0.00 0.61			3.81							10.3
Iran Iraq UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	3.80 4.47 2.93 2.71 0.00 0.61			3.81							
Iraq UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	4.47 2.93 2.71 0.00 0.61				0.01				3.82	3.79	3.7
UAE Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	2.93 2.71 0.00 0.61				4.47				4.47	4.54	4.5
Kuwait Neutral Zone Qatar Angola Nigeria Libya Algeria	2.71 0.00 0.61			2.84	2.88				2.87	2.90	2.9
Qatar Angola Nigeria Libya Algeria	0.61			2.70	2.71				2.71	2.72	2.8
Angola Nigeria Libya Algeria	0.61			0.00	0.00				0.00	0.00	0.0
Nigeria Libya Algeria	1.64			0.60	0.61				0.61	0.62	0.6
Libya Algeria				1.55	1.49				1.51	1.45	1.4
Algeria	1.53			1.66	1.51				1.47	1.46	1.5
-	0.83			1.01	0.89				0.97	0.71	0.6
Congo	1.05			1.01	1.03				1.04	1.05	1.(
0	0.26			0.31	0.32				0.32	0.33	0.3
Gabon	0.20			0.21	0.19				0.17	0.20	0.1
Equatorial Guinea	0.13			0.13	0.12				0.13	0.12	0.1
Ecuador	0.53			0.52	0.53				0.53	0.53	0.5
Venezuela	1.97			1.54	1.36				1.36	1.30	1.2
Fotal Crude Oil	32.60			32.30	32.05				32.01	32.18	32.1
Fotal NGLs <sup>1</sup>	6.87	6.95	7.03	6.92	6.93	6.98	6.99	7.03	6.93	6.93	6.9
Total OPEC <sup>2</sup>	39.47			39.22	38.99				38.95	39.11	39.1
ION-OPEC <sup>2,3</sup>											
DECD											
Americas	20.29	22.16	23.56	21.74	22.10	22.14	22.64	23.28	22.21	22.12	22.1
United States	13.24	14.96	16.21	14.38	15.00	15.06	15.37	15.80	15.03	15.08	15.
Mexico	2.23	2.10	2.04	2.15	2.12	2.08	2.05	2.03	2.11	2.09	2.0
Canada	4.82	5.09	5.30	5.19	4.97	4.99	5.21	5.44	5.06	4.94	4.8
Chile	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0
Europe	3.49	3.42	3.36	3.55	3.32	3.33	3.48	3.46	3.20	3.24	3.3
UK	1.01	1.08	1.11	1.08	1.06	1.06	1.14	1.14	1.03	0.99	1.(
Norway	1.97	1.83	1.74	1.96	1.76	1.77	1.84	1.82	1.66	1.75	1.8
Others	0.51	0.50	0.51	0.51	0.51	0.50	0.50	0.50	0.51	0.50	0.5
Asia Oceania	0.39	0.39	0.47	0.41	0.38	0.36	0.40	0.43	0.36	0.37	0.3
Australia	0.31	0.32	0.40	0.34	0.31	0.30	0.33	0.36	0.30	0.31	0.2
Others	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0
Total OECD	24.17	25.96	27.38	25.70	25.80	25.83	26.53	27.16	25.78	25.74	25.8
NON-OECD											
Former USSR	14.34	14.54	14.76	14.43	14.47	14.57	14.67	14.79	14.46	14.52	14.6
Russia	11.36	11.48	11.69	11.34	11.38	11.56	11.62	11.65	11.35	11.45	11.6
Others	2.98	3.06	3.08	3.09	3.09	3.01	3.05	3.13	3.11	3.08	3.0
Asia <sup>2</sup>	7.34	7.16	6.97	7.24	7.19	7.12	7.08	6.98	7.17	7.26	7.1
China	3.87	3.81	3.72	3.82	3.86	3.80	3.79	3.71	3.82	3.92	3.8
Malaysia	0.72	0.72	0.70	0.74	0.72	0.72	0.71	0.70	0.71	0.73	0.7
India	0.86	0.85	0.84	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.8
Indonesia	0.84	0.80	0.77	0.81	0.81	0.80	0.79	0.78	0.81	0.80	0.8
Others	1.05	0.98	0.93	1.02	0.96	0.97	0.96	0.95	0.97	0.96	0.9
Europe	0.13	0.12	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.1
Americas <sup>2</sup>	4.54	4.59	4.91	4.50	4.54	4.62	4.71	4.77	4.55	4.52	4.5
Brazil	2.74	2.79	3.14	2.71	2.72	2.81	2.92	2.99	2.73	2.71	2.7
Argentina	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.5
Colombia	0.86	0.86	0.84	0.85	0.87	0.86	0.85	0.85	0.87	0.87	0.8
Others	0.37	0.36	0.35	0.36	0.37	0.36	0.36	0.36	0.37	0.36	0.3
/liddle East <sup>2,4</sup>	1.25	1.25	1.25	1.21	1.26	1.27	1.27	1.26	1.26	1.27	1.2
Oman	0.98	0.98	0.96	0.97	0.98	0.98	0.98	0.97	0.98	0.98	0.9
Syria	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0
Yemen	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.0
Others	0.21	0.21	0.22	0.18	0.22	0.22	0.22	0.22	0.22	0.22	0.2
Africa	1.41	1.45	1.40	1.44	1.47	1.46	1.41	1.41	1.42	1.51	1.4
Egypt	0.64	0.64	0.61	0.65	0.65	0.64	0.63	0.62	0.66	0.65	0.6
Others	0.77	0.81	0.80	0.80	0.82	0.82	0.78	0.80	0.77	0.86	0.8
Total Non-OECD	29.00	29.11	29.41	28.96	29.05	29.16	29.26	29.33	28.98	29.20	29.2
Processing gains <sup>5</sup>	2.29	2.32	2.35	2.32	2.32	2.32	2.32	2.35	2.32	2.32	2.3
Global Biofuels	2.46	2.51	2.61	2.11	2.60	2.83	2.51	2.20	2.67	2.77	2.8
TOTAL NON-OPEC	57.93	59.91	61.76	59.09	59.77	60.13	60.61	61.04	59.75	60.02	60.2
TOTAL SUPPLY	97.40		-	98.31	98.76			-	98.70	99.14	99.4
Includes condensates reported by OPEC con		00-000	nal sources a -						00110		

### Table 3 WORLD OIL PRODUCTION (million barrels per day)

			MONTHLY Million Barr		2		YEARS' S Million Barr			STOCK C		
	Feb2018	Mar2018	Apr2018	May2018	Jun2018*	Jun2015	Jun2016	Jun2017	3Q2017	4Q2017	1Q2018	2Q2018
OECD Americas												
Crude	581.9	584.9	591.1	597.7	576.2	594.8	652.4	656.3	-0.34	-0.48	0.04	-0.10
Motor Gasoline	284.5	273.0	271.5	270.9	268.9	251.3	273.7	268.7	-0.18	0.17	0.06	-0.05
Middle Distillate	214.1	205.8	195.2	186.0	187.2	213.3	220.4	224.4	-0.15	0.09	-0.15	-0.20
Residual Fuel Oil	38.6	40.8	38.7	37.6	33.8	48.7	46.8	41.1	0.02	-0.08	0.06	-0.08
Total Products <sup>3</sup>	718.0	703.4	696.9	698.7	712.7	735.3	773.0	753.2	-0.06	-0.14	-0.35	0.10
Total <sup>4</sup>	1473.3	1468.4	1467.4	1481.6	1473.3	1508.1	1611.2	1595.3	-0.26	-0.79	-0.34	0.05
OECD Europe												
Crude	339.5	344.2	352.5	356.9	355.8	344.2	360.7	363.2	-0.28	-0.08	0.16	0.13
Motor Gasoline	103.2	96.5	93.8	85.1	84.3	85.8	96.5	92.2	-0.06	0.13	-0.03	-0.13
Middle Distillate	279.9	268.4	262.9	260.7	260.8	279.4	323.4	297.3	-0.04	-0.24	-0.03	-0.08
Residual Fuel Oil	63.9	62.0	61.4	62.3	60.9	67.5	76.1	65.6	-0.07	0.00	0.03	-0.01
Total Products <sup>3</sup>	563.6	545.9	534.1	518.3	519.0	526.3	596.3	563.6	-0.09	-0.13	0.03	-0.29
Total <sup>4</sup>	981.2	969.9	970.3	958.4	958.6	942.7	1026.5	999.1	-0.37	-0.24	0.25	-0.12
OECD Asia Oceania												
Crude	184.0	161.1	163.2	163.4	162.8	201.3	202.3	189.7	0.09	-0.10	-0.31	0.02
Motor Gasoline	23.9	24.0	24.4	26.3	24.5	25.3	26.5	25.1	-0.02	0.00	0.01	0.01
Middle Distillate	59.7	62.0	65.1	64.0	65.1	61.2	67.1	63.3	0.03	-0.04	-0.01	0.03
Residual Fuel Oil	19.1	18.2	19.0	19.7	20.2	19.4	19.2	20.9	-0.02	0.00	-0.01	0.02
Total Products <sup>3</sup>	160.0	161.3	164.8	164.5	167.0	165.2	175.2	169.7	0.03	-0.08	-0.04	0.06
Total <sup>4</sup>	401.6	378.0	388.3	390.2	391.1	429.5	438.1	424.1	0.10	-0.23	-0.38	0.14
Total OECD												
Crude	1105.4	1090.1	1106.9	1118.0	1094.8	1140.3	1215.4	1209.3	-0.53	-0.66	-0.11	0.05
Motor Gasoline	411.6	393.6	389.6	382.4	377.7	362.4	396.7	386.0	-0.26	0.29	0.05	-0.17
Middle Distillate	553.7	536.2	523.2	510.7	513.1	553.8	610.9	584.9	-0.15	-0.19	-0.19	-0.25
Residual Fuel Oil	121.5	121.0	119.0	119.6	114.9	135.5	142.1	127.6	-0.08	-0.08	0.09	-0.07
Total Products <sup>3</sup>	1441.6	1410.5	1395.8	1381.5	1398.6	1426.8	1544.5	1486.5	-0.13	-0.35	-0.36	-0.13
Total <sup>₄</sup>	2856.1	2816.3	2826.0	2830.1	2822.9	2880.3	3075.7	3018.5	-0.53	-1.27	-0.46	0.07

Table 4 OECD INDUSTRY STOCKS<sup>1</sup> AND QUARTERLY STOCK CHANGES

# **OECD GOVERNMENT-CONTROLLED STOCKS<sup>5</sup> AND QUARTERLY STOCK CHANGES**

		RECENT	MONTHLY	STOCKS	2	PRIOR YEARS' STOCKS <sup>2</sup>			STOCK CHANGES				
	in Million Barrels					in Million Barrels			in mb/d				
	Feb2018	Mar2018	Apr2018	May2018	Jun2018*	Jun2015	Jun2016	Jun2017	3Q2017	4Q2017	1Q2018	2Q2018	
OECD Americas													
Crude	665.5	665.5	664.0	660.2	660.0	693.9	695.1	679.2	-0.06	-0.12	0.03	-0.06	
Products	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.00	0.00	0.00	0.00	
OECD Europe													
Crude	204.1	207.6	208.7	209.3	209.1	207.4	205.6	208.4	0.00	-0.02	0.02	0.02	
Products	275.1	274.2	272.8	272.0	272.1	261.0	266.1	272.2	-0.06	0.04	0.04	-0.02	
OECD Asia Oceania													
Crude	383.4	383.4	383.4	383.4	383.4	385.6	385.4	385.0	0.00	-0.01	-0.01	0.00	
Products	38.7	38.7	38.7	38.7	38.7	32.8	35.5	38.0	0.00	0.00	0.00	0.00	
Total OECD													
Crude	1252.9	1256.5	1256.1	1252.9	1252.4	1286.9	1286.1	1272.6	-0.06	-0.15	0.04	-0.04	
Products	315.7	314.9	313.5	312.7	312.7	295.8	303.6	312.2	-0.05	0.04	0.04	-0.02	
Total <sup>4</sup>	1571.6	1574.7	1573.3	1569.1	1568.6	1586.8	1592.4	1588.5	-0.12	-0.11	0.08	-0.07	

Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) and include stocks held by industry to meet IEA, EU and national emergency reserve commitments and are subject to government control in emergencies. 1

Industry to meet IEA, EO and national emergency reserve communents and are subject to governments?
Closing stock levels.
Total includes gasoline, middle distillates, fuel oil and other products.
Total includes NGLs, refinery feedstocks, additives/oxygenates and other hydrocarbons.
Includes government-owned stocks and stock holding organisation stocks held for emergency purposes.

Table 5
TOTAL STOCKS ON LAND IN OECD COUNTRIES <sup>1</sup>

('millions of barrels' and 'days')

	End June 2017		End Septembe	51 2017	End Decembe	1 2017	End Marc	JN 2018	End June 2018		
	Stock	Days Fwd <sup>2</sup>	Stock D	ays Fwd	Stock D	ays Fwd	Stock D	ays Fwd	Stock	Days Fwd	
	Level	Demand	Level [	Demand	Level [	Demand	Level D	Demand	Level	Demand	
OECD Americas											
Canada	182.7	7 72	185.7	74	189.2	81	191.9	-	-	-	
Chile	11.2	2 31	12.5	35	11.5	31	10.8	-	-	-	
Mexico	49.3	3 25	46.5	24	43.8	22	47.3	-	-	-	
United States <sup>4</sup>	2011.2	2 101	1980.3	99	1897.0	94	1863.8	-	-	-	
Total <sup>4</sup>	2276.5	5 91	2247.2	89	2163.5	86	2135.9	84	2135.2	84	
OECD Asia Oceania											
Australia	35.4	4 30	33.7	28	34.2	29	40.3	-	-	-	
Israel			-	-	-	-	-	-	-	-	
Japan	566.3	3 156	571.3	141	562.8	132	538.6	-	-	-	
Korea	236.4	4 92	243.5	92	230.6	88	213.0	-	-	-	
New Zealand	9.0	57	8.1	46	7.4	41	8.1	-	-	-	
Total	847.1	1 109	856.6	103	835.1	98	800.1	105	813.1	105	
OECD Europe⁵											
Austria	21.8	3 76	22.1	83	21.4	84	23.0	-	-	-	
Belgium	46.6	6 73	44.1	66	41.4	59	46.2	-	-	-	
Czech Republic	21.4	4 94	21.4	98	21.5	108	22.7	-	-	-	
Denmark	27.3	3 172	23.6	146	23.4	152	22.1	-	-	-	
Estonia	2.7	7 100	2.2	82	3.0	113	2.5	-	-	-	
Finland	43.4	4 194	44.7	213	41.1	186	41.0	-	-	-	
France	165.4	4 94	165.2	99	165.7	97	166.0	-	-	-	
Germany	276.7	7 111	273.9	113	278.8	120	279.9	-	-	-	
Greece	32.4		32.3	108	32.4	116	33.3	-	-	-	
Hungary	25.2		26.2	150	25.4	152	26.1	-	-	-	
Ireland	12.1		10.1	63	11.0	68	11.4	-	-	-	
Italy	133.7		127.7	102	125.1	100	125.8	-	-	-	
Latvia	3.3		1.5	36	2.5	67	3.1	-	-	-	
Luxembourg	0.7		0.6	11	0.6	10	0.6	-	-	-	
Netherlands	156.1		149.7	163	142.5	154	147.8	-	-	-	
Norway	22.0		22.0	89	23.3	92	27.2	-	-	-	
Poland	69.5		69.2	102	71.8	113	75.0	-	-	-	
Portugal	24.0		24.1	98	22.9	99	24.8	-	-	-	
Slovak Republic	13.0		12.1	126	11.4	146	12.1	-	-	-	
Slovenia	5.2		4.7	88	5.2	99	5.1	-	-	-	
Spain	128.7		127.2	98	119.5	91	124.7	-	-		
Sweden Switzerland	53.2 34.5		42.3 35.4	131 148	35.6 33.9	127 159	38.7 33.1	-	-	-	
Turkey	34.0 84.0		35.4 83.9	80	83.2	90	33.1 84.1	-	-	-	
United Kingdom	84.0		83.9 77.5	80 48	80.1	90 51	79.0	-	-	-	
Total	1483.4		1443.9	100	1422.6	101	1455.1	103	1443.1	99	
Total OECD	4606.9		4547.6	<u>95</u>	4421.1	92	4391.1	93	4391.5	<u>99</u> 92	
DAYS OF IEA Net Imports <sup>6</sup> -	-000.3	<u> </u>	- 4047.0	192	- 4421.1	92 187	- 4391.1	93 186	- 4391.5	32	

1 Total Stocks are industry and government-controlled stocks (see breakdown in table below). Stocks are primary national territory stocks on land (excluding utility stocks and including pipeline and entrepot stocks where known) they include stocks held by industry to meet IEA, EU and national emergency reserves commitments and are

subject to government control in emergencies. 2 Note that days of forward demand represent the stock level divided by the forward quarter average daily demand and is very different from the days of net

imports used for the calculation of IEA Emergency Reserves.
 End June 2018 forward demand figures are IEA Secretariat forecasts.

4 US figures exclude US territories. Total includes US territories.5 Data not available for Iceland.

6 Reflects stock levels and prior calendar year's net imports adjusted according to IEA emergency reserve definitions (see www.iea.org/netimports.asp).
 Net exporting IEA countries are excluded.

# **TOTAL OECD STOCKS**

CLOSING STOCKS	Total	Government <sup>1</sup>	Industry	Total	Government <sup>1</sup>	Industry	
		controlled	controlled				
		Millions of Barrels			Days of Fwd. Demand	2	
2Q2015	4467	1587	2880	95	34	61	
3Q2015	4538	1581	2957	97	34	63	
4Q2015	4577	1588	2989	98	34	64	
1Q2016	4633	1595	3039	100	35	66	
2Q2016	4668	1592	3076	99	34	65	
3Q2016	4679	1596	3084	99	34	65	
4Q2016	4602	1600	3002	98	34	64	
1Q2017	4632	1600	3033	99	34	65	
2Q2017	4607	1588	3018	97	33	63	
3Q2017	4548	1578	2970	95	33	62	
4Q2017	4421	1568	2854	92	33	60	
1Q2018	4391	1575	2816	93	33	60	
2Q2018	4391	1569	2823	92	33	59	

1 Includes government-owned stocks and stock holding organisation stocks held for emergency purposes 2 Days of forward demand calculated using actual demand except in 2Q2018 (when latest forecasts are used).

# Table 6 IEA MEMBER COUNTRY DESTINATIONS OF SELECTED CRUDE STREAMS<sup>1</sup>

(million barrels per day)

											Year E	arlier
_	2015	2016	2017	2Q17	3Q17	4Q17	1Q18	Mar 18	Apr 18	May 18	May 17	change
Saudi Light & Extra Light												
Americas	0.63	0.69	0.59	0.75	0.44	0.47	0.54	0.55	0.76	0.66	0.86	-0.21
Europe	0.78	0.79	0.69	0.78	0.64	0.68	0.58	0.64	0.56	0.73	0.75	-0.01
Asia Oceania	1.25	1.40	1.56	1.49	1.56	1.53	1.50	1.32	1.52	1.35	1.48	-0.13
Saudi Medium Americas	0.37	0.44	0.33	0.35	0.28	0.27	0.20	0.18	0.28	0.29	0.30	-0.01
Europe	0.03	0.01	0.01	0.00	0.01	0.02	0.02	0.02	-	0.02	-	-
Asia Oceania	0.44	0.41	0.37	0.33	0.41	0.41	0.40	0.45	0.41	0.44	0.31	0.13
Canada Heavy						- <b>-</b> -				o (o		
Americas	1.90	2.04	2.23	2.25	2.21	2.17	2.33	2.40	2.45	2.40	2.22	0.18
Europe Asia Oceania	0.01 -	0.01	0.02	-	0.03	0.04	0.03 0.00	0.04	0.08	0.02 0.01	-	-
Iraqi Basrah Light <sup>2</sup>												
Americas	0.17	0.42	0.63	0.67	0.55	0.75	0.66	0.54	0.85	0.61	0.65	-0.04
Europe	0.72	0.81	0.76	0.84	0.76	0.70	0.65	0.59	0.52	0.63	0.86	-0.23
Asia Oceania	0.41	0.46	0.40	0.39	0.41	0.39	0.42	0.35	0.36	0.53	0.29	0.24
Kuwait Blend	0.12	0.14	0.11	0.19	0.04	0.03	0.03	_	-	_	0.22	
Americas Europe	0.13 0.13	0.14 0.19	0.11 0.20	0.18 0.22	0.04 0.25	0.03	0.03 0.13	- 0.12	- 0.06	- 0.07	0.23 0.21	-0.14
Asia Oceania	0.65	0.66	0.68	0.68	0.23	0.67	0.68	0.12	0.00	0.62	0.75	-0.14
Iranian Light												
Americas Europe	- 0.09	- 0.21	- 0.27	- 0.25	- 0.25	- 0.20	- 0.24	- 0.22	- 0.19	0.32	0.26	- 0.07
Asia Oceania	0.09	0.21	0.27	0.23	0.23	0.20	0.24	0.22	0.19	0.02	0.20	0.07
<b>Iranian Heavy<sup>3</sup></b> Americas	-	_	_	_		_	_		_	_		
Europe	0.02	0.21	0.52	0.52	0.59	0.54	0.42	0.38	0.52	0.43	0.45	-0.02
Asia Oceania	0.27	0.52	0.57	0.43	0.57	0.54	0.49	0.55	0.36	0.40	0.42	-0.02
BFOE												
Americas Europe	0.01 0.49	0.02 0.44	0.02 0.45	0.01 0.41	0.02 0.49	0.01 0.52	- 0.47	- 0.53	0.01 0.21	- 0.21	0.04 0.37	-0.15
Asia Oceania	0.45	0.05	0.40	0.06	0.09	0.52	0.09	0.06	- 0.21	0.20	- 0.57	-0.13
Kazakhstan												
Americas	0.00	0.01	-	-	-	-	-	-	-	-	-	-
Europe	0.64	0.70	0.75	0.78	0.74	0.72	0.83	0.78	0.83	0.68	0.70	-0.02
Asia Oceania	0.06	0.03	0.10	0.09	0.15	0.13	0.13	0.14	0.14	0.24	0.08	0.16
Venezuelan 22 API and hea Americas	<b>avier</b> 0.67	0.63	0.48	0.61	0.41	0.39	0.40	0.50	0.48	0.45	0.53	-0.08
Europe	0.09	0.05	0.04	0.04	0.05	0.03	0.02	0.02	0.02	0.01	0.02	-0.01
Asia Oceania	-	-	-	-	-	-	-	-	-	-	-	-
Mexican Maya												
Americas Europe	0.50 0.15	0.53 0.17	0.58 0.20	0.63 0.18	0.50 0.17	0.67 0.26	0.64 0.27	0.68 0.26	0.54 0.25	0.54 0.28	0.67 0.18	-0.14 0.10
Asia Oceania	0.13	0.05	0.20	0.18	0.07	0.20	0.06	0.20	0.23	0.28	0.18	0.06
Russian Urals												
Americas	-	-	0.01	-	0.02	0.01	-	-	-	-	-	-
Europe	1.61	1.72	1.64	1.57	1.68	1.67	1.32	1.29	1.47	1.51	1.50	0.00
Asia Oceania	-	-	0.01	0.02	0.02	-	-	-	0.03	-	-	-
Cabinda and Other Angola North America	0.11	0.16	0.07		0.17	0.07	-		0.16			
Europe	0.11	0.16 0.27	0.07	- 0.07	0.17	0.07	0.14	0.13	0.18	0.10	0.03	0.07
Pacific	0.02	0.01	0.01	0.01	0.03	-	-	-	-	-	0.03	-
Nigerian Light <sup>4</sup>												
Americas	0.02	0.07	0.04	0.04	0.05	0.06	0.03	-	-	0.03	0.13	-0.10
Europe Asia Oceania	0.57	0.39 0.01	0.39 0.02	0.46 0.03	0.38 0.03	0.38 0.01	0.47 0.02	0.47 0.03	0.59 0.01	0.49 0.05	0.49 0.06	0.00 -0.01
Libya Light and Medium												
Americas	-	-	0.02	-	0.03	0.03	-	-	-	-	-	-
Europe	0.22	0.20	0.54	0.37	0.67	0.70	0.65	0.62	0.72	0.58	0.41	0.17
Asia Oceania	0.01	0.02	0.03	0.04	0.01	0.03	0.02	-	0.02	0.03	0.06	-0.04

Data based on monthly submissions from IEA countries to the crude oil import register (in '000 bbl), subject to availability. May differ from Table 8 of the Report. IEA Americas includes United States and Canada. IEA Europe includes all countries in OECD Europe except Estonia, Hungary, Slovenia and Latvia. IEA Asia Oceania includes Australia, New Zealand, Korea and Japan.
 Iraqi Total minus Kirkuk.
 Iranian Total minus Iranian Light.
 33° API and lighter (e.g., Bonny Light, Escravos, Qua Iboe and Oso Condensate).

# Table 7 REGIONAL OECD IMPORTS<sup>1,2</sup> (thousand barrels per day)

											Year	Earlier
	2015	2016	2017	2Q17	3Q17	4Q17	1Q18	Mar 18	Apr 18	May 18	May 17	% change
Crude Oil												
Americas	4026	4542	4361	4664	4289	3941	3827	3761	4387	3826	4637	-17%
Europe	9505	9253	9711	9636	9779	9935	9502	9120	9285	9680	9662	0%
Asia Oceania	6573	6659	6842	6465	6937	6942	6849	6280	6850	6582	6761	-3%
Total OECD	20103	20455	20914	20765	21005	20818	20178	19161	20522	20089	21059	-5%
		20100	20011	20100	21000	20010	20110	10101	LUULL	20000	21000	070
LPG	40			10	45	05			10	40	05	500/
Americas	10	20	20	16	15	25	33	24	19	10	25	-58%
Europe	418	445	437	425	421	400	492	484	440	467	465	0%
Asia Oceania	518	567	549	587	468	538	595	584	678	446	559	-20%
Total OECD	947	1032	1006	1029	904	963	1120	1092	1137	924	1049	-12%
Naphtha												
Americas	14	10	19	19	18	20	10	7	6	5	22	-76%
Europe	345	348	369	355	363	389	409	484	333	449	368	22%
Asia Oceania	950	908	981	979	971	991	1031	999	937	1051	969	8%
Total OECD	1309	1266	1369	1353	1353	1399	1450	1490	1276	1505	1359	11%
Gasoline <sup>3</sup>												
Americas	670	735	727	891	880	560	559	760	1008	1110	976	14%
Europe	105	100	162	141	130	224	155	168	62	37	165	-78%
Asia Oceania	91	87	103	99	96	94	123	107	106	156	106	47%
Total OECD	866	922	991	1131	1106	879	838	1035	1176	1303	1247	5%
Jet & Kerosene												
Americas	141	169	171	144	181	210	131	116	81	158	121	31%
Europe	445	504	506	469	552	535	426	418	542	565	510	11%
Asia Oceania	66	73	77	67	45	87	112	102	63	77	65	20%
Total OECD	651	745	754	680	779	832	669	636	686	800	696	15%
o	1											
Gasoil/Diesel Americas	76	67	77	37	48	144	179	77	79	60	43	39%
	1161	1340	1381	1377	40 1394	1360	1402	1280	79 1294	1449	43 1422	39% 2%
Europe Asia Oceania	158	1340	195	207	1394	1360	214	254	266	287	1422	2% 51%
Total OECD	1395	1602	1654	1621	1631	1684	1794	1611	1640	1796	1656	8%
	1000	1002	1004	1021	1001	1004	17.54	1011	1040	1750	1000	070
Heavy Fuel Oil												
Americas	116	149	131	103	153	128	158	146	138	188	98	91%
Europe	537	477	240	215	299	174	239	305	224	212	195	9%
Asia Oceania	173	153	146	180	106	153	192	199	150	167	189	-12%
Total OECD	826	779	517	498	559	456	589	650	511	568	482	18%
Other Products												
Americas	675	652	717	694	722	745	722	734	649	665	687	-3%
Europe	701	774	1009	1119	829	979	1058	1092	983	835	1025	-19%
Asia Oceania	345	348	255	239	238	248	277	277	268	219	260	-16%
Total OECD	1721	1774	1981	2052	1788	1972	2057	2103	1899	1718	1972	-13%
Total Products												
Americas	1702	1802	1862	1904	2018	1832	1793	1864	1979	2197	1972	11%
Europe	3712	3988	4104	4101	3988	4062	4181	4232	3877	4014	4150	-3%
Asia Oceania	2301	2331	2306	2359	2112	2292	2543	2522	2469	2402	2339	3%
Total OECD	7715	8121	8272	8364	8118	8185	8517	8617	8325	8614	8461	2%
Total Oil												
Americas	5728	6344	6223	6568	6307	5773	5620	5625	6366	6023	6609	-9%
Europe	13216	6344 13241	13815	13738	13767	13996	13683	5625 13352	13162	13695	13812	-9% -1%
Asia Oceania	8874	8991		8824	9049	9234	9392	8802	9319	8985	9099	-1% -1%
			9147									
Total OECD	27818	28575	29186	29130	29123	29003	28695	27778	28847	28703	29520	-3%

Based on Monthly Oil Questionnaire data submitted by OECD countries in tonnes and converted to barrels.
 Excludes intra-regional trade.
 Includes additives.

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### User's Guide and Glossary to the IEA Oil Market Report

For information on the data sources, definitions, technical terms and general approach used in preparing the Oil Market Report (OMR), Market Report Series\_Oil and Annual Statistical Supplement (current issue of the Statistical Supplement dated 10 August 2018), readers are referred to the Users' Guide at www.oilmarketreport.org/glossary.asp. It should be noted that the spot crude and product price assessments are based on daily Argus prices, converted when appropriate to US\$ per barrel according to the Argus specification of products (Copyright © 2018 Argus Media Limited - all rights reserved).

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