



# SECTION 4

## Oil data: downstream



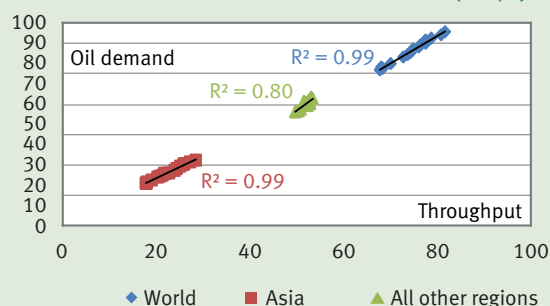
## Downstream dynamics in Asia and their importance to the oil market

Global oil demand continued to grow in 2016 at a slower rate at 1.5 per cent as compared to the growth in 2015 of around 1.8 per cent. Geographically, Asia and Pacific remained the main source of oil demand growth in 2016 with India, China and South Korea being the main drivers. Western Europe, Eastern Europe as well as Eurasia have also registered substantial growth in 2016. North America and Middle East oil demand growth slowed down slightly while Latin American oil demand continued to decline. Considering the petroleum derivatives, the light end of the barrel — gasoline, LPG and jet/kerosene — supported global oil demand growth while fuel oil remained weak. In Asia and Pacific, particularly, oil demand remained bullish, with 2016 gasoline demand in Asia and Pacific increasing by more than six per cent, kerosene by roughly five per cent and other petroleum products including LPG and naphtha increased by approximately three per cent while fuel oil demand shrank by almost three per cent compared to 2015. India, China and South Korea continued to grow in a wide range of petroleum products. Petroleum demand in India and South Korea increased by eight per cent and six per cent, respectively, in 2016 compared to 2015, while it also increased in China, Thailand, New Zealand, to name a few countries.

As result of strong world oil demand growth in 2016, world refining capacity also increased but at a slower rate compared to previous years. Despite the deceleration of global downstream activities in 2016, world refining capacity inched up by almost 0.5m b/cd as compared to 2015. The 2016 global refining capacity gains have mainly originated from North America and the Middle East. North American refining capacity increased, particularly in the United States where it rose by 0.3m b/cd. The Middle East also registered a growth of 0.3m b/cd of condensate splitters. Asian and Pacific refinery capacity growth slowed down strongly in 2016, despite increases in South Korea and in China, which were partly offset by declines in Japan. Western Europe refining capacity declined again in 2016 as result of continuing closures in France and the UK. Global refinery throughput slowed down this year compared to last year as a result of gains in oil prices and high global oil stocks. Asia and Pacific and the Middle East registered a strong growth in throughput in 2016. All other regions weakened in 2016 except North America which experienced small growth. Global refinery output followed the same trend as global refinery throughput with Asia and Pacific recording healthy gains, North America registered small gains while other regions registered declines.

Oil demand correlates highly with refinery throughput. Considering the period 2000 to 2016, the explained variance of the assumed linear relationship between the two variables ( $R^2$ )<sup>1</sup> exceeds 99 per cent for total world, as well as for Asia and Pacific, while it reaches 80 per cent for the remaining of the regions. For total world and Asia and Pacific, this relationship is almost linear, with similar simple regression coefficients in both models, while this structure weakens for other world regions. These results are shown in the accompanying graph, which highlights the importance of Asia and Pacific in the oil market, particularly in the downstream.

Oil demand and refinery throughput  
(m b/d)



1. The square of the correlation coefficient.

Table 4.1  
Refinery capacity in OPEC Members by company and location

(1,000 b/cd)

	Location	2012	2013	2014	2015	2016
<b>Algeria</b>		<b>592.0</b>	<b>650.8</b>	<b>650.8</b>	<b>650.8</b>	<b>650.8</b>
Sonatrach	Skikda	323.4	355.3	355.3	355.3	355.3
	Skikda (condensate)	122.2	122.2	122.2	122.2	122.2
	Arzew	53.8	80.8	80.8	80.8	80.8
	Alger	58.1	58.1	58.1	58.1	58.1
	Hassi Messaoud	21.5	21.5	21.5	21.5	21.5
	Adrar	12.9	12.9	12.9	12.9	12.9
<b>Angola</b>		<b>65.0</b>	<b>65.0</b>	<b>65.0</b>	<b>65.0</b>	<b>65.0</b>
Fina Petroleos de Angola	Luanda	65.0	65.0	65.0	65.0	65.0
<b>Ecuador</b>		<b>188.4</b>	<b>190.8</b>	<b>190.8</b>	<b>190.8</b>	<b>190.8</b>
Petroindustrial	Esmeraldas	110.0	110.0	110.0	110.0	110.0
	Santa Elens	45.0	45.0	45.0	45.0	45.0
	Shushufindi	20.0	20.0	20.0	20.0	20.0
Repsol YPF	Orellana	7.2	7.2	7.2	7.2	7.2
Andes Petroleum	Sucumbios	3.5	3.5	3.5	3.5	3.5
Petroproduccion	El Oro	nap	2.4	2.4	2.4	2.4
	Sucumbios	1.7	1.7	1.7	1.7	1.7
	Lago Agrio	1.0	1.0	1.0	1.0	1.0
<b>Gabon</b>		<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>
Total & Shell	Port Gentil	24.0	24.0	24.0	24.0	24.0
<b>IR Iran</b>		<b>1,715.0</b>	<b>1,715.0</b>	<b>1,781.0</b>	<b>1,781.0</b>	<b>1,901.0</b>
NIOC	Abadan	360.0	360.0	399.0	399.0	399.0
	Isfahan	370.0	370.0	375.0	375.0	375.0
	Bandar Abbas	320.0	320.0	284.0	284.0	284.0
	Tehran	220.0	220.0	245.0	245.0	245.0
	Arak	250.0	250.0	242.0	242.0	242.0
	Tabriz	110.0	110.0	110.0	110.0	110.0
	Shiraz	40.0	40.0	56.0	56.0	56.0
	Lavan	25.0	25.0	22.0	22.0	22.0
	Kermanshah	20.0	20.0	48.0	48.0	48.0
	Bandar Abbas	nap	nap	nap	nap	120.0
<b>Iraq</b>		<b>820.0</b>	<b>830.0</b>	<b>900.0</b>	<b>900.0</b>	<b>900.0</b>
INOC	Baiji	310.0	310.0	310.0	310.0	310.0
	Basrah	140.0	140.0	210.0	210.0	210.0
	Daura	140.0	140.0	140.0	140.0	140.0
	Kirkuk	30.0	30.0	30.0	30.0	30.0
	Sainia	20.0	30.0	30.0	30.0	30.0
	Najaf	30.0	30.0	30.0	30.0	30.0
	Samawa	30.0	30.0	30.0	30.0	30.0
	Nasiria	30.0	30.0	30.0	30.0	30.0
	Missan	30.0	30.0	30.0	30.0	30.0
	Diwania	20.0	20.0	20.0	20.0	20.0
	Haditha	16.0	16.0	16.0	16.0	16.0
	Qaiarah	14.0	14.0	14.0	14.0	14.0
	Kask	10.0	10.0	10.0	10.0	10.0

Table 4.1

## Refinery capacity in OPEC Members by company and location

(1,000 b/cd)

	Location	2012	2013	2014	2015	2016
<b>Kuwait</b>		<b>936.0</b>	<b>936.0</b>	<b>936.0</b>	<b>936.0</b>	<b>936.0</b>
KNPC	Mina Al-Ahmadi	466.0	466.0	466.0	466.0	466.0
	Mina Abdullah	270.0	270.0	270.0	270.0	270.0
	Shuaiba	200.0	200.0	200.0	200.0	200.0
<b>Libya</b>		<b>380.0</b>	<b>380.0</b>	<b>380.0</b>	<b>380.0</b>	<b>380.0</b>
NOC	Ras Lanuf	220.0	220.0	220.0	220.0	220.0
	Zawia	120.0	120.0	120.0	120.0	120.0
	Tobruk	20.0	20.0	20.0	20.0	20.0
	Sarir	10.0	10.0	10.0	10.0	10.0
	Marsa El-Brega	10.0	10.0	10.0	10.0	10.0
<b>Nigeria</b>		<b>446.0</b>	<b>446.0</b>	<b>446.0</b>	<b>446.0</b>	<b>446.0</b>
PHRC	New Port Harcourt	150.0	150.0	150.0	150.0	150.0
WRPC	Warri	125.0	125.0	125.0	125.0	125.0
KRPC	Kaduna	110.0	110.0	110.0	110.0	110.0
PHRC	Old Port Harcourt	60.0	60.0	60.0	60.0	60.0
NDPR	Rivers State	1.0	1.0	1.0	1.0	1.0
<b>Qatar</b>		<b>283.0</b>	<b>283.0</b>	<b>283.0</b>	<b>283.0</b>	<b>429.0</b>
Qatar Petroleum	Ras Laffan condensate	146.0	146.0	146.0	146.0	146.0
Qatar Petroleum	Mesaieed refinery & condensate	137.0	137.0	137.0	137.0	137.0
Takreer	Ras Laffan condensate II	nap	nap	nap	nap	146.0
<b>Saudi Arabia</b>		<b>2,107.0</b>	<b>2,507.0</b>	<b>2,899.0</b>	<b>2,899.0</b>	<b>2,899.0</b>
Saudi Aramco	Ras Tanura	550.0	550.0	550.0	550.0	550.0
	Yanbu	235.0	235.0	245.0	245.0	245.0
	Riyadh	124.0	124.0	126.0	126.0	126.0
	Jeddah	88.0	88.0	78.0	78.0	78.0
Saudi Aramco & Mobil	Samref	400.0	400.0	400.0	400.0	400.0
Saudi Aramco & Petrola	Rabigh	400.0	400.0	400.0	400.0	400.0
Saudi Aramco & Total	Satorp	nap	400.0	400.0	400.0	400.0
Saudi Aramco	Yasref	nap	nap	400.0	400.0	400.0
Saudi Aramco & Shell	Sasref	310.0	310.0	300.0	300.0	300.0
<b>United Arab Emirates</b>		<b>675.0</b>	<b>707.0</b>	<b>707.0</b>	<b>1,124.0</b>	<b>1,124.0</b>
ADNOC	Al-Ruwais	400.0	400.0	400.0	817.0	817.0
Emirate Oil	Jebel Ali	120.0	140.0	140.0	140.0	140.0
ADNOC	Umm Al-Narr	85.0	85.0	85.0	85.0	85.0
METRO Oil	Fujairah	70.0	82.0	82.0	82.0	82.0
<b>Venezuela</b>		<b>1,872.0</b>	<b>1,855.0</b>	<b>1,890.6</b>	<b>1,890.6</b>	<b>1,890.6</b>
PDVSA	Amuay	600.0	600.0	600.0	600.0	600.0
	Cardon	340.0	340.0	340.0	340.0	340.0
	Puerto La Cruz	195.5	195.5	195.5	195.5	195.5
	El Palito	126.9	126.9	126.9	126.9	126.9
	San Roque	5.2	5.2	5.2	5.2	5.2
	Bajo Grande	4.1	5.0	5.0	5.0	5.0
	Petrompiar <sup>1</sup>	184.2	145.8	198.0	198.0	198.0
	Petromonagas <sup>1</sup>	130.4	132.2	136.0	136.0	136.0
	Petrocedeno <sup>1</sup>	175.3	181.7	153.0	153.0	153.0
	Petrozuata <sup>1</sup>	110.4	122.7	131.0	131.0	131.0
<b>OPEC</b>		<b>10,103.3</b>	<b>10,589.6</b>	<b>11,153.2</b>	<b>11,570.2</b>	<b>11,836.2</b>

## Notes:

1. Upgrader refinery capacity.

Table 4.2  
Charge refinery capacity in OPEC Members, 2016

(1,000 b/cd)

	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic <sup>1</sup> hydrocracking	Catalytic hydrotreating
Algeria	10.7	–	7.1	89.7	–	82.0
Angola	2.5	–	8.7	–	2.4	3.4
Ecuador	45.3	31.5	18.0	12.8	–	27.5
Gabon	–	9.2	–	1.4	–	9.4
IR Iran	624.0	104.0	40.0	197.4	145.0	180.2
Iraq	145.0	–	–	88.0	74.2	292.0
Kuwait	341.8	80.0	43.0	54.6	204.5	588.7
Libya	3.7	–	–	20.3	–	43.3
Nigeria <sup>1</sup>	132.2	23.4	86.0	73.5	33.0	110.8
Qatar <sup>1</sup>	–	–	60.0	24.6	194.0	39.4
Saudi Arabia	645.9	191.1	187.6	240.4	259.0	755.0
United Arab Emirates	92.8	–	127.0	208.2	120.0	638.3
Venezuela	679.0	145.0	231.8	49.5	–	389.7
<b>OPEC</b>	<b>2,722.9</b>	<b>584.2</b>	<b>809.2</b>	<b>1,060.4</b>	<b>1,032.1</b>	<b>3,159.6</b>

## Notes:

1. Includes GTL cracker capacities.

Table 4.3  
World refinery capacity by country

(1,000 b/cd)

	2012	2013	2014	2015	2016	change 16/15
<b>North America</b>	<b>19,377.8</b>	<b>19,782.4</b>	<b>19,837.3</b>	<b>20,023.7</b>	<b>20,366.7</b>	<b>343.0</b>
Canada	2,049.8	1,964.4	1,964.3	1,965.7	1,965.7	–
United States	17,328.0	17,818.0	17,873.0	18,058.0	18,401.0	343.0
<b>Latin America</b>	<b>8,785.2</b>	<b>8,363.7</b>	<b>8,541.3</b>	<b>8,669.1</b>	<b>8,669.1</b>	<b>–</b>
Argentina	630.6	630.6	630.6	630.6	630.6	–
Brazil	2,000.0	2,093.0	2,235.0	2,277.8	2,277.8	–
Colombia	330.0	330.0	330.0	415.0	415.0	–
Ecuador	188.4	190.8	190.8	190.8	190.8	–
Mexico	1,690.0	1,690.0	1,690.0	1,690.0	1,690.0	–
Curaçao	320.0	320.0	320.0	320.0	320.0	–
Trinidad & Tobago	168.0	168.0	168.0	168.0	168.0	–
Venezuela <sup>1</sup>	1,872.0	1,855.0	1,890.6	1,890.6	1,890.6	–
Others	1,586.3	1,086.3	1,086.3	1,086.3	1,086.3	–
<b>Eastern Europe and Eurasia</b>	<b>10,163.2</b>	<b>10,262.7</b>	<b>10,337.7</b>	<b>10,387.7</b>	<b>10,443.7</b>	<b>56.0</b>
Azerbaijan	399.0	399.0	399.0	399.0	399.0	–
Belarus	493.3	493.3	493.3	493.3	517.3	24.0
Kazakhstan	345.1	345.1	345.1	345.1	345.1	–
Poland	493.0	493.0	493.0	493.0	493.0	–
Romania	537.3	461.8	461.8	461.8	461.8	–

Table 4.3  
World refinery capacity by country

(1,000 b/cd)

	2012	2013	2014	2015	2016	change 16/15
<b>Eastern Europe and Eurasia (cont'd)</b>						
Russia	5,754.0	5,929.0	6,004.0	6,054.0	6,086.0	32.0
Ukraine	879.8	879.8	879.8	879.8	879.8	–
Others	1,261.8	1,261.8	1,261.8	1,261.8	1,261.8	–
<b>Western Europe</b>	<b>14,790.8</b>	<b>14,136.1</b>	<b>13,918.6</b>	<b>13,918.6</b>	<b>13,660.6</b>	<b>–258.0</b>
Belgium	739.8	739.8	739.8	739.8	739.8	–
France	1,718.8	1,508.4	1,406.0	1,406.0	1,248.0	–158.0
Germany	2,247.0	2,247.0	2,188.0	2,188.0	2,188.0	–
Italy	2,337.2	2,115.7	2,046.0	2,046.0	2,046.0	–
Netherlands	1,196.6	1,196.6	1,196.6	1,196.6	1,196.6	–
Spain	1,271.5	1,291.5	1,427.5	1,427.5	1,427.5	–
United Kingdom	1,767.2	1,524.4	1,402.0	1,402.0	1,302.0	–100.0
Others	3,512.7	3,512.7	3,512.7	3,512.7	3,512.7	–
<b>Middle East</b>	<b>7,718.3</b>	<b>8,160.3</b>	<b>8,688.3</b>	<b>9,105.3</b>	<b>9,371.3</b>	<b>266.0</b>
IR Iran	1,715.0	1,715.0	1,781.0	1,781.0	1,901.0	120.0
Iraq	820.0	830.0	900.0	900.0	900.0	–
Kuwait	936.0	936.0	936.0	936.0	936.0	–
Qatar	283.0	283.0	283.0	283.0	429.0	146.0
Saudi Arabia	2,107.0	2,507.0	2,899.0	2,899.0	2,899.0	–
United Arab Emirates	675.0	707.0	707.0	1,124.0	1,124.0	–
Others	1,182.3	1,182.3	1,182.3	1,182.3	1,182.3	–
<b>Africa</b>	<b>3,413.0</b>	<b>3,491.8</b>	<b>3,491.8</b>	<b>3,491.8</b>	<b>3,491.8</b>	<b>–</b>
Algeria	592.0	650.8	650.8	650.8	650.8	–
Angola	65.0	65.0	65.0	65.0	65.0	–
Egypt	726.3	726.3	726.3	726.3	726.3	–
South Africa	484.5	484.5	484.5	484.5	484.5	–
Gabon	24.0	24.0	24.0	24.0	24.0	–
Libya	380.0	380.0	380.0	380.0	380.0	–
Nigeria	446.0	446.0	446.0	446.0	446.0	–
Others	695.2	715.2	715.2	715.2	715.2	–
<b>Asia and Pacific</b>	<b>30,631.6</b>	<b>30,687.0</b>	<b>31,005.5</b>	<b>31,324.5</b>	<b>31,367.5</b>	<b>43.0</b>
Australia	760.1	674.1	541.1	440.1	440.1	–
China	11,547.3	11,787.3	12,337.3	12,437.3	12,497.3	60.0
India	4,278.8	4,319.0	4,319.0	4,619.0	4,619.0	–
Indonesia	1,157.0	1,157.0	1,157.0	1,157.0	1,157.0	–
Japan	4,477.4	4,339.7	3,946.7	3,916.7	3,789.7	–127.0
South Korea	2,949.0	2,949.0	3,009.0	3,059.0	3,169.0	110.0
Singapore	1,422.0	1,414.0	1,514.0	1,514.0	1,514.0	–
Others	4,039.9	4,046.9	4,181.4	4,181.4	4,181.4	–
<b>Total world</b>	<b>94,879.7</b>	<b>94,883.9</b>	<b>95,820.5</b>	<b>96,920.6</b>	<b>97,370.6</b>	<b>450.0</b>
<i>of which</i>						
OPEC	10,103.3	10,589.6	11,153.2	11,570.2	11,836.2	266.0
<i>OPEC percentage</i>	<i>10.6</i>	<i>11.2</i>	<i>11.6</i>	<i>11.9</i>	<i>12.2</i>	
OECD	45,035.7	44,561.9	43,933.4	44,038.7	44,106.7	68.0
FSU	8,532.4	8,707.4	8,782.4	8,832.4	8,888.4	56.0

**Notes:**

1. Includes upgrader capacity.

Table 4.4

## World refinery throughput by country

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>North America</b>	<b>16,847.4</b>	<b>17,136.2</b>	<b>17,664.5</b>	<b>17,948.8</b>	<b>18,099.7</b>	<b>0.8</b>
Canada	1,868.0	1,843.0	1,841.0	1,839.0	1,857.0	1.0
United States	14,979.4	15,293.2	15,823.5	16,109.8	16,242.7	0.8
<b>Latin America</b>	<b>6,969.8</b>	<b>6,756.2</b>	<b>6,409.4</b>	<b>6,238.9</b>	<b>5,782.3</b>	<b>-7.3</b>
Argentina	529.3	522.9	523.7	535.6	507.1	-5.3
Brazil	1,932.0	2,055.3	2,106.9	1,984.0	1,835.8	-7.5
Colombia	294.0	280.3	237.3	232.2	236.6	1.9
Ecuador	152.0	140.4	137.8	133.2	150.3	12.8
Mexico	1,206.5	1,224.6	1,152.8	1,059.7	931.7	-12.1
Curaçao	175.2	143.4	147.7	152.2	156.7	3.0
Trinidad & Tobago	108.4	125.5	104.3	125.3	147.4	17.6
Venezuela	1,315.8	1,393.6	1,351.0	1,416.9	1,210.4	-14.6
Others	1,256.7	870.0	647.8	599.8	606.4	1.1
<b>Eastern Europe and Eurasia</b>	<b>7,952.6</b>	<b>8,116.7</b>	<b>8,534.9</b>	<b>8,428.4</b>	<b>8,235.3</b>	<b>-2.3</b>
Azerbaijan	120.8	129.2	131.8	125.9	105.9	-15.9
Belarus	435.1	424.9	449.9	464.4	374.8	-19.3
Kazakhstan	295.8	297.6	385.8	359.3	357.2	-0.6
Poland	503.8	487.9	485.8	524.8	516.1	-1.7
Romania	188.2	193.9	215.8	212.7	233.8	10.0
Russia	5,434.9	5,590.9	5,915.3	5,791.6	5,717.0	-1.3
Ukraine	78.4	89.5	73.8	29.3	25.1	-14.5
Others	895.7	903.0	876.7	920.5	905.3	-1.7
<b>Western Europe</b>	<b>11,395.6</b>	<b>10,786.2</b>	<b>10,715.3</b>	<b>11,359.9</b>	<b>11,218.3</b>	<b>-1.2</b>
Belgium	638.0	555.5	645.3	643.8	641.3	-0.4
France	1,157.1	1,138.4	1,115.3	1,172.6	1,141.4	-2.7
Germany	1,940.2	1,895.3	1,861.8	1,914.6	1,902.1	-0.7
Italy	1,487.4	1,270.9	1,202.3	1,346.0	1,304.8	-3.1
Netherlands	1,008.2	959.7	1,003.7	1,062.1	1,092.1	2.8
Spain	1,177.3	1,161.3	1,178.5	1,295.8	1,296.1	-
United Kingdom	1,376.9	1,219.6	1,142.6	1,143.4	1,092.8	-4.4
Others	2,610.4	2,585.4	2,566.0	2,781.6	2,747.7	-1.2
<b>Middle East</b>	<b>6,815.2</b>	<b>6,604.6</b>	<b>6,899.2</b>	<b>7,266.0</b>	<b>7,923.9</b>	<b>9.1</b>
IR Iran	1,717.0	1,817.0	1,817.0	1,817.0	1,857.3	2.2
Iraq	587.0	606.5	495.3	415.1	625.8	50.7
Kuwait	905.5	863.7	871.8	865.6	801.0	-7.5
Qatar	292.0	269.0	261.0	252.8	280.0	10.7
Saudi Arabia	1,726.1	1,577.5	2,000.0	2,180.5	2,459.1	12.8
United Arab Emirates	637.5	650.5	636.8	918.6	1,100.3	19.8
Others	950.2	820.5	817.3	816.3	800.5	-1.9
<b>Africa</b>	<b>2,262.4</b>	<b>2,117.7</b>	<b>2,300.6</b>	<b>2,160.3</b>	<b>2,139.0</b>	<b>-1.0</b>
Algeria	577.6	536.8	699.3	670.9	658.5	-1.9
Angola	38.8	33.4	31.6	52.7	53.7	1.9
Egypt	532.9	487.4	527.0	527.1	501.8	-4.8
South Africa	464.9	400.7	450.7	444.1	456.2	2.7
Gabon	15.8	17.1	16.7	16.5	16.8	1.5
Libya	123.3	140.1	91.9	91.9	90.1	-2.0
Nigeria	84.7	94.7	67.1	21.8	61.9	184.4
Others	424.4	407.6	416.4	335.4	300.2	-10.5
<b>Asia and Pacific</b>	<b>25,180.3</b>	<b>25,886.8</b>	<b>26,098.6</b>	<b>27,293.4</b>	<b>28,543.4</b>	<b>4.6</b>
Australia	599.6	587.6	538.0	427.4	433.4	1.4
China	9,512.0	9,782.0	10,158.0	11,001.0	11,545.0	4.9
India	4,300.3	4,462.6	4,475.9	4,561.0	4,930.2	8.1
Indonesia	819.9	822.3	847.8	836.4	861.5	3.0
Japan	3,223.5	3,265.8	3,125.5	3,137.5	3,152.9	0.5
South Korea	2,589.5	2,484.0	2,516.0	2,784.0	2,948.6	5.9
Singapore	993.7	1,277.0	1,262.0	1,210.0	1,238.0	2.3
Others	3,141.8	3,205.6	3,175.4	3,336.1	3,433.8	2.9
<b>Total world</b>	<b>77,423.3</b>	<b>77,404.5</b>	<b>78,622.6</b>	<b>80,695.8</b>	<b>81,941.7</b>	<b>1.5</b>
<i>of which</i>						
OPEC	8,173.0	8,140.2	8,477.3	8,853.7	9,364.8	5.8
<i>OPEC percentage</i>	<i>10.6</i>	<i>10.5</i>	<i>10.8</i>	<i>11.0</i>	<i>11.4</i>	
OECD	37,075.0	36,684.8	36,946.3	37,996.5	38,008.7	-
FSU	6,761.2	6,948.4	7,338.7	7,172.5	6,999.8	-2.4



Table 4.5  
Output of petroleum products in OPEC Members

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>Algeria</b>	<b>451.5</b>	<b>506.0</b>	<b>655.1</b>	<b>628.6</b>	<b>622.1</b>	<b>-1.0</b>
Gasoline	50.8	48.7	63.3	59.0	55.0	-6.9
Kerosene	24.3	36.1	42.2	34.4	34.8	1.2
Distillates	126.4	148.6	190.4	186.2	187.0	0.4
Residuals	86.7	113.0	139.4	139.6	144.7	3.6
Others	163.3	159.5	219.8	209.4	200.6	-4.2
<b>Angola</b>	<b>38.7</b>	<b>45.4</b>	<b>43.8</b>	<b>43.5</b>	<b>53.0</b>	<b>21.7</b>
Gasoline	1.5	1.5	0.5	0.4	0.8	110.8
Kerosene	7.8	9.2	11.1	6.8	9.3	36.2
Distillates	10.8	12.1	10.1	12.4	12.4	-
Residuals	16.3	16.9	13.0	17.1	18.1	6.1
Others	2.4	5.8	9.2	6.8	12.4	81.1
<b>Ecuador</b>	<b>132.9</b>	<b>210.0</b>	<b>201.0</b>	<b>193.6</b>	<b>205.7</b>	<b>6.3</b>
Gasoline	28.3	65.1	81.1	85.6	83.0	-3.1
Kerosene	8.2	8.6	8.2	8.0	7.7	-4.1
Distillates	42.1	32.3	29.7	29.2	35.9	23.0
Residuals	32.6	54.6	45.3	45.1	56.6	25.5
Others	21.6	49.4	36.7	25.6	22.5	-12.2
<b>Gabon</b>	<b>15.3</b>	<b>16.7</b>	<b>16.2</b>	<b>16.1</b>	<b>16.2</b>	<b>0.6</b>
Gasoline	1.6	1.3	1.5	1.4	1.5	3.5
Kerosene	0.5	0.6	0.6	0.5	0.6	3.8
Distillates	4.4	4.8	4.6	4.6	4.6	-
Residuals	7.4	8.3	7.9	7.9	7.9	-
Others	1.4	1.7	1.6	1.6	1.6	1.2
<b>IR Iran</b>	<b>1,811.9</b>	<b>1,918.4</b>	<b>1,811.5</b>	<b>1,818.5</b>	<b>1,857.3</b>	<b>2.1</b>
Gasoline	418.6	455.7	412.5	422.4	435.1	3.0
Kerosene	124.5	124.5	137.7	128.8	131.4	2.0
Distillates	555.6	588.6	533.0	545.4	561.8	3.0
Residuals	476.3	512.8	464.3	457.8	462.4	1.0
Others	237.0	237.0	264.0	264.0	266.7	1.0
<b>Iraq</b>	<b>580.4</b>	<b>601.3</b>	<b>522.8</b>	<b>444.7</b>	<b>448.9</b>	<b>1.0</b>
Gasoline	76.4	85.9	66.2	56.0	49.2	-12.2
Kerosene	44.5	41.6	30.9	27.8	33.9	21.9
Distillates	127.6	132.4	104.3	72.3	67.0	-7.4
Residuals	282.4	293.0	249.2	221.8	220.6	-0.6
Others	49.5	48.4	72.2	66.7	78.3	17.4
<b>Kuwait</b>	<b>1,057.0</b>	<b>992.1</b>	<b>918.3</b>	<b>1,013.2</b>	<b>923.5</b>	<b>-8.9</b>
Gasoline	52.4	59.2	36.8	47.8	60.9	27.6
Kerosene	180.8	187.8	195.8	189.7	168.6	-11.1
Distillates	227.6	248.3	244.5	226.1	212.0	-6.3
Residuals	199.8	179.8	149.9	185.3	201.5	8.7
Others	396.4	317.0	291.3	364.3	280.5	-23.0
<b>Libya</b>	<b>148.3</b>	<b>144.8</b>	<b>135.0</b>	<b>137.2</b>	<b>133.9</b>	<b>-2.4</b>
Gasoline	15.1	17.3	16.7	16.3	16.2	-1.0
Kerosene	16.2	16.4	16.8	16.4	16.1	-2.0
Distillates	46.2	41.8	37.9	37.9	36.4	-4.0
Residuals	41.4	43.9	42.3	43.1	41.8	-3.0
Others	29.4	25.4	21.4	23.4	23.4	-

Table 4.5  
Output of petroleum products in OPEC Members

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>Nigeria</b>	<b>82.3</b>	<b>88.5</b>	<b>57.0</b>	<b>24.1</b>	<b>53.5</b>	<b>122.2</b>
Gasoline	27.4	30.4	17.3	12.3	15.2	23.7
Kerosene	12.9	15.8	9.8	3.4	8.3	140.1
Distillates	18.8	18.4	13.2	4.5	13.8	206.9
Residuals	18.4	20.7	14.5	3.6	7.0	93.5
Others	4.8	3.3	2.1	0.3	9.3	3,609.5
<b>Qatar</b>	<b>659.0</b>	<b>650.0</b>	<b>638.4</b>	<b>611.3</b>	<b>632.3</b>	<b>3.4</b>
Gasoline	46.0	37.0	46.2	36.9	45.8	23.9
Kerosene	79.0	76.0	67.3	71.3	80.3	12.7
Distillates	45.0	44.0	44.9	42.7	42.4	-0.6
Residuals	6.0	7.0	4.5	9.5	4.1	-57.0
Others	483.0	486.0	475.6	450.9	459.7	1.9
<b>Saudi Arabia</b>	<b>1,927.1</b>	<b>1,841.7</b>	<b>2,103.5</b>	<b>2,480.5</b>	<b>2,825.9</b>	<b>13.9</b>
Gasoline	398.6	369.0	425.4	492.9	552.9	12.2
Kerosene	174.3	162.9	199.2	210.8	244.5	16.0
Distillates	639.7	602.1	710.7	962.9	1,050.9	9.1
Residuals	508.4	455.3	469.1	447.0	459.9	2.9
Others	206.1	252.4	299.2	366.9	517.7	41.1
<b>United Arab Emirates</b>	<b>624.0</b>	<b>653.3</b>	<b>625.6</b>	<b>834.9</b>	<b>1,089.0</b>	<b>30.4</b>
Gasoline	87.6	91.4	87.2	102.5	132.0	28.7
Kerosene	180.5	191.5	180.5	256.9	341.0	32.7
Distillates	112.0	123.2	123.2	176.9	220.0	24.4
Residuals	35.3	51.0	26.0	26.1	33.0	26.3
Others	208.6	196.3	208.6	272.5	363.0	33.2
<b>Venezuela</b>	<b>1,232.0</b>	<b>1,245.1</b>	<b>1,162.5</b>	<b>1,049.9</b>	<b>960.9</b>	<b>-8.5</b>
Gasoline	294.6	293.1	273.7	248.0	202.6	-18.3
Kerosene	71.2	67.7	63.4	60.5	38.1	-37.1
Distillates	269.2	255.2	242.7	206.7	166.6	-19.4
Residuals	303.7	312.4	271.8	255.9	266.4	4.1
Others	293.2	316.7	311.0	278.8	287.2	3.0
<b>OPEC</b>	<b>8,760.4</b>	<b>8,913.4</b>	<b>8,890.6</b>	<b>9,296.1</b>	<b>9,822.1</b>	<b>5.7</b>
Gasoline	1,499.0	1,555.5	1,528.2	1,581.6	1,650.0	4.3
Kerosene	924.8	938.7	963.4	1,015.5	1,114.6	9.8
Distillates	2,225.3	2,251.7	2,289.2	2,507.9	2,610.8	4.1
Residuals	2,014.7	2,068.6	1,897.2	1,859.9	1,923.9	3.4
Others	2,096.7	2,098.9	2,212.5	2,331.2	2,522.7	8.2

## Notes:

Data may include products from GTLs and condensate units.

Table 4.6  
World output of petroleum products by country

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>North America</b>	<b>20,663.0</b>	<b>21,176.6</b>	<b>21,706.3</b>	<b>21,906.5</b>	<b>22,094.5</b>	<b>0.9</b>
Canada	2,099.0	2,070.6	2,052.3	2,020.5	2,033.0	0.6
United States	18,564.0	19,106.0	19,654.0	19,886.0	20,061.5	0.9
<b>Latin America</b>	<b>7,313.9</b>	<b>7,333.2</b>	<b>7,047.2</b>	<b>6,728.5</b>	<b>6,408.7</b>	<b>-4.8</b>
Argentina	650.9	681.7	681.7	716.4	691.1	-3.5
Brazil	2,021.8	2,135.2	2,179.3	2,041.2	1,910.3	-6.4
Colombia	319.4	313.7	341.9	348.7	355.7	2.0
Ecuador	132.9	210.0	201.0	193.6	205.7	6.3
Mexico	1,417.6	1,517.2	1,463.6	1,334.2	1,197.4	-10.2
Curaçao	146.5	146.5	161.2	166.0	171.0	3.0
Trinidad & Tobago	85.0	125.3	99.1	124.8	148.6	19.1
Venezuela	1,232.0	1,245.1	1,162.5	1,049.9	960.9	-8.5
Others	1,307.8	958.6	757.0	753.8	768.0	1.9
<b>Eastern Europe and Eurasia</b>	<b>9,068.9</b>	<b>9,157.9</b>	<b>9,307.3</b>	<b>9,132.2</b>	<b>8,911.4</b>	<b>-2.4</b>
Azerbaijan	114.7	126.1	128.5	125.3	114.7	-8.4
Belarus	408.4	404.3	414.5	414.5	339.4	-18.1
Kazakhstan	300.0	352.1	385.8	359.3	358.9	-0.1
Poland	569.5	518.3	515.5	566.2	556.1	-1.8
Romania	216.4	215.2	244.4	242.3	265.9	9.7
Russia	6,436.1	6,536.1	6,636.1	6,437.0	6,337.0	-1.6
Ukraine	112.7	87.7	71.5	29.3	25.1	-14.5
Others	911.1	918.0	911.0	958.4	914.4	-4.6
<b>Western Europe</b>	<b>12,379.2</b>	<b>12,320.6</b>	<b>12,234.1</b>	<b>12,851.8</b>	<b>12,822.9</b>	<b>-0.2</b>
Belgium	714.5	666.2	734.5	728.9	696.3	-4.5
France	1,296.3	1,260.6	1,264.3	1,270.5	1,263.7	-0.5
Germany	2,120.1	2,139.1	2,114.8	2,163.3	2,231.4	3.1
Italy	1,607.2	1,495.0	1,408.3	1,566.9	1,556.8	-0.6
Netherlands	1,208.8	1,186.4	1,214.1	1,277.5	1,281.3	0.3
Spain	1,236.6	1,238.5	1,243.5	1,335.6	1,327.6	-0.6
United Kingdom	1,417.9	1,410.5	1,332.7	1,341.0	1,314.7	-2.0
Others	2,777.8	2,924.4	2,921.9	3,168.1	3,151.2	-0.5
<b>Middle East</b>	<b>7,612.7</b>	<b>7,575.8</b>	<b>7,485.4</b>	<b>8,099.6</b>	<b>8,663.8</b>	<b>7.0</b>
IR Iran	1,811.9	1,918.4	1,811.5	1,818.5	1,857.3	2.1
Iraq	580.4	601.3	522.8	444.7	448.9	1.0
Kuwait	1,057.0	992.1	918.3	1,013.2	923.5	-8.9
Qatar	659.0	650.0	638.4	611.3	632.3	3.4
Saudi Arabia	1,927.1	1,841.7	2,103.5	2,480.5	2,825.9	13.9
United Arab Emirates	624.0	653.3	625.6	834.9	1,089.0	30.4
Others	953.3	918.9	865.4	896.5	886.9	-1.1
<b>Africa</b>	<b>2,185.9</b>	<b>2,162.7</b>	<b>2,324.2</b>	<b>2,163.4</b>	<b>2,138.2</b>	<b>-1.2</b>
Algeria	451.5	506.0	655.1	628.6	622.1	-1.0
Angola	38.7	45.4	43.8	43.5	53.0	21.7
Egypt	543.9	487.3	510.8	527.7	501.2	-5.0
South Africa	500.6	435.6	476.2	452.4	464.6	2.7
Gabon	15.3	16.7	16.2	16.1	16.2	0.6
Libya	148.3	144.8	135.0	137.2	133.9	-2.4
Nigeria	82.3	88.5	57.0	24.1	53.5	122.2
Others	405.2	438.4	430.0	333.8	293.7	-12.0
<b>Asia and Pacific</b>	<b>26,671.5</b>	<b>26,833.2</b>	<b>27,584.1</b>	<b>28,284.6</b>	<b>29,074.3</b>	<b>2.8</b>
Australia	644.6	628.3	603.8	479.3	469.0	-2.1
China	10,132.6	10,248.5	10,794.7	11,118.6	11,418.0	2.7
India	4,096.6	4,514.7	4,798.1	4,888.1	5,235.5	7.1
Indonesia	965.1	889.8	938.6	971.2	1,000.3	3.0
Japan	3,748.1	3,669.0	3,518.8	3,508.8	3,510.5	-
South Korea	2,834.8	2,745.2	2,822.2	3,060.2	3,110.0	1.6
Singapore	1,099.6	1,044.5	1,031.9	1,001.0	1,024.0	2.3
Others	3,150.0	3,093.2	3,076.0	3,257.5	3,307.0	1.5
<b>Total world</b>	<b>85,895.1</b>	<b>86,560.1</b>	<b>87,688.4</b>	<b>89,166.7</b>	<b>90,113.7</b>	<b>1.1</b>
<i>of which</i>						
OPEC	8,760.4	8,913.4	8,890.6	9,296.1	9,822.1	5.7
<i>OPEC percentage</i>	<i>10.2</i>	<i>10.3</i>	<i>10.1</i>	<i>10.4</i>	<i>10.9</i>	
OECD	43,171.4	43,515.6	43,811.6	44,682.9	44,657.0	-0.1
FSU	7,709.7	7,850.8	7,952.2	7,713.2	7,542.4	-2.2

**Notes:**

Data may include products from GTL and condensate units.

Table 4.7

## Oil demand by main petroleum product in OPEC Members

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>Algeria</b>	<b>351.1</b>	<b>376.8</b>	<b>389.5</b>	<b>418.5</b>	<b>399.0</b>	<b>-4.7</b>
Gasoline	79.3	80.7	87.0	93.3	89.8	-3.7
Kerosene	11.2	11.3	11.7	11.7	11.9	1.5
Distillates	187.5	207.1	211.7	224.7	218.5	-2.8
Residuals	4.0	4.5	4.4	4.6	4.0	-12.3
Others	69.1	73.2	74.7	84.2	74.8	-11.2
<b>Angola</b>	<b>84.5</b>	<b>149.2</b>	<b>147.2</b>	<b>141.8</b>	<b>122.0</b>	<b>-14.0</b>
Gasoline	21.8	28.6	33.6	30.8	25.8	-16.1
Kerosene	4.1	11.3	11.9	11.6	9.4	-18.7
Distillates	50.7	75.1	77.4	86.4	60.2	-30.3
Residuals	0.9	6.7	1.9	1.2	3.0	148.1
Others	7.0	27.6	22.4	11.8	23.6	99.2
<b>Ecuador</b>	<b>269.2</b>	<b>272.0</b>	<b>285.8</b>	<b>258.7</b>	<b>247.0</b>	<b>-4.5</b>
Gasoline	49.8	50.8	52.9	58.7	64.5	9.8
Kerosene	7.3	7.9	7.9	7.5	6.9	-7.7
Distillates	79.5	88.9	92.6	91.6	84.4	-7.8
Residuals	39.1	32.9	38.6	33.8	26.1	-22.8
Others	93.5	91.6	93.7	67.1	65.1	-3.0
<b>Gabon</b>	<b>21.6</b>	<b>23.5</b>	<b>23.6</b>	<b>24.4</b>	<b>25.2</b>	<b>3.3</b>
Gasoline	1.6	1.8	1.9	2.1	2.1	1.1
Kerosene	2.4	2.6	2.2	2.3	2.4	3.2
Distillates	13.5	15.2	15.5	16.3	16.8	3.2
Residuals	3.2	3.0	3.0	2.9	3.0	4.1
Others	0.9	0.9	1.0	0.9	1.0	9.3
<b>IR Iran</b>	<b>1,764.7</b>	<b>1,776.2</b>	<b>1,845.6</b>	<b>1,794.9</b>	<b>1,742.2</b>	<b>-2.9</b>
Gasoline	393.4	394.5	437.6	455.5	444.0	-2.5
Kerosene	104.2	104.5	137.7	128.8	127.8	-0.8
Distillates	618.1	619.8	538.4	546.5	498.9	-8.7
Residuals	342.7	343.7	413.5	378.6	365.9	-3.4
Others	306.2	313.7	318.5	285.5	305.7	7.1
<b>Iraq</b>	<b>664.5</b>	<b>714.8</b>	<b>680.3</b>	<b>685.9</b>	<b>757.1</b>	<b>10.4</b>
Gasoline	136.9	134.3	110.3	104.6	108.7	3.9
Kerosene	47.8	44.9	32.8	30.9	32.8	6.2
Distillates	156.4	159.3	131.1	104.2	100.0	-4.1
Residuals	158.9	173.5	153.0	179.1	217.7	21.5
Others	164.6	202.7	253.0	267.1	297.9	11.5
<b>Kuwait</b>	<b>377.0</b>	<b>329.6</b>	<b>337.0</b>	<b>345.7</b>	<b>349.7</b>	<b>1.2</b>
Gasoline	62.6	65.7	69.0	71.1	70.3	-1.1
Kerosene	19.0	13.3	15.4	16.2	17.5	8.0
Distillates	54.1	56.7	54.6	48.4	49.1	1.5
Residuals	135.0	128.2	127.0	122.3	131.0	7.1
Others	106.2	65.7	71.0	87.7	81.8	-6.8

Table 4.7  
Oil demand by main petroleum product in OPEC Members

(1,000 b/d)

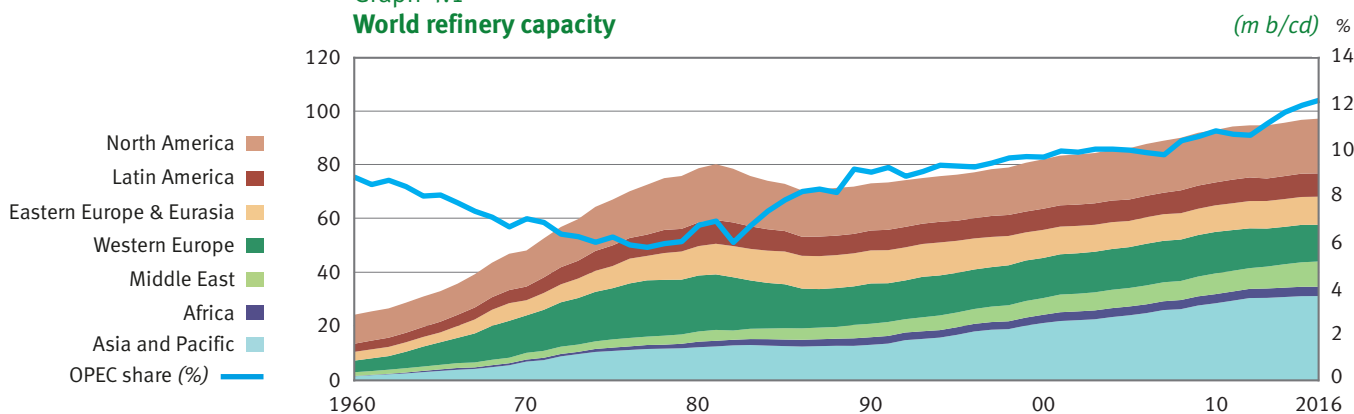
	2012	2013	2014	2015	2016	% change 16/15
<b>Libya</b>	<b>220.0</b>	<b>250.0</b>	<b>222.2</b>	<b>211.1</b>	<b>207.6</b>	<b>-1.7</b>
Gasoline	72.9	88.5	78.1	75.2	76.4	1.6
Kerosene	17.3	9.4	6.5	5.1	5.2	1.8
Distillates	70.2	98.0	90.4	85.3	84.1	-1.4
Residuals	45.8	38.7	33.2	32.0	29.2	-8.7
Others	13.8	15.3	14.0	13.5	12.7	-6.2
<b>Nigeria</b>	<b>343.6</b>	<b>384.9</b>	<b>396.1</b>	<b>407.8</b>	<b>393.1</b>	<b>-3.6</b>
Gasoline	241.3	273.9	283.8	306.4	298.7	-2.5
Kerosene	47.7	53.3	53.0	43.9	24.9	-43.2
Distillates	45.1	48.8	50.3	56.0	67.0	19.6
Residuals	8.6	8.0	7.9	1.0	1.8	77.2
Others	1.0	1.0	1.1	0.6	0.8	40.0
<b>Qatar</b>	<b>125.4</b>	<b>149.1</b>	<b>167.9</b>	<b>206.0</b>	<b>227.0</b>	<b>10.2</b>
Gasoline	31.5	29.6	34.2	33.1	29.4	-11.4
Kerosene	40.3	57.5	65.4	94.9	111.0	16.9
Distillates	32.6	39.6	45.3	53.3	51.0	-4.4
Residuals	2.0	2.1	2.1	2.2	2.3	3.7
Others	18.8	20.3	20.9	22.5	33.4	48.4
<b>Saudi Arabia</b>	<b>2,872.7</b>	<b>2,994.0</b>	<b>3,163.4</b>	<b>3,318.7</b>	<b>3,209.8</b>	<b>-3.3</b>
Gasoline	480.7	504.5	522.5	558.8	555.7	-0.6
Kerosene	67.7	70.0	74.7	85.9	87.6	1.9
Distillates	710.8	729.7	753.3	778.4	701.0	-9.9
Residuals	318.8	364.1	379.5	399.0	470.5	17.9
Others	1,294.8	1,325.8	1,433.4	1,496.5	1,395.1	-6.8
<b>United Arab Emirates</b>	<b>638.0</b>	<b>665.2</b>	<b>719.5</b>	<b>778.1</b>	<b>799.2</b>	<b>2.7</b>
Gasoline	127.9	144.0	167.6	174.8	176.0	0.7
Kerosene	95.7	102.8	119.3	146.5	148.0	1.1
Distillates	94.3	92.4	98.2	105.5	106.0	0.5
Residuals	284.8	290.5	295.4	311.8	329.2	5.6
Others	35.3	35.5	39.0	39.5	40.0	1.2
<b>Venezuela</b>	<b>786.3</b>	<b>831.1</b>	<b>751.8</b>	<b>657.9</b>	<b>566.2</b>	<b>-13.9</b>
Gasoline	301.8	299.1	283.3	259.1	227.3	-12.3
Kerosene	7.5	6.6	6.4	5.4	4.5	-16.2
Distillates	217.8	249.1	236.9	210.3	163.1	-22.4
Residuals	46.9	48.5	36.8	21.0	19.9	-5.3
Others	212.2	227.9	188.4	162.2	151.4	-6.7
<b>OPEC</b>	<b>8,518.6</b>	<b>8,916.6</b>	<b>9,129.8</b>	<b>9,249.7</b>	<b>9,045.2</b>	<b>-2.2</b>
Gasoline	2,001.7	2,096.0	2,161.7	2,223.5	2,168.6	-2.5
Kerosene	472.1	495.3	545.0	590.7	589.9	-0.1
Distillates	2,330.6	2,479.6	2,395.5	2,406.9	2,200.0	-8.6
Residuals	1,390.8	1,444.4	1,496.5	1,489.4	1,603.4	7.7
Others	2,323.5	2,401.3	2,531.0	2,539.2	2,483.2	-2.2

Table 4.8  
World oil demand by country

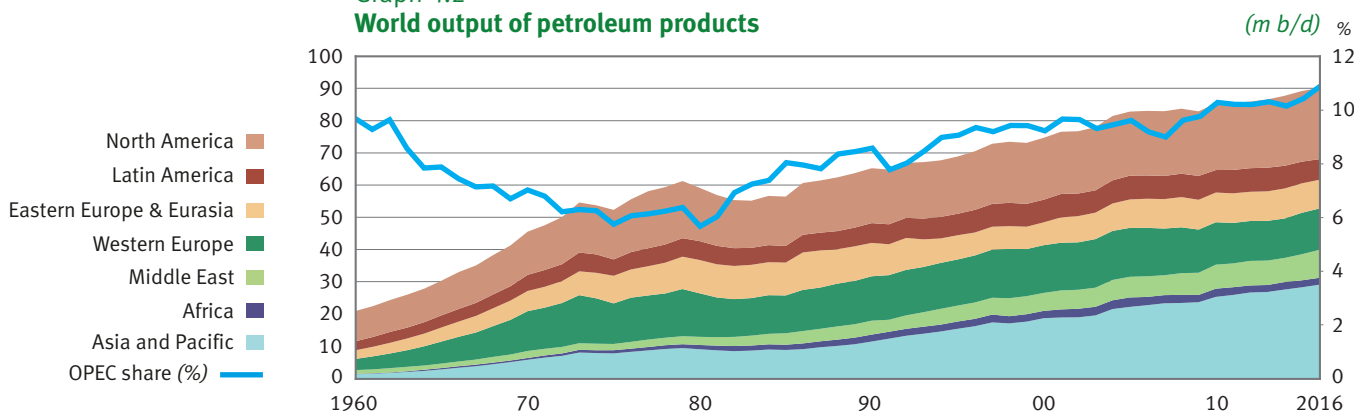
(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>North America</b>	<b>20,963.1</b>	<b>21,446.8</b>	<b>21,562.5</b>	<b>21,985.0</b>	<b>22,160.6</b>	<b>0.8</b>
Canada	2,470.5	2,455.0	2,406.6	2,406.0	2,428.3	0.9
United States	18,490.2	18,989.3	19,153.4	19,576.4	19,729.7	0.8
Others	2.5	2.5	2.5	2.5	2.6	1.3
<b>Latin America</b>	<b>9,094.3</b>	<b>9,294.9</b>	<b>9,305.1</b>	<b>9,170.5</b>	<b>9,046.0</b>	<b>-1.4</b>
Argentina	679.2	688.8	719.8	715.9	719.6	0.5
Brazil	2,955.1	3,097.5	3,158.1	3,111.3	3,071.7	-1.3
Colombia	299.3	297.5	306.3	318.9	324.4	1.7
Ecuador	269.2	272.0	285.8	258.7	247.0	-4.5
Mexico	2,102.2	2,090.6	2,039.8	2,006.7	1,951.7	-2.7
Venezuela	786.3	831.1	751.8	657.9	566.2	-13.9
Others	2,003.1	2,017.2	2,043.7	2,101.1	2,165.4	3.1
<b>Eastern Europe and Eurasia</b>	<b>5,703.2</b>	<b>5,766.1</b>	<b>5,903.3</b>	<b>5,928.5</b>	<b>6,023.4</b>	<b>1.6</b>
Czech Republic	194.0	187.6	199.9	193.2	170.5	-11.7
Hungary	132.3	129.6	145.1	155.1	158.0	1.9
Kazakhstan	275.5	276.5	285.4	270.5	271.8	0.5
Poland	532.8	505.3	505.5	527.7	584.2	10.7
Romania	166.8	167.3	174.5	180.3	186.5	3.5
Russia	3,317.7	3,376.6	3,460.1	3,433.7	3,424.4	-0.3
Slovakia	71.3	75.0	73.8	82.5	86.0	4.2
Ukraine	295.8	273.5	259.3	257.9	268.7	4.2
Others	717.0	774.7	799.7	827.6	873.1	5.5
<b>Western Europe</b>	<b>13,153.6</b>	<b>13,021.8</b>	<b>12,901.6</b>	<b>13,111.7</b>	<b>13,385.9</b>	<b>2.1</b>
France	1,738.9	1,714.4	1,691.7	1,690.7	1,681.0	-0.6
Germany	2,389.2	2,435.3	2,373.9	2,372.3	2,413.1	1.7
Italy	1,370.3	1,259.9	1,266.2	1,265.9	1,267.1	0.1
Netherlands	997.4	991.1	991.3	945.4	993.3	5.1
Spain	1,300.9	1,208.4	1,199.6	1,255.4	1,288.6	2.6
United Kingdom	1,534.9	1,527.4	1,519.9	1,544.9	1,588.0	2.8
Others	3,822.1	3,885.3	3,859.0	4,037.2	4,154.8	2.9
<b>Middle East</b>	<b>7,672.2</b>	<b>7,709.9</b>	<b>7,974.6</b>	<b>8,199.6</b>	<b>8,195.8</b>	<b>-</b>
IR Iran	1,764.7	1,776.2	1,845.6	1,794.9	1,742.2	-2.9
Iraq	664.5	714.8	680.3	685.9	757.1	10.4
Kuwait	377.0	329.6	337.0	345.7	349.7	1.2
Qatar	125.4	149.1	167.9	206.0	227.0	10.2
Saudi Arabia	2,872.7	2,994.0	3,163.4	3,318.7	3,209.8	-3.3
Syrian Arab Republic	250.1	153.9	143.2	131.1	121.3	-7.5
United Arab Emirates	638.0	665.2	719.5	778.1	799.2	2.7
Others	979.8	927.1	917.7	939.1	989.4	5.4
<b>Africa</b>	<b>3,627.5</b>	<b>3,819.1</b>	<b>3,904.2</b>	<b>3,992.0</b>	<b>4,095.3</b>	<b>2.6</b>
Algeria	351.1	376.8	389.5	418.5	399.0	-4.7
Angola	84.5	149.2	147.2	141.8	122.0	-14.0
Egypt	830.5	799.0	826.1	823.2	871.9	5.9
Gabon	21.6	23.5	23.6	24.4	25.2	3.3
Libya	220.0	250.0	222.2	211.1	207.6	-1.7
Nigeria	343.6	384.9	396.1	407.8	393.1	-3.6
South Africa	609.4	641.2	638.1	642.2	657.9	2.4
Tunisia	89.5	89.7	94.5	88.2	89.8	1.8
Others	1,077.3	1,104.6	1,167.1	1,234.6	1,328.8	7.6
<b>Asia and Pacific</b>	<b>29,214.5</b>	<b>30,015.2</b>	<b>30,439.1</b>	<b>31,290.4</b>	<b>32,208.2</b>	<b>2.9</b>
Australia	1,094.9	1,120.8	1,118.6	1,123.5	1,122.3	-0.1
China	9,793.0	10,387.8	10,784.8	11,194.5	11,506.3	2.8
India	3,629.4	3,668.3	3,786.3	4,050.9	4,387.0	8.3
Indonesia	1,580.7	1,604.9	1,635.1	1,668.5	1,684.3	0.9
Japan	4,630.2	4,504.1	4,267.1	4,120.2	3,992.7	-3.1
New Zealand	151.7	154.5	156.2	161.0	167.0	3.8
South Korea	2,321.8	2,328.3	2,347.5	2,406.8	2,565.7	6.6
Thailand	1,248.9	1,315.2	1,330.9	1,324.9	1,377.8	4.0
Others	4,763.8	4,931.3	5,012.6	5,240.1	5,405.2	3.1
<b>Total world</b>	<b>89,428.3</b>	<b>91,073.8</b>	<b>91,990.5</b>	<b>93,677.7</b>	<b>95,115.1</b>	<b>1.5</b>
<i>of which</i>						
OPEC	8,518.6	8,916.6	9,129.8	9,249.7	9,045.2	-2.2
<i>OPEC percentage</i>	9.5	9.8	9.9	9.9	9.5	
OECD	45,951.5	46,105.1	45,818.2	46,380.3	46,860.4	1.0
FSU	4,444.9	4,540.0	4,641.0	4,621.2	4,661.9	0.9

Graph 4.1  
World refinery capacity



Graph 4.2  
World output of petroleum products



Graph 4.3  
OPEC output of refined petroleum products

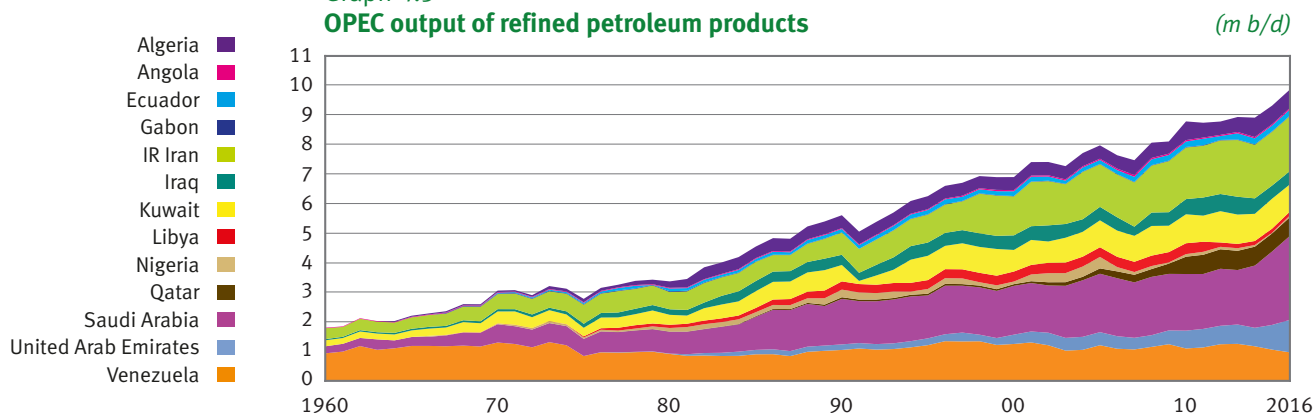


Table 4.9

## World oil demand by main petroleum product and region

(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>North America</b>	<b>20,963.1</b>	<b>21,446.8</b>	<b>21,562.5</b>	<b>21,985.0</b>	<b>22,160.6</b>	<b>0.8</b>
Gasoline	9,720.4	9,749.7	9,818.1	10,003.1	10,224.7	2.2
Kerosene	1,565.3	1,593.8	1,654.4	1,687.4	1,704.6	1.0
Distillates	4,548.0	4,535.0	4,655.4	4,698.8	4,643.0	-1.2
Residuals	513.0	466.0	435.0	421.0	438.0	4.0
Others	4,616.4	5,102.4	4,999.7	5,174.7	5,150.2	-0.5
<b>Latin America</b>	<b>9,094.3</b>	<b>9,294.9</b>	<b>9,305.1</b>	<b>9,170.5</b>	<b>9,046.0</b>	<b>-1.4</b>
Gasoline	2,538.7	2,567.8	2,635.6	2,659.3	2,634.7	-0.9
Kerosene	375.1	389.8	397.9	413.0	394.2	-4.6
Distillates	2,724.5	2,782.3	2,859.9	2,840.3	2,773.7	-2.3
Residuals	1,039.4	1,018.0	985.4	948.9	944.8	-0.4
Others	2,416.7	2,537.0	2,426.2	2,309.0	2,298.7	-0.4
<b>Eastern Europe and Eurasia</b>	<b>5,703.2</b>	<b>5,766.1</b>	<b>5,903.3</b>	<b>5,928.5</b>	<b>6,023.4</b>	<b>1.6</b>
Gasoline	1,379.2	1,379.6	1,372.0	1,372.1	1,373.4	0.1
Kerosene	360.0	340.1	335.0	319.7	320.3	0.2
Distillates	1,593.6	1,632.8	1,828.7	1,855.4	1,952.8	5.2
Residuals	460.8	381.7	375.7	381.6	375.0	-1.7
Others	1,909.6	2,031.8	1,991.9	1,999.8	2,002.0	0.1
<b>Western Europe</b>	<b>13,153.6</b>	<b>13,021.8</b>	<b>12,901.6</b>	<b>13,111.7</b>	<b>13,385.9</b>	<b>2.1</b>
Gasoline	1,851.6	1,793.4	1,773.0	1,784.0	1,785.9	0.1
Kerosene	1,203.6	1,237.3	1,253.8	1,313.2	1,337.6	1.9
Distillates	5,586.9	5,645.8	5,588.1	5,715.7	5,872.4	2.7
Residuals	1,111.7	1,039.8	930.3	900.9	928.7	3.1
Others	3,399.8	3,305.5	3,356.4	3,397.9	3,461.4	1.9
<b>Middle East</b>	<b>7,672.2</b>	<b>7,709.9</b>	<b>7,974.6</b>	<b>8,199.6</b>	<b>8,195.8</b>	<b>-</b>
Gasoline	1,492.5	1,471.8	1,543.9	1,623.0	1,599.4	-1.5
Kerosene	448.1	468.9	518.5	581.7	603.8	3.8
Distillates	2,247.6	2,232.6	2,166.8	2,181.1	2,070.7	-5.1
Residuals	1,381.0	1,418.6	1,465.9	1,471.3	1,600.9	8.8
Others	2,103.0	2,118.0	2,279.5	2,342.5	2,320.9	-0.9
<b>Africa</b>	<b>3,627.5</b>	<b>3,819.1</b>	<b>3,904.2</b>	<b>3,992.0</b>	<b>4,095.3</b>	<b>2.6</b>
Gasoline	940.5	1,011.3	1,085.2	1,129.2	1,175.6	4.1
Kerosene	310.2	313.0	310.7	314.6	305.5	-2.9
Distillates	1,399.0	1,483.9	1,508.2	1,553.9	1,600.2	3.0
Residuals	474.3	421.9	389.2	378.8	384.0	1.4
Others	503.6	589.0	611.0	615.5	630.1	2.4

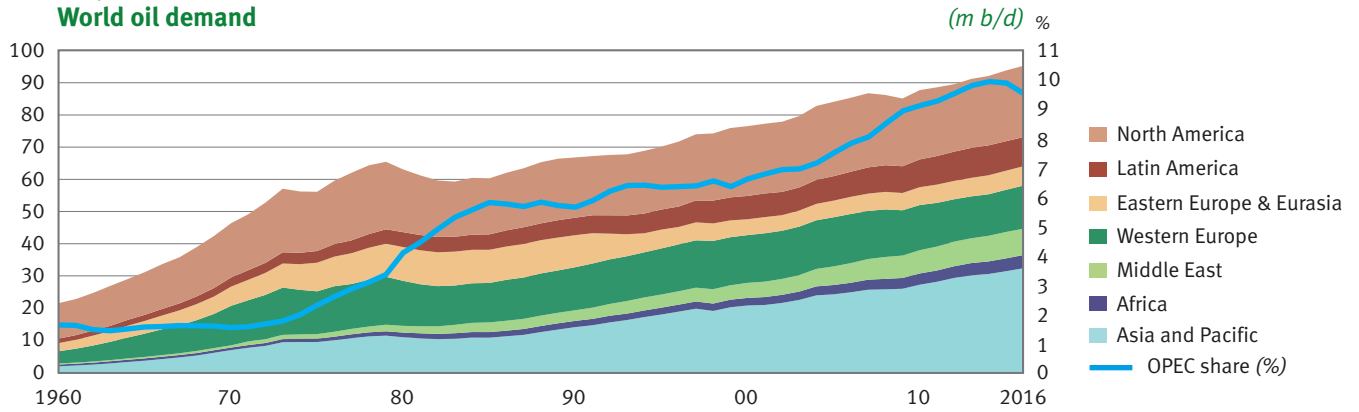


Table 4.9  
World oil demand by main petroleum product and region

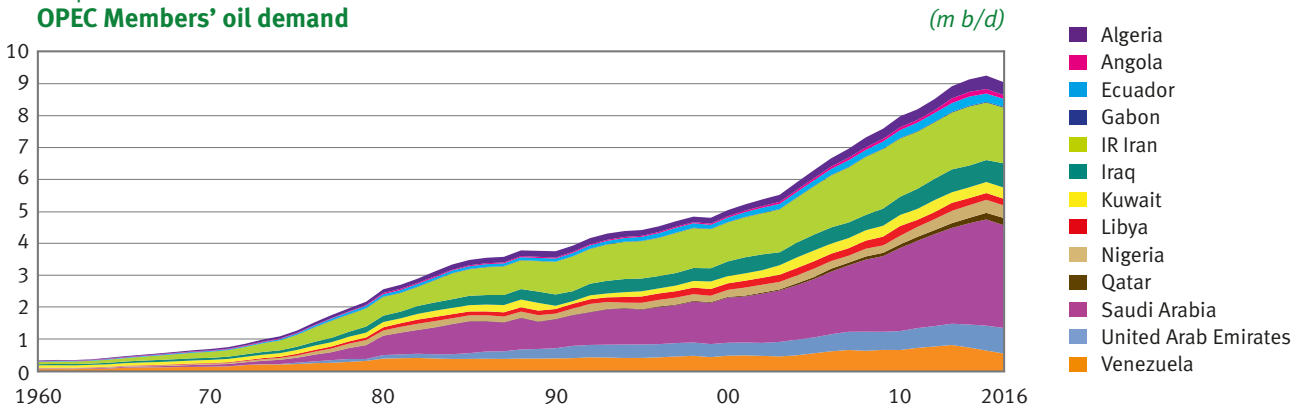
(1,000 b/d)

	2012	2013	2014	2015	2016	% change 16/15
<b>Asia and Pacific</b>	<b>29,214.5</b>	<b>30,015.2</b>	<b>30,439.1</b>	<b>31,290.4</b>	<b>32,208.2</b>	<b>2.9</b>
Gasoline	5,232.5	5,637.5	5,842.7	6,236.6	6,576.4	5.4
Kerosene	2,065.8	2,150.9	2,192.7	2,231.6	2,293.4	2.8
Distillates	8,429.8	8,686.0	8,783.4	9,066.4	9,259.2	2.1
Residuals	2,725.4	2,650.6	2,520.5	2,366.8	2,360.1	-0.3
Others	10,761.0	10,890.3	11,099.9	11,389.0	11,719.0	2.9
<b>Total world</b>	<b>89,428.3</b>	<b>91,073.8</b>	<b>91,990.5</b>	<b>93,677.7</b>	<b>95,115.1</b>	<b>1.5</b>
Gasoline	23,155.4	23,611.1	24,070.6	24,807.3	25,370.0	2.3
Kerosene	6,328.1	6,493.7	6,662.9	6,861.2	6,959.5	1.4
Distillates	26,529.3	26,998.4	27,390.4	27,911.6	28,172.0	0.9
Residuals	7,705.5	7,396.6	7,102.1	6,869.2	7,031.5	2.4
Others	25,710.2	26,573.9	26,764.6	27,228.4	27,582.2	1.3
<i>of which</i>						
<b>OPEC</b>	<b>8,518.6</b>	<b>8,916.6</b>	<b>9,129.8</b>	<b>9,249.7</b>	<b>9,045.2</b>	<b>-2.2</b>
Gasoline	2,001.7	2,096.0	2,161.7	2,223.5	2,168.6	-2.5
Kerosene	472.1	495.3	545.0	590.7	589.9	-0.1
Distillates	2,330.6	2,479.6	2,395.5	2,406.9	2,200.0	-8.6
Residuals	1,390.8	1,444.4	1,496.5	1,489.4	1,603.4	7.7
Others	2,323.5	2,401.3	2,531.0	2,539.2	2,483.2	-2.2
<b>OECD</b>	<b>45,951.5</b>	<b>46,105.1</b>	<b>45,818.2</b>	<b>46,380.3</b>	<b>46,860.4</b>	<b>1.0</b>
Gasoline	14,178.6	14,173.5	14,195.9	14,501.2	14,703.7	1.4
Kerosene	3,761.5	3,801.3	3,879.6	4,024.6	4,175.5	3.8
Distillates	12,816.7	12,853.3	13,037.0	13,185.6	13,137.4	-0.4
Residuals	2,755.4	2,449.3	2,114.1	2,004.3	2,116.0	5.6
Others	12,439.3	12,827.7	12,591.6	12,664.6	12,727.8	0.5
<b>FSU</b>	<b>4,444.9</b>	<b>4,540.0</b>	<b>4,641.0</b>	<b>4,621.2</b>	<b>4,661.9</b>	<b>0.9</b>
Gasoline	1,158.3	1,169.8	1,166.5	1,152.0	1,167.4	1.3
Kerosene	329.0	309.2	291.8	285.0	283.3	-0.6
Distillates	1,002.0	1,043.5	1,244.0	1,246.4	1,295.4	3.9
Residuals	414.0	336.2	337.3	342.8	339.8	-0.9
Others	1,541.6	1,681.3	1,601.3	1,595.0	1,576.0	-1.2

Graph 4.4  
World oil demand



Graph 4.5  
OPEC Members' oil demand



Graph 4.6  
World oil demand by main petroleum product

