

The average price of crude oil surged in 2018 compared with 2017. The improvement in world economy, the devaluation of the US dollar vis-à-vis other currencies, the rise in global oil demand, the shortage in oil supply, and the reduction in world's oil reserves made the average price of crude oil jump. The 174<sup>th</sup> and 175<sup>th</sup> Meetings of the Conference of the OPEC were convened in Vienna, Austria, on June 22 and December 6, 2018, respectively.

## OPEC

### Primary Energy Consumption

Primary energy consumption by OPEC members rose from 921.9 million tons oil equivalent in 2017 to 937.1 million tons in 2018. Crude oil and natural gas are consumed by member countries largely while others are

used sparingly, with the lowest related to nuclear and renewable energies. Middle East members (Saudi Arabia, Iran, Iraq, Kuwait, the UAE, and Qatar), consumed 798.1 million tons, higher than Venezuela, Ecuador, and Algeria. Iran with 285.7 and Saudi Arabia with 259.2 million tons oil equivalent ranked first and second, respectively.

### Crude Oil Proven Reserves

At end-2018, crude oil proven reserves located in OPEC member countries reached 1,242.2 billion barrels, up by 0.2 percent compared with 2017 year-end. Among OPEC member countries, the largest reserves by 303.3 billion barrels belonged to Venezuela, followed by Saudi Arabia with 297.7 billion barrels. Iran, with 155.6 billion barrels, ranked third among OPEC member countries.

**Table 3.1. OPEC Primary Energy Consumption in 2018<sup>1</sup>** (million tons oil equivalent)

	Crude oil	Natural gas	Coal	Nuclear energy	Hydroelectricity	Renewable energies	Total
<b>Middle East members</b>	<b>364.5</b>	<b>425.6</b>	<b>2.8</b>	<b>1.6</b>	<b>3.1</b>	<b>0.42</b>	<b>798.1</b>
Saudi Arabia	162.6	96.4	0.1	0.0	0.0	0.04	259.2
Iran	86.2	193.9	1.5	1.6	2.4	0.10	285.7
Iraq	38.4	14.7	0.0	0.0	0.7	0.01	53.7
Kuwait	20.0	18.7	0.2	0.0	0.0	0.02	39.0
United Arab Emirates	45.1	65.8	1.1	0.0	0.0	0.22	112.2
Qatar	12.2	36.0	0.0	0.0	0.0	0.03	48.3
<b>Other members</b>	<b>51.3</b>	<b>66.1</b>	<b>0.3</b>	<b>0.0</b>	<b>21.0</b>	<b>0.26</b>	<b>139.0</b>
Venezuela	19.5	28.7	0.1	0.0	16.3	0.00	64.6
Nigeria	0.0	0.0	0.0	0.0	0.0	0.00	0.0
Ecuador	12.2	0.6	0.0	0.0	4.7	0.12	17.6
Libya	0.0	0.0	0.0	0.0	0.0	0.00	0.0
Algeria	19.6	36.7	0.2	0.0	0.0	0.14	56.7
Angola	0.0	0.0	0.0	0.0	0.0	0.00	0.0
<b>Total</b>	<b>415.9</b>	<b>491.7</b>	<b>3.1</b>	<b>1.6</b>	<b>24.2</b>	<b>0.68</b>	<b>937.1</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup> Excludes Nigeria, Libya, Gabon, Equatorial Guinea, the Republic of the Congo, and Angola.

### Crude Oil Production

In 2018, the average OPEC crude oil production, with 0.8 percent (334.8 thousand b/d) fall compared with 2017, amounted to 39.3 mb/d. Production by the Middle East members, with 0.8 percent (251.7 thousand

b/d) increase, totaled 30.5 mb/d while production by other members decreased by 6.2 percent to 8.9 mb/d. The highest amount of production was related to Saudi Arabia with 12.3 mb/d and a share of 31.2 percent.

**Table 3.2. OPEC Crude Oil Proven Reserves** (billion barrels)

	Year-end			Percentage change		Share (percent)	
	2016	2017	2018	2017	2018	2017	2018
<b>Middle East members</b>	<b>796.7</b>	<b>823.3</b>	<b>825.0</b>	<b>3.3</b>	<b>0.2</b>	<b>66.4</b>	<b>66.4</b>
Saudi Arabia	266.2	296.0	297.7	11.2	0.6	23.9	24.0
Iran	157.2	155.6	155.6	-1.0	0.0	12.5	12.5
Iraq	148.8	147.2	147.2	-1.0	0.0	11.9	11.9
Kuwait	101.5	101.5	101.5	0.0	0.0	8.2	8.2
United Arab Emirates	97.8	97.8	97.8	0.0	0.0	7.9	7.9
Qatar	25.2	25.2	25.2	0.0	0.0	2.0	2.0
<b>Other members</b>	<b>417.7</b>	<b>416.9</b>	<b>417.2</b>	<b>-0.2</b>	<b>0.1</b>	<b>33.6</b>	<b>33.6</b>
Venezuela	302.3	302.8	303.3	0.2	0.2	24.4	24.4
<b>Total</b>	<b>1,214.4</b>	<b>1,240.2</b>	<b>1,242.2</b>	<b>2.1</b>	<b>0.2</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

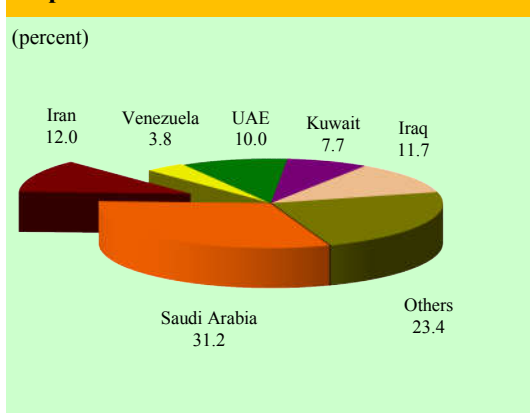
**Table 3.3. OPEC Crude Oil Production<sup>1</sup>** (thousand b/d)

	2016	2017	2018	Percentage change		Share (percent)	
				2017	2018	2017	2018
<b>Middle East members</b>	<b>30,531.7</b>	<b>30,233.9</b>	<b>30,485.6</b>	<b>-1.0</b>	<b>0.8</b>	<b>76.2</b>	<b>77.5</b>
Saudi Arabia	12,406.0	11,892.2	12,286.8	-4.1	3.3	30.0	31.2
Iran <sup>2</sup>	4,586.1	5,023.7	4,715.4	9.5	-6.1	12.7	12.0
Iraq	4,422.9	4,533.4	4,614.3	2.5	1.8	11.4	11.7
Kuwait	3,141.1	3,000.9	3,048.5	-4.5	1.6	7.6	7.7
United Arab Emirates	4,037.5	3,910.0	3,941.9	-3.2	0.8	9.9	10.0
Qatar	1,938.1	1,873.7	1,878.5	-3.3	0.3	4.7	4.8
<b>Other members</b>	<b>9,204.3</b>	<b>9,439.2</b>	<b>8,852.7</b>	<b>2.6</b>	<b>-6.2</b>	<b>23.8</b>	<b>22.5</b>
<b>Total</b>	<b>39,736.0</b>	<b>39,673.1</b>	<b>39,338.3</b>	<b>-0.2</b>	<b>-0.8</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup>Includes Natural Gas Liquids (NGL), shale oil, and oil sands.

<sup>2</sup>BP data on Iran's crude oil production are overestimated.

**Figure 3.1. Share of OPEC members in crude oil production in 2018**

### Crude Oil Consumption

In 2018, the average crude oil consumption in OPEC member countries<sup>1</sup> amounted to

9.2 mb/d, indicating 0.3 percent decrease compared with the year before. The highest amount of consumption by 3.7 mb/d was related to Saudi Arabia. Ecuador, with 255.3 thousand barrels a day, accounted for the lowest amount of crude oil consumption in 2018. Iran's consumption was about 1.8 mb/d, constituting 20.4 percent of total OPEC consumption<sup>2</sup>.

### Natural Gas Proven Reserves

OPEC natural gas proven reserves reached 91.2 trillion cubic meters at end-2018, up by 0.3 percent compared with the previous year-end. Iran and Qatar, with 31.9 and 24.7 trillion cubic meters, had the largest reserves among member countries.

**Table 3.4. OPEC Crude Oil Consumption<sup>1</sup>**

(thousand b/d)

	2016	2017	2018	Percentage change		Share (percent)	
				2017	2018	2017	2018
<b>Middle East members</b>	<b>8,201.4</b>	<b>8,151.6</b>	<b>8,150.5</b>	<b>-0.6</b>	<b>0.0</b>	<b>88.0</b>	<b>88.3</b>
Saudi Arabia	3,874.7	3,837.9	3,724.0	-0.9	-3.0	41.4	40.4
Iran <sup>2</sup>	1,749.2	1,842.7	1,879.1	5.3	2.0	19.9	20.4
Iraq	760.3	731.8	776.8	-3.7	6.1	7.9	8.4
Kuwait	453.2	454.8	450.7	0.4	-0.9	4.9	4.9
United Arab Emirates	1,022.7	964.4	991.5	-5.7	2.8	10.4	10.7
Qatar	341.3	320.0	328.5	-6.2	2.6	3.5	3.6
<b>Other members</b>	<b>1,189.0</b>	<b>1,107.7</b>	<b>1,078.3</b>	<b>-6.8</b>	<b>-2.7</b>	<b>12.0</b>	<b>11.7</b>
<b>Total<sup>3</sup></b>	<b>9,390.3</b>	<b>9,259.3</b>	<b>9,228.8</b>	<b>-1.4</b>	<b>-0.3</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup> Includes domestic demand for crude oil, aviation and marine fuels, fuel for refineries and oil wastes.

<sup>2</sup> Data related to Iran are overestimated.

<sup>3</sup> Excludes Nigeria, Libya, Angola, Gabon, Equatorial Guinea, and the Republic of the Congo.

<sup>1</sup> Excludes Nigeria, Libya, Angola, Gabon, Equatorial Guinea, and the Republic of the Congo.

<sup>2</sup> Estimates released by the BP are higher than figures published by the Ministry of Petroleum.

**Table 3.5. OPEC Natural Gas Proven Reserves** (trillion cubic meters)

	Year-end			Percentage change		Share (percent)	
	2016	2017	2018	2017	2018	2017	2018
<b>Middle East members</b>	<b>76.1</b>	<b>73.5</b>	<b>73.7</b>	<b>-3.4</b>	<b>0.3</b>	<b>80.8</b>	<b>80.9</b>
Saudi Arabia	8.0	5.7	5.9	-29.7	4.3	6.2	6.5
Iran	31.8	31.9	31.9	0.3	0.0	35.1	35.0
Iraq	3.6	3.6	3.6	-2.0	0.0	3.9	3.9
Kuwait	1.7	1.7	1.7	0.0	0.0	1.9	1.9
United Arab Emirates	5.9	5.9	5.9	0.0	0.0	6.5	6.5
Qatar	24.9	24.7	24.7	-0.9	0.0	27.2	27.1
<b>Other members</b>	<b>17.3</b>	<b>17.4</b>	<b>17.4</b>	<b>0.6</b>	<b>0.0</b>	<b>19.2</b>	<b>19.1</b>
<b>Total<sup>1</sup></b>	<b>93.4</b>	<b>90.9</b>	<b>91.2</b>	<b>-2.7</b>	<b>0.3</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup>Excludes Angola, Ecuador, Gabon, Equatorial Guinea, and the Republic of the Congo.

### Natural Gas Production<sup>1</sup>

OPEC natural gas production amounted to 806.8 billion cubic meters in 2018, up by 3.5 percent. Iran, with a production of 239.5 billion cubic meters, enjoyed the highest share of OPEC natural gas production by 29.7 percent. Qatar, with a production of 175.5 billion cubic meters of natural gas and a share of 21.7 percent, ranked second.

### Natural Gas Consumption

OPEC natural gas consumption amounted to 571.8 billion cubic meters in 2018, showing 4.2 percent rise compared with the previous year. Consumption of natural gas by Middle East members reached 495.0 billion cubic meters, up by 5.2 percent compared with 2017 and constituting 86.6 percent of total consumption.

**Table 3.6. OPEC Natural Gas Production** (billion cubic meters)

	2016	2017	2018	Percentage change		Share (percent)	
				2017	2018	2017	2018
<b>Middle East members</b>	<b>565.1</b>	<b>590.1</b>	<b>622.2</b>	<b>4.4</b>	<b>5.4</b>	<b>75.7</b>	<b>77.1</b>
Saudi Arabia	105.3	109.3	112.1	3.7	2.6	14.0	13.9
Iran	199.3	220.2	239.5	10.4	8.8	28.2	29.7
Iraq	9.9	10.1	13.0	2.2	28.4	1.3	1.6
Kuwait	16.4	16.2	17.5	-1.1	7.6	2.1	2.2
United Arab Emirates	60.3	62.0	64.7	2.8	4.4	8.0	8.0
Qatar	173.8	172.4	175.5	-0.8	1.8	22.1	21.7
<b>Other members</b>	<b>184.2</b>	<b>189.3</b>	<b>184.6</b>	<b>2.7</b>	<b>-2.5</b>	<b>24.3</b>	<b>22.9</b>
<b>Total<sup>1</sup></b>	<b>749.3</b>	<b>779.4</b>	<b>806.8</b>	<b>4.0</b>	<b>3.5</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup>Excludes Angola, Ecuador, Gabon, Equatorial Guinea, and the Republic of the Congo.

<sup>1</sup>Includes commercial production and consumed gas.

**Table 3.7. OPEC Natural Gas Consumption<sup>1</sup>**

(billion cubic meters)

	2016	2017	2018	Percentage change		Share (percent)	
				2017	2018	2017	2018
<b>Middle East members</b>	<b>445.8</b>	<b>470.5</b>	<b>495.0</b>	<b>5.5</b>	<b>5.2</b>	<b>85.7</b>	<b>86.6</b>
Saudi Arabia	105.3	109.3	112.1	3.7	2.6	19.9	19.6
Iran	196.3	209.9	225.6	6.9	7.4	38.2	39.4
Iraq	9.9	12.7	17.0	28.7	33.9	2.3	3.0
Kuwait	21.1	21.0	21.8	-0.6	3.6	3.8	3.8
United Arab Emirates	72.7	74.4	76.6	2.4	2.9	13.6	13.4
Qatar	40.4	43.1	41.9	6.6	-2.8	7.8	7.3
<b>Other members</b>	<b>77.0</b>	<b>78.5</b>	<b>76.9</b>	<b>1.9</b>	<b>-2.1</b>	<b>14.3</b>	<b>13.4</b>
<b>Total</b>	<b>522.8</b>	<b>549.0</b>	<b>571.8</b>	<b>5.0</b>	<b>4.2</b>	<b>100.0</b>	<b>100.0</b>

Source: BP Statistical Review of World Energy 2019.

<sup>1</sup> Excludes Nigeria, Libya, Angola, Gabon, Equatorial Guinea, and the Republic of the Congo.

## Iran

### Natural Gas

With the development of gas supply infrastructure in urban and rural areas, domestic consumption of natural gas rose 3.5 percent to 209.0 billion cubic meters. The shares of "residential, commercial, and industrial sectors", "power plants", and "major industries" in total consumption were 48.8, 32.4 and 18.8 percent, respectively.

### Electricity

In 2018/19, Iran's electricity generation amounted to 310.9 billion kWh, showing 1.0 percent growth compared with 2017/18. Of total generated electricity, 175.1 billion kWh (56.3 percent) was related to the private sector's power plants, 130.8 billion kWh (42.1 percent) to the Ministry of Energy, and 5.0 billion kWh (1.6 percent) to large industries. The highest amount of generated electricity by 103.6 billion kWh was related

to the combined cycle power plants affiliated to the private sector, followed by steam power plants affiliated to the Ministry of Energy (60.4 billion kWh). The amount of electricity generated by power plants affiliated to the Ministry of Energy experienced 2.3 percent decrease compared with the year before while the amount of electricity generated by the private sector rose by 5.4 percent. Electricity consumption amounted to 261.4 billion kWh, up by 2.5 percent compared with 2017/18. The residential and industrial sectors experienced the highest growth of consumption by 5.1 and 3.8 percent, respectively. Street lighting, public, commercial, and agricultural sectors experienced -5.4, -2.0, -1.6 and -0.1 percent growth, respectively. Residential and industrial sectors enjoyed the highest shares in consumption by respectively 33.5 and 33.4 percent.