

Crude oil price fluctuations in global markets, having started since early 2016, continued until January 2017. Subsequently, the monthly average price of each barrel of crude oil followed a declining trend until June 2017 when it hit a record low. However, in the second half of the year, price trends picked up and in December 2017, the monthly average price of each barrel was within a range of \$57.9 to \$64.1, the highest as of June 2015 until the end of 2017. Factors such as the agreement between the OPEC member states and non-member countries on production reduction and producers' adherence to this deal, as well as the economic crisis in Venezuela which led to a fall in the crude production capacity of this country, reduced the global supply of crude oil in 2017. On the other hand, the higher-than-projected economic growth in countries like the US and some developing economies such as China and India strengthened demand, which along with effective supply management raised the global price of crude oil in 2017.

Moreover, the 172nd Meeting of the OPEC Conference was convened in Vienna on May 25 and the 173rd Meeting was held on November 30, 2017.

OPEC

Primary Energy Consumption

Primary energy consumption by OPEC members rose from 911.9 million tons oil equivalent in 2016 to 938.9 million tons in 2017. Among primary energy sources, crude oil and natural gas are consumed by member countries largely while others are used sparingly, with the lowest amount related to nuclear energy and renewable energies. Middle East members (Saudi Arabia, Iran, Iraq, Kuwait, UAE, and Qatar), with a total consumption of 795.1 million tons oil equivalent, accounted for higher consumption compared with Venezuela, Ecuador, and Algeria. Iran with 275.4 and Saudi Arabia with 268.3 million tons oil equivalent ranked first and second, respectively.

Table 3.1. OPEC Primary Energy Consumption in 2017¹ (million tons oil equivalent)

	Crude oil	Natural gas	Coal	Nuclear energy	Hydroelectricity	Renewable energy	Total
Middle East members	373.8	412.4	2.7	1.6	4.2	0.4	795.1
Saudi Arabia	172.4	95.9	0.1	0.0	0.0	0.0	268.3
Iran	84.6	184.4	0.9	1.6	3.7	0.1	275.4
Iraq	38.5	10.3	0.0	0.0	0.5	0.0	49.2
Kuwait	20.0	19.0	0.2	0.0	0.0	0.0	39.3
United Arab Emirates	45.0	62.1	1.6	0.0	0.0	0.1	108.7
Qatar	13.3	40.8	0.0	0.0	0.0	0.0	54.1
Other members	55.0	66.3	0.3	0.0	21.9	0.2	143.8
OPEC	428.8	478.7	3.1	1.6	26.1	0.6	938.9

Source: BP Statistical Review of World Energy 2018.

¹ Excludes Nigeria, Libya, Angola, Gabon, and Equatorial Guinea.

Crude Oil Proven Reserves

At end-2017, crude oil proven reserves located in OPEC member countries reached 1,218.8 billion barrels, representing 0.1 percent increase compared with 2016 year-end. Among OPEC member countries, the largest reserves by 303.2 billion barrels belonged to Venezuela, followed by Saudi Arabia with 266.2 billion barrels. Iran, with 157.2 billion barrels, ranked third among OPEC member countries.

Crude Oil Production

In 2017, the average OPEC crude oil production, with 0.4 percent (165.3 thousand b/d) fall compared with 2016, amounted to 39.4 mb/d. Production by Middle East members, with 0.8 percent (232.8 thousand b/d) decline, totaled 30.3 mb/d while production by other members increased by 0.7 percent to 9.1 mb/d. The highest amount of production was related to Saudi Arabia with 12.0 mb/d and a share of 30.3 percent.

Table 3.2. OPEC Crude Oil Proven Reserves

(billion barrels)

	Year-end			Percentage change		Share (percent)	
	2015	2016	2017	2016	2017	2016	2017
Middle East members	791.9	796.7	796.7	0.6	0.0	65.4	65.4
Saudi Arabia	266.5	266.2	266.2	-0.1	0.0	21.9	21.8
Iran	158.4	157.2	157.2	-0.8	0.0	12.9	12.9
Iraq	142.5	148.8	148.8	4.4	0.0	12.2	12.2
Kuwait	101.5	101.5	101.5	0.0	0.0	8.3	8.3
United Arab Emirates	97.8	97.8	97.8	0.0	0.0	8.0	8.0
Qatar	25.2	25.2	25.2	0.0	0.0	2.1	2.1
Other members	419.4	420.8	422.2	0.3	0.3	34.6	34.6
Venezuela	300.9	301.8	303.2	0.3	0.5	24.8	24.9
OPEC	1,211.3	1,217.4	1,218.8	0.5	0.1	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

Table 3.3. OPEC Crude Oil Production¹

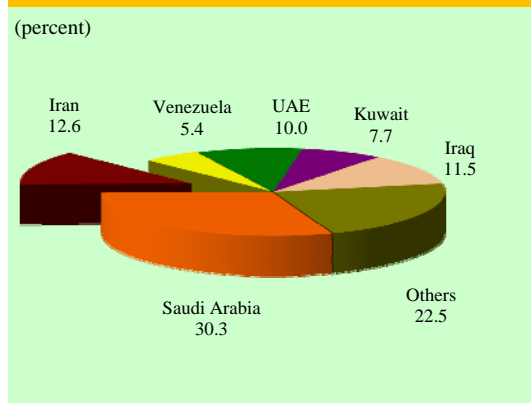
(thousand b/d)

	2015	2016	2017	Percentage change		Share (percent)	
				2016	2017	2016	2017
Middle East members	28,738.0	30,561.8	30,329.0	6.3	-0.8	77.2	76.9
Saudi Arabia	11,994.3	12,401.8	11,950.8	3.4	-3.6	31.3	30.3
Iran ²	3,861.8	4,602.4	4,981.7	19.2	8.2	11.6	12.6
Iraq	3,985.9	4,422.9	4,520.0	11.0	2.2	11.2	11.5
Kuwait	3,064.7	3,145.1	3,025.4	2.6	-3.8	7.9	7.7
United Arab Emirates	3,873.3	4,019.9	3,935.3	3.8	-2.1	10.2	10.0
Qatar	1,958.0	1,969.7	1,915.8	0.6	-2.7	5.0	4.9
Other members	9,623.6	9,039.3	9,106.8	-6.1	0.7	22.8	23.1
OPEC	38,361.6	39,601.0	39,435.7	3.2	-0.4	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

¹ Includes NGL, shale oil, and oil sands.

² BP data on Iran's crude oil production are overestimated. According to the Ministry of Petroleum, the amount of Iran's crude oil production totaled 3.8 mb/d in 2017/18.

Figure 3.1. Share of OPEC members in crude oil production in 2017

Crude Oil Consumption

In 2017, the average crude oil consumption in OPEC member countries¹ amounted

to 9.5 mb/d, indicating 0.8 percent increase compared with 2016. The highest amount of consumption by 3.9 mb/d was related to Saudi Arabia.

Ecuador, with 237.2 thousand barrels a day, accounted for the lowest amount of crude oil consumption in 2017. Iran's consumption was 1.8 mb/d, constituting 19.1 percent of total OPEC consumption².

Natural Gas Proven Reserves

OPEC natural gas proven reserves reached 94.6 trillion cubic meters at end-2017, remaining unchanged compared with the previous year-end. Iran and Qatar, with 33.2 and 24.9 trillion cubic meters, had the largest reserves among member countries.

Table 3.4. OPEC Crude Oil Consumption¹

(thousand b/d)

	2015	2016	2017	Percentage change		Share (percent)	
				2016	2017	2016	2017
Middle East members	8,049.8	8,217.5	8,334.2	2.1	1.4	87.3	87.8
Saudi Arabia	3,875.3	3,938.6	3,917.5	1.6	-0.5	41.9	41.3
Iran ²	1,766.1	1,722.4	1,815.6	-2.5	5.4	18.3	19.1
Iraq	687.0	758.0	791.1	10.3	4.4	8.1	8.3
Kuwait	456.5	452.8	449.4	-0.8	-0.8	4.8	4.7
United Arab Emirates	949.0	1,002.6	1,007.0	5.6	0.4	10.7	10.6
Qatar	315.9	343.1	353.6	8.6	3.1	3.6	3.7
Other members	1,313.3	1,190.4	1,152.9	-9.4	-3.2	12.7	12.2
OPEC³	9,363.1	9,408.0	9,487.1	0.5	0.8	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

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

² Data related to Iran are overestimated.

³ Excludes, Nigeria, Libya, Angola, Gabon, and Equatorial Guinea.

¹ Excludes Nigeria, Libya, Angola, Gabon, and Equatorial Guinea.

² 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)	
	2015	2016	2017	2016	2017	2016	2017
Middle East members	77.2	77.2	77.2	0.1	0.1	81.7	81.7
Saudi Arabia	8.0	8.0	8.0	0.5	0.0	8.5	8.5
Iran	33.0	33.2	33.2	0.6	0.0	35.1	35.1
Iraq	3.5	3.5	3.5	0.0	0.0	3.7	3.7
Kuwait	1.7	1.7	1.7	0.0	0.0	1.8	1.8
United Arab Emirates	5.9	5.9	5.9	0.0	0.0	6.2	6.2
Qatar	25.1	24.9	24.9	-0.8	0.0	26.3	26.3
Other members	17.2	17.3	17.3	0.8	0.0	18.3	18.3
OPEC¹	94.4	94.6	94.6	0.2	0.0	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

¹Excludes Angola, Ecuador, Gabon, and Equatorial Guinea

Natural Gas Production¹

OPEC natural gas production amounted to 786.7 billion cubic meters in 2017, up by 4.2 percent. Iran, with a production of 223.9 billion cubic meters, enjoyed the highest share of OPEC natural gas production by 28.5 percent. Qatar, with a production of 175.7 billion cubic meters of natural gas and a share of 22.3 percent, ranked second.

Natural Gas Consumption

OPEC natural gas consumption amounted to 556.7 billion cubic meters in 2017, showing 4.9 percent rise compared with the previous year. Consumption of natural gas by Middle East members reached 479.6 billion cubic meters, up by 5.8 percent compared with 2016 and constituting 86.2 percent of total consumption.

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

	2015	2016	2017	Percentage change		Share (percent)	
				2016	2017	2016	2017
Middle East members	547.9	571.4	599.3	4.3	4.9	75.7	76.2
Saudi Arabia	99.2	105.3	111.4	6.2	5.8	14.0	14.2
Iran	191.4	203.2	223.9	6.2	10.2	26.9	28.5
Iraq	7.3	9.9	10.4	35.6	5.1	1.3	1.3
Kuwait	16.1	16.4	17.4	2.0	5.9	2.2	2.2
United Arab Emirates	58.7	59.6	60.4	1.5	1.4	7.9	7.7
Qatar	175.2	177.0	175.7	1.0	-0.7	23.5	22.3
Other members	177.4	183.3	187.4	3.3	2.2	24.3	23.8
OPEC¹	725.3	754.7	786.7	4.1	4.2	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

¹Excludes Angola, Ecuador, Gabon, and Equatorial Guinea

¹Includes commercial production and consumed gas.

Table 3.7. OPEC Natural Gas Consumption¹

(billion cubic meters)

	2015	2016	2017	Percentage change		Share (percent)	
				2016	2017	2016	2017
Middle East members	433.8	453.2	479.6	4.5	5.8	85.4	86.2
Saudi Arabia	99.2	105.3	111.4	6.1	5.8	19.8	20.0
Iran	191.9	201.4	214.4	4.9	6.5	37.9	38.5
Iraq	7.3	9.9	12.0	35.6	21.3	1.9	2.2
Kuwait	20.3	21.1	22.2	3.8	5.4	4.0	4.0
United Arab Emirates	71.0	72.5	72.2	2.1	-0.4	13.7	13.0
Qatar	44.1	43.1	47.4	-2.3	10.0	8.1	8.5
Other members	75.1	77.6	77.1	3.3	-0.6	14.6	13.8
OPEC	508.9	530.8	556.7	4.3	4.9	100.0	100.0

Source: BP Statistical Review of World Energy 2018.

¹ Excludes Nigeria, Libya, Angola, Gabon, and Equatorial Guinea.

Iran

Production and Exports of Crude Oil

According to the Ministry of Petroleum, Iran's average crude oil production was raised in adherence to the production quotas set by the OPEC to reach 3.8 mb/d in 2017/18. This was 2.3 percent higher than 2016/17. Iran's crude oil exports rose 0.7 percent to 2.1 mb/d and exports of oil products increased by 75.0 percent to 256.0 thousand b/d. Heightened exports of fuel oil, gas oil, and liquefied gas were the main factors behind the increased exports of oil products in this year. Iran's medium crude oil spot price went up by 19.8 percent to \$55.1 a barrel on average. Domestic consumption of oil products reached 1,505.8 thousand b/d in 2017/18, up by 0.2 percent compared with 2016/17. Consumption of gasoline and gas oil reached 591.3 and 501.5 thousand b/d, accounting for respectively 39.3 and 33.3 percent of total consumption of oil products.

Natural Gas

With the development of gas supply infrastructure in urban and rural areas, domestic consumption of natural gas rose 4.3 percent to 201.9 billion cubic meters in 2017/18. The share of "residential, commercial, and industrial sectors" in total natural gas consumption was 48.2, "power plants" 33.5, and "major industries" 18.3 percent.

Electricity

In 2017/18, Iran's electricity generation amounted to 308.0 billion kWh, showing 6.5 percent growth compared with 2016/17. Of total generated electricity, 166.1 billion kWh (53.9 percent) was related to the private sector's power plants, 133.9 billion kWh (43.5 percent) to the Ministry of Energy, and 7.9 billion kWh (2.6 percent) to large industries. The highest amount of generated electricity by 89.5 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 (63.1 billion kWh). The amount of electricity generated by power plants affiliated to the Ministry of Energy experienced 4.4 percent increase in 2017/18. Among power plants affiliated to the Ministry of Energy, the highest rise in electricity generation by 11.2 percent was related to combined cycle power plants.

Electricity consumption amounted to 255.0 billion kWh in 2017/18, up by 7.4 percent compared with 2016/17. The highest growth of consumption was related to the agriculture sector by 8.7 percent. Other sectors including industrial, street lighting, residential, public, and commercial sectors showed 8.5, 6.7, 6.4, 6.2, and 6.0 percent increase, respectively, compared with 2016/17. Industrial and residential sectors enjoyed the highest shares in electricity consumption by 33.0 and 32.7 percent, respectively.