

In 2011 and the first quarter of 2012, international crude oil prices followed a generally upward, yet fluctuating, trend. A host of factors were responsible for the fluctuations of crude oil prices. Complete albeit temporary halt in Libya's supply of oil, Fukushima nuclear power plant disaster in Japan, inclement weather conditions in Europe including heavy snowfall and extreme cold, depreciation of the US dollar against euro, and Middle East tensions were among factors that contributed to the run-up in crude oil prices. On the other hand, decline in the price of crude oil in 2011 was attributable to spillovers of the European economic crisis to other countries in Europe including Spain, rise in OPEC crude oil production, and uncertainty regarding the alleviation of the global economic slowdown.

During the 159th Meeting of the OPEC Conference held in Vienna on July 8, 2011, it was decided that the production ceiling for the OPEC member countries (excluding Iraq) be kept unchanged at 24.8 mb/d. At the 160th Meeting of the OPEC Conference convened in Vienna on December 14, 2011, OPEC agreed to set its production ceiling at 30.0 mb/d (including Libya and Iraq).

In 1390, Iran produced crude oil in adherence to the quotas set by the OPEC. According to the Ministry of Petroleum, average crude oil exports increased by 0.6 percent in this year, to 2.0 mb/d and exports

of oil products increased by 9.3 percent to 88 thousand b/d.

OPEC

Primary Energy Consumption

Primary energy consumption by the OPEC member countries rose from 703.1 million tons oil equivalent in 2010 to 739.1 million tons oil equivalent in 2011. Among primary energy sources, oil and natural gas are consumed by member countries to a large extent, while hydroelectricity and coal are used by Iran, Venezuela, and Algeria sparingly. Middle East members (Saudi Arabia, Iran, Kuwait, United Arab Emirates, and Qatar), with a total consumption of 595.8 million tons oil equivalent, accounted for higher consumption as compared with other members (Venezuela, Ecuador, and Algeria). Iran, with 228.6 million tons oil equivalent, ranked first, followed by Saudi Arabia, with 217.1 million tons oil equivalent.

Crude Oil Proven Reserves

At end-2011, crude oil proven reserves located in OPEC member countries reached 1,196.3 billion barrels, up by 2.5 percent compared with 2010 year-end. Among OPEC member countries, the largest reserves, by 296.5 billion barrels, belonged to Venezuela, followed by Saudi Arabia, with 265.4 billion barrels. Iran, with 151.2 billion barrels, ranked third among OPEC member countries.

Table 3.1. OPEC Primary Energy Consumption in 2011¹ (million tons oil equivalent)

	Oil	Natural gas	Coal	Nuclear energy	Hydroelectricity	Renewable energies	Total
Middle East members	272.4	319.9	0.8	0.0	2.7	0.1	595.8
Saudi Arabia	127.8	89.3	0.0	0.0	0.0	0.0	217.1
Iran	87.0	138.0	0.8	0.0	2.7	0.1	228.6
Kuwait	19.0	14.6	0.0	0.0	0.0	0.0	33.6
United Arab Emirates	30.5	56.6	0.0	0.0	0.0	0.0	87.2
Qatar	8.0	21.4	0.0	0.0	0.0	0.0	29.4
Other members	64.5	55.5	2.0	0.0	21.2	0.1	143.2
OPEC	336.9	375.4	2.8	0.0	23.9	0.1	739.1

Source: BP Statistical Review of World Energy 2012

¹ Excludes Iraq, Libya, Nigeria, and Angola.

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

	Year-end			Percentage change		Share (percent)	
	2009	2010	2011	2010	2011	2010	2011
Middle East members	741.8	754.7	783.7	1.7	3.8	64.6	65.5
Saudi Arabia	264.6	264.5	265.4	0.0	0.3	22.7	22.2
Iran	137.0	151.2	151.2	10.4	0.0	13.0	12.6
Iraq	115.0	115.0	143.1	0.0	24.4	9.9	12.0
Kuwait	101.5	101.5	101.5	0.0	0.0	8.7	8.5
United Arab Emirates	97.8	97.8	97.8	0.0	0.0	8.4	8.2
Qatar	25.9	24.7	24.7	-4.6	0.0	2.1	2.1
Other members	326.8	412.7	412.7	26.3	0.0	35.4	34.5
OPEC	1,068.6	1,167.3	1,196.3	9.2	2.5	100.0	100.0

Source: BP Statistical Review of World Energy 2012

Crude Oil Production

In 2011, average OPEC crude oil production, with 3.1 percent rise, amounted to 35.8 mb/d compared with 2010. Production of OPEC Middle East members, with 10.4 percent increase, totaled 26.2 mb/d while production of other members decreased by 12.6 percent to 9.6 mb/d. The highest amount of production was related to Saudi Arabia with 11.2 mb/d, and a share of 31.1 percent.

Production Ceiling

The OPEC Conference, in its 159th Meeting held in Vienna, capital city of Austria, on July 8, 2011, kept the production ceiling

unchanged at 24.8 mb/d for the member countries (except for Iraq). In the 160th Meeting held in Vienna on December 14, 2011, OPEC agreed to set its production ceiling at 30.0 mb/d (including Libya and Iraq).

Oil Consumption

In 2011, average oil consumption in OPEC member countries¹ grew by 2.6 percent to 7.4 mb/d. The highest amount of consumption was related to Saudi Arabia by 2.8 mb/d, and the lowest to Qatar by 0.2 mb/d. Iran's consumption was 1.8 mb/d, accounting for 24.6 percent of total OPEC consumption².

¹ Excludes Iraq, Nigeria, Libya, and Angola.

² Figures released by the BP are higher than those published by the Ministry of Petroleum.

Table 3.3. OPEC Crude Oil Production¹ (thousand b/d)

	2009	2010	2011	Percentage change		Share (percent)	
				2010	2011	2010	2011
Middle East members	23,117.5	23,726.5	26,189.9	2.6	10.4	68.3	73.1
Saudi Arabia	9,893.1	9,955.1	11,160.6	0.6	12.1	28.6	31.1
Iran	4,198.6	4,338.5	4,321.1	3.3	-0.4	12.5	12.1
Iraq	2,442.5	2,480.0	2,798.1	1.5	12.8	7.1	7.8
Kuwait	2,488.6	2,517.6	2,865.4	1.2	13.8	7.2	8.0
United Arab Emirates	2,749.9	2,866.5	3,322.1	4.2	15.9	8.2	9.3
Qatar	1,344.9	1,568.7	1,722.6	16.6	9.8	4.5	4.8
Other members	10,247.0	11,026.5	9,640.3	7.6	-12.6	31.7	26.9
OPEC	33,364.6	34,753.0	35,830.2	4.2	3.1	100.0	100.0

Source: BP Statistical Review of World Energy 2012

¹ Includes NGL, shale oil, and oil sands as well.**Table 3.4. OPEC Oil Consumption¹** (thousand b/d)

	2009	2010	2011	Percentage change		Share (percent)	
				2010	2011	2010	2011
Middle East members	5,602.2	5,897.7	6,027.1	5.3	2.2	81.5	81.1
Saudi Arabia	2,623.9	2,747.7	2,855.7	4.7	3.9	38.0	38.4
Iran ²	1,787.0	1,886.8	1,824.4	5.6	-3.3	26.1	24.6
Kuwait	398.7	436.4	438.5	9.5	0.5	6.0	5.9
United Arab Emirates	616.1	606.6	671.0	-1.5	10.6	8.4	9.0
Qatar	176.4	220.1	237.6	24.8	8.0	3.0	3.2
Other members	1,271.3	1,341.8	1,402.6	5.5	4.5	18.5	18.9
OPEC³	6,873.5	7,239.4	7,429.7	5.3	2.6	100.0	100.0

Source: BP Statistical Review of World Energy 2012

¹ Includes domestic demand for oil, aviation and marine fuels, fuel

for refineries and oil wastes.

² Data related to Iran are overestimated.³ Excludes Iraq, Nigeria, Libya, and Angola.

Natural Gas Proven Reserves

OPEC natural gas proven reserves reached 94.4 trillion cubic meters at end-2011, showing 0.6 percent increase compared with the previous year-end. Iran and Qatar, with 33.1 and 25.0 trillion cubic meters, respectively, had the largest reserves among member countries.

Natural Gas Production¹

In 2011, OPEC natural gas production amounted to 617.5 billion cubic meters, indicating 6.7 percent increase compared with 2010. Iran, which had a production of 151.8 billion cubic meters, enjoyed the highest share of OPEC natural gas production by 24.6 percent. Qatar, with a production of 146.8 billion cubic meters of

natural gas and a share of 23.8 percent, ranked second.

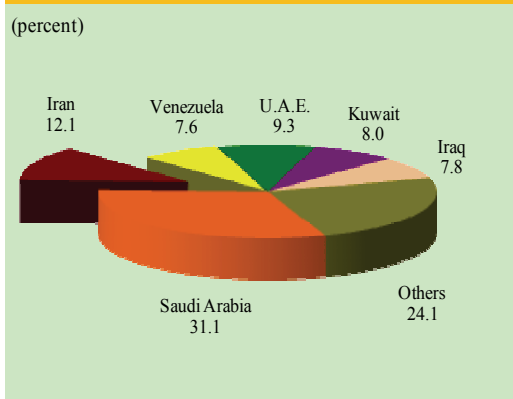
Figure 3.1. OPEC members' production quotas in 2011¹ Includes commercial production and consumed gas.

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

	Year-end			Percentage change		Share (percent)	
	2009	2010	2011	2010	2011	2010	2011
Middle East members	73.9	77.2	77.7	4.5	0.7	82.3	82.4
Saudi Arabia	7.9	8.0	8.2	1.3	1.7	8.5	8.6
Iran	29.6	33.1	33.1	11.8	0.0	35.3	35.1
Iraq	3.2	3.2	3.6	0.0	13.3	3.4	3.8
Kuwait	1.8	1.8	1.8	0.0	0.0	1.9	1.9
United Arab Emirates	6.1	6.1	6.1	0.0	0.0	6.5	6.5
Qatar	25.3	25.0	25.0	-1.2	0.0	26.7	26.5
Other members	16.4	16.6	16.6	1.2	0.1	17.7	17.6
OPEC¹	90.3	93.8	94.4	3.9	0.6	100.0	100.0

Source: BP Statistical Review of World Energy 2012

¹Excludes Angola and Ecuador.

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

	2009	2010	2011	Percentage change		Share (percent)	
				2010	2011	2010	2011
Middle East members	359.0	414.8	464.4	15.5	12.0	71.7	75.2
Saudi Arabia	78.5	87.7	99.2	11.7	13.2	15.1	16.1
Iran	131.2	146.2	151.8	11.4	3.9	25.2	24.6
Iraq	1.2	1.3	1.9	8.3	42.0	0.2	0.3
Kuwait	11.2	11.7	13.0	4.5	10.4	2.0	2.1
United Arab Emirates	48.8	51.3	51.7	5.1	0.9	8.9	8.4
Qatar	89.3	116.7	146.8	30.7	25.8	20.2	23.8
Other members	150.0	164.0	153.1	9.3	-6.6	28.3	24.8
OPEC¹	509.0	578.8	617.5	13.7	6.7	100.0	100.0

Source: BP Statistical Review of World Energy 2012

¹Excludes Angola and Ecuador.

Natural Gas Consumption

In 2011, OPEC natural gas consumption amounted to 417.1 billion cubic meters, showing 7.7 percent rise compared with the previous year. Consumption of natural gas

by Middle East members reached 355.5 billion cubic meters, up by 8.4 percent compared with 2010, and constituting 85.2 percent of total consumption.

Table 3.7. OPEC Natural Gas Consumption¹ (billion cubic meters)

	2009	2010	2011	Percentage change		Share (percent)	
				2010	2011	2010	2011
Middle East members	301.0	328.0	355.5	9.0	8.4	84.7	85.2
Saudi Arabia	78.5	87.7	99.2	11.7	13.2	22.6	23.8
Iran	131.4	144.6	153.3	10.0	6.1	37.3	36.8
Kuwait	12.1	14.5	16.2	19.8	11.5	3.7	3.9
United Arab Emirates	59.1	60.8	62.9	2.9	3.5	15.7	15.1
Qatar	20.0	20.4	23.8	2.0	16.4	5.3	5.7
Other members	58.2	59.2	61.6	1.7	4.2	15.3	14.8
OPEC	359.2	387.1	417.1	7.8	7.7	100.0	100.0

Source: BP Statistical Review of World Energy 2012

¹Excludes Iraq, Nigeria, Libya, and Angola.

Iran

Production and Exports of Crude Oil

In 1390, Iran's average crude oil production was in adherence to the quotas set by the OPEC. According to the Ministry of Petroleum, average crude oil exports increased by 0.6 percent to 2.0 mb/d and exports of oil products increased by 9.3 percent to 88 thousand b/d. Total exports of crude oil and oil products rose 0.9 percent and amounted to 2.1 mb/d. In this year, crude oil exports had a share of 95.8 percent in total oil exports. Moreover, Iran's crude oil spot price increased by 32.4 percent, compared with the previous year, to \$111.1 a barrel on average.

Domestic consumption of oil products reached 1,463 thousand b/d in 1390. Consumption of gas oil and gasoline reached 507 and 360 thousand b/d, accounting for 34.7 and 24.6 percent of total consumption of oil products, respectively. As the implementation of Subsidy Reform Plan continued, total domestic consumption of oil products decreased by 0.3 percent compared with 1389.

Natural Gas

With the development of gas supply systems in urban and rural areas, domestic consumption of natural gas increased by 1.3 percent to 152.7 billion cubic meters in 1390. The share of "residential, commercial, and industrial sectors" in total natural gas consumption was 56.1 percent, "power plants" 24.7 percent, and "major industries" 19.3 percent. In the aftermath of the implementation of Subsidy Reform Plan, growth in natural gas consumption decelerated and stood at 1.3 percent. The corresponding growth figure for the previous year was 6.8 percent.

Electricity

In 1390, Iran's electricity generation amounted to 240.1 billion kWh, showing 3.0

percent growth compared with the year before. Of total generated electricity, 208.4 billion kWh (86.8 percent) was related to power plants affiliated to the Ministry of Energy and 31.7 billion kWh (13.2 percent) to other institutions (including private sector and large industries).

The highest amount of electricity was generated by gas and combined cycle power plants (103.2 billion kWh) and the lowest by hydroelectric, diesel, and wind power plants (12.7 billion kWh). Hydroelectric, diesel, and wind power plants experienced the highest growth in electricity generation by 28.7 percent. The amount of electricity generated by gas and combined cycle power plants declined by 1.1 percent.

Electricity consumption amounted to 188.2 billion kWh in 1390, up by 2.2 percent compared with the year before. The highest growth of consumption was related to the agriculture sector with 34.8 percent, followed by the industrial sector with 3.9 percent. Electricity consumption by the public sector, however, fell 20.2 percent, residential sector 3.3 percent, commercial sector 2.3 percent, and for street lighting by 6.0 percent. Industrial and residential sectors had the highest shares in electricity consumption by 33.9 and 31.3 percent, respectively.

In 1390, electricity exports rose by 29.2 percent to 8.7 billion kWh. Electricity imports grew by 21.2 percent to 3.7 billion kWh. Therefore, net exports of electricity increased by 35.8 percent to over 5.0 billion kWh. More than 97 percent of imported electricity was from Turkmenistan and Armenia and over 74 percent of electricity exports were related to Iraq.