

In 2010 and the first quarter of 2011, international crude oil prices followed an upward, yet fluctuating, trend. The run-up in crude oil prices was attributable to a host of factors inter alia, the excess of world crude oil consumption over production, rise in manufacturing products with their ensuing effect on demand for oil (especially in China), depreciation of the US dollar, decline in commercial crude oil inventories, and the expansionary monetary policy of the US and Europe to offset the effects of the global financial crisis. Factors such as continuation of the economic crisis in Europe and the US as well as increase in the production of crude oil globally were responsible for the fall in prices of crude oil in 2010.

During the 155th (Extraordinary) Meeting of the Conference of the Organization of the Petroleum Exporting Countries (OPEC) convened in Luanda, Angola, on December 22, 2009, the production levels were kept unchanged at 24.8 mb/d. After all no change was made in the production quotas of the OPEC member countries during the 152nd through the 158th Meetings.

OPEC

Primary Energy Consumption

Primary energy consumption by the OPEC member countries rose from 661.9 million tons oil equivalent in 2009 to 691.0 million

tons oil equivalent in 2010. 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 556.7 million tons oil equivalent, accounted for higher consumption as compared with other members (Venezuela, Ecuador, and Algeria). Iran, with 212.5 million tons oil equivalent, ranked first, followed by Saudi Arabia, with 201.0 million tons oil equivalent.

Crude Oil Reserves

At end-2010, OPEC crude oil reserves remained relatively unchanged at 1,068.4 billion barrels, compared with 2009 year-end. Among OPEC member countries, the largest reserves, by 264.5 billion barrels, belonged to Saudi Arabia followed by Venezuela, with 211.2 billion barrels. Iran, with 137.0 billion barrels, ranked third among OPEC member countries.

Crude Oil Production

In 2010, average OPEC crude oil production, with 2.9 percent rise, amounted to 34.3 mb/d compared with 2009. In this year, production of OPEC Middle East members, with 2.2 percent increase, totaled 23.6 mb/d and production of other members rose 4.3 percent to 10.7 mb/d. The highest

Table 3.1. OPEC Primary Energy Consumption in 2010¹ (million tons oil equivalent)

	Oil	Natural gas	Coal	Nuclear energy	Hydroelectricity	Renewable energies	Total
Middle East members	268.9	284.5	1.1	0.0	2.2	0.05	556.7
Saudi Arabia	125.5	75.5	0.0	0.0	0.0	0.0	201.0
Iran	86.0	123.2	1.1	0.0	2.2	0.05	212.5
Kuwait	17.7	12.9	0.0	0.0	0.0	0.0	30.6
United Arab Emirates	32.3	54.5	0.0	0.0	0.0	0.0	86.8
Qatar	7.4	18.4	0.0	0.0	0.0	0.0	25.8
Other members	60.6	54.1	0.2	0.0	19.3	0.05	134.4
OPEC	329.5	338.6	1.3	0.0	21.5	0.1	691.0

Source: BP Statistical Review of World Energy 2011

¹ Excludes Iraq, Libya, Nigeria, and Angola.

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

	Year-end			Percentage change		Share (percent)	
	2008	2009▲	2010	2009	2010	2009	2010
Middle East members	742.8	741.8	741.7	-0.1	*	69.4	69.4
Saudi Arabia	264.1	264.6	264.5	-0.4	*	24.8	24.8
Iran	137.6	137.0	137.0	0.0	0.0	12.8	12.8
Iraq	115.0	115.0	115.0	0.0	0.0	10.8	10.8
Kuwait	101.5	101.5	101.5	0.0	0.0	9.5	9.5
United Arab Emirates	97.8	97.8	97.8	0.0	0.0	9.2	9.2
Qatar	26.8	25.9	25.9	-3.3	0.0	2.4	2.4
Other members	286.0	326.8	326.7	14.3	*	30.6	30.6
OPEC	1,028.8	1,068.6	1,068.4	3.8	*	100.0	100.0

Source: BP Statistical Review of World Energy 2011

amount of production was related to Saudi Arabia with 10.0 mb/d, and a share of 29.2 percent.

OPEC Production Ceiling

The OPEC Conference, in its 155th Meeting held in Luanda, Angola, on December 22, 2009, agreed to keep the production quotas unchanged at 24.8 mb/d. In the 156th Meeting held in Vienna, on March 17, 2010, the production ceiling remained unchanged at previous level of 24.8 mb/d.

In its 157th Meeting of the Conference in Vienna on October 14, 2010, OPEC kept the

Figure 3.1. OPEC members' production quotas in 2010

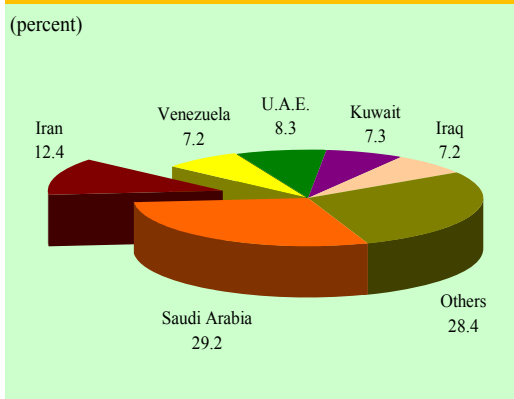


Table 3.3. OPEC Crude Oil Production¹

(thousand b/d)

	2008	2009▲	2010	Percentage change		Share (percent)	
				2009	2010	2009	2010
Middle East members	24,692.3	23,117.5	23,637.0	-6.4	2.2	69.3	68.9
Saudi Arabia	10,846.1	9,893.1	10,006.9	-8.8	1.2	29.7	29.2
Iran	4,326.6	4,198.6	4,245.0	-3.0	1.1	12.6	12.4
Iraq	2,423.0	2,442.5	2,459.7	0.8	0.7	7.3	7.2
Kuwait	2,782.0	2,488.6	2,508.2	-10.5	0.8	7.5	7.3
United Arab Emirates	2,936.3	2,749.9	2,848.5	-6.3	3.6	8.2	8.3
Qatar	1,378.3	1,344.9	1,568.7	-2.4	16.6	4.0	4.6
Other members	10,875.4	10,247.0	10,687.2	-5.8	4.3	30.7	31.1
OPEC	35,567.7	33,364.6	34,324.2	-6.2	2.9	100.0	100.0

Source: BP Statistical Review of World Energy 2011

¹ Includes NGL, shale oil, and oil sands as well.

production ceiling unchanged at 24.8 mb/d. Meanwhile, it was decided that Iran would chair the OPEC Meetings in 2011. During the 158th Meeting convened in Quito, capital city of Ecuador, on December 11, 2010, OPEC kept the production ceiling and quotas unchanged.

Oil Consumption

In 2010, average oil consumption in OPEC member countries¹ grew by 5.4 percent to 7.2 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 24.8 percent of total OPEC consumption².

Natural Gas Proven Reserves

OPEC natural gas proven reserves reached 90.7 trillion cubic meters at end-2010, showing 0.5 percent increase compared with the previous year-end. Iran and Qatar, with

29.6 and 25.3 trillion cubic meters, respectively, had the largest reserves among member countries.

Natural Gas Production³

In 2010, OPEC natural gas production grew by 10.3 percent to 561.3 billion cubic meters. Iran, with a production of 138.5 billion cubic meters, had the highest share of OPEC natural gas production by 24.7 percent. Qatar, with a production of 116.7 billion cubic meters of natural gas and a share of 20.8 percent, ranked second.

Natural Gas Consumption

In 2010, OPEC natural gas consumption amounted to 376.2 billion cubic meters, showing 4.7 percent rise compared with the previous year. Consumption of natural gas by Middle East members reached 316.2 billion cubic meters, up by 5.1 percent compared with 2009 and constituting 84.0 percent of total consumption.

¹ Excludes Iraq, Nigeria, Libya, and Angola.² Estimations by the BP are more than those published by the Ministry of Petroleum.³ Includes commercial production and consumed gas.

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Table 3.4. OPEC Oil Consumption¹

(thousand b/d)

	2008	2009▲	2010	Percentage change		Share (percent)	
				2009	2010	2009	2010
Middle East members	5,193.0	5,602.2	5,926.4	7.9	5.8	81.5	81.8
Saudi Arabia	2,389.5	2,623.9	2,812.3	9.8	7.2	38.2	38.8
Iran ²	1,761.3	1,787.0	1,799.2	1.5	0.7	26.0	24.8
Kuwait	369.9	398.7	413.1	7.8	3.6	5.8	5.7
United Arab Emirates	474.6	616.1	681.6	29.8	10.6	9.0	9.4
Qatar	197.6	176.4	220.1	-10.7	24.7	2.6	3.0
Other members	1,125.0	1,271.3	1,318.0	13.0	3.7	18.5	18.2
OPEC³	6,318.0	6,873.5	7,244.4	8.8	5.4	100.0	100.0

Source: BP Statistical Review of World Energy 2011 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.

Table 3.5. OPEC Natural Gas Proven Reserves

(trillion cubic meters)

	Year-end			Percentage change		Share (percent)	
	2008	2009▲	2010	2009	2010	2009	2010
Middle East members	73.9	73.9	73.9	0.0	0.0	81.8	81.5
Saudi Arabia	7.6	7.9	8.0	4.6	1.2	8.8	8.8
Iran	29.6	29.6	29.6	0.0	0.0	32.8	32.6
Iraq	3.2	3.2	3.2	0.0	-0.1	3.5	3.5
Kuwait	1.8	1.8	1.8	0.0	0.0	2.0	2.0
United Arab Emirates	6.4	6.1	6.0	-5.3	-1.0	6.7	6.6
Qatar	25.4	25.3	25.3	-0.2	0.0	28.0	27.9
Other members	16.3	16.4	16.8	0.9	2.3	18.2	18.5
OPEC¹	90.2	90.3	90.7	0.1	0.5	100.0	100.0

Source: BP Statistical Review of World Energy 2011

¹ Excludes Angola and Ecuador.

Table 3.6. OPEC Natural Gas Production

(billion cubic meters)

	2008	2009▲	2010	Percentage change		Share (percent)	
				2009	2010	2009	2010
Middle East members	338.6	360.2	403.0	6.3	11.9	70.7	71.8
Saudi Arabia	80.4	78.5	83.9	-2.5	7.0	15.4	15.0
Iran	116.3	131.2	138.5	12.8	5.6	25.8	24.7
Iraq	1.9	1.2	1.3	-39.0	8.7	0.2	0.2
Kuwait	12.8	11.2	11.6	-12.2	3.5	2.2	2.1
United Arab Emirates	50.2	48.8	51.0	-2.8	4.5	9.6	9.0
Qatar	77.0	89.3	116.7	16.0	30.7	17.5	20.8
Other members	166.7	148.8	158.3	-10.7	6.3	29.3	28.2
OPEC¹	505.3	509.0	561.3	0.7	10.3	100.0	100.0

Source: BP Statistical Review of World Energy 2011

¹ Excludes Angola and Ecuador.

Table 3.7. OPEC Natural Gas Consumption¹

(billion cubic meters)

	2008	2009▲	2010	Percentage change		Share (percent)	
				2009	2010	2009	2010
Middle East members	292.1	301.0	316.2	3.0	5.1	83.8	84.0
Saudi Arabia	80.4	78.5	83.9	-2.5	7.0	21.8	22.3
Iran	119.3	131.4	136.9	10.1	4.2	36.6	36.4
Kuwait	12.8	12.1	14.4	-5.2	18.8	3.4	3.8
United Arab Emirates	59.5	59.1	60.5	-0.7	2.5	16.4	16.1
Qatar	20.2	20.0	20.4	-0.9	2.0	5.6	5.4
Other members	56.5	58.2	60.0	3.1	3.1	16.2	16.0
OPEC	348.6	359.2	376.2	3.0	4.7	100.0	100.0

Source: BP Statistical Review of World Energy 2011

¹Excludes Iraq, Nigeria, Libya, and Angola.

Iran

Production and Exports of Crude Oil

In 1389, Iran's average crude oil production, in adherence to the quotas set by the OPEC, reached 3.5 mb/d. Average crude oil exports declined by 1.7 percent to 2.0 mb/d and exports of oil products decreased by 26.0 percent to 81 thousand b/d. Total oil exports (including crude oil and oil products), with a reduction of 2.9 percent, amounted to 2.1 mb/d. In this year, crude oil exports had a share of 96.1 percent in total oil exports. The average crude oil spot price increased by 21.7 percent to \$83.89 a barrel, compared with 1388.

In this year, the price of major oil products increased, mainly attributable to the implementation of Subsidy Reform Act. As of Azar 28, 1389, each liter of gasoline was sold for Rls. 4,000, gas oil Rls. 1,500, kerosene Rls. 1,000, and fuel oil Rls. 2,000.

In 1389, domestic consumption of oil products decreased by 2.8 percent to 1,468 thousand barrels a day. Consumption of gas oil and fuel oil reached 497 and 357 thousand barrels a day, accounting for 33.8

and 24.3 percent of total consumption of oil products, respectively. Consumption of gasoline fell from 402 thousand barrels a day in 1388 to 331 thousand barrels a day in 1389.

Table 3.8. Comparison of Prices of Major Oil Products before and after Implementation of Subsidy Reform Act

(rial/liter)

	Before Azar 28, 1389	After Azar 28, 1389
Regular gasoline		
Rationed (with fuel cards)	1,000	4,000
Free (without fuel cards)	4,000	7,000
Premium gasoline		
Rationed (with fuel cards)	1,500	5,000
Free (without fuel cards)	5,000	8,000
Gas oil		
Rationed (with fuel cards)	165	1,500
Free (without fuel cards)	165	3,500
Fuel oil	95	2,000
Kerosene	165	1,000

Source: National Iranian Oil Refining and Distribution Company (NIORDC)

Natural Gas

In 1389, with the development of gas supply systems in urban and rural areas, domestic consumption of natural gas increased by 4.3 percent to 150.8 billion cubic meters. Meanwhile, the share of "residential, commercial and industrial sectors" in total natural gas consumption was 52.7 percent, "power plants" 29.5 percent, and "major industries" 17.8 percent. In the aftermath of the implementation of Subsidy Reform Act, growth in natural gas consumption decelerated and stood at 4.3 percent. The corresponding figure for the previous year was 8.9 percent.

Electricity

In 1389, Iran's electricity generation amounted to 233.0 billion kWh, showing 5.3 percent growth compared with the previous year. Of total generated electricity, 204.5 billion kWh (87.8 percent) was related to power plants affiliated to the Ministry of Energy and 28.5 billion kWh (12.2 percent) to other institutions (including private sector and large industries).

The highest amount of electricity was generated by gas and combined cycle power plants (10.4 billion kWh) and the lowest by hydroelectric, diesel, and wind power plants (9.9 billion kWh). Hydroelectric, diesel,

and wind power plants accounted for the highest growth in electricity generation by 30.5 percent. The amount of electricity generated by steam power plants declined by 2.1 percent.

In 1389, electricity consumption amounted to 184.2 billion kWh, up by 9.3 percent compared with the year before. The highest growth of consumption was related to the commercial sector by 15.5 percent. Electricity consumption by agriculture sector grew by 13.0 percent, industrial sector 12.0 percent, and residential sector 9.5 percent. However, electricity consumption for street lighting and public sector dropped by 3.0 percent and 2.4 percent, respectively. Industrial and residential sectors had the highest shares in electricity consumption by 33.4 and 33.1 percent, respectively.

In this year, electricity exports rose by 9 percent to 6.7 billion kWh. Meanwhile, electricity imports grew by 45.8 percent to 3.0 billion kWh. Therefore, net electricity exports declined by 9.6 percent, compared with 1388, and reached 3.7 billion kWh. More than 97 percent of electricity was imported from Turkmenistan and Armenia and over 74 percent of electricity was exported to Iraq in 1389.