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2013 Minerals Yearbook

KUWAIT

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The Mineral Industry of Kuwait

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Kuwait's economy was dominated by the production and refining of hydrocarbons. In 2013, crude oil exports accounted for about 95% of total exports and about 94% of Government revenue (Central Bank of Kuwait, 2014, tables 26, 35).

Under Article 21 of the Constitution, the state owns all natural resources. Article 152 of the Constitution authorizes limited-time-period concessions for the exploitation of natural resources. Decree law No. 6 of 1980 authorizes Kuwait Petroleum Corp. (KPC) to form partnerships with other companies to conduct petroleum sector activity. Environmental issues (including those associated with the manufacturing of aluminum, gold, and steel articles; cement production and storage; and the exploration for and production, storage, and transport of natural gas, petroleum, and sand) are covered by law No. 21 of 1995, law No. 16 of 1996, and decision No. 210 of 2001.

In 2013, Kuwait's total exports were valued at about $116 billion[2] compared with about $119 billion in 2012. Crude oil exports were valued at about $109 billion in 2013 compared with about $113 billion in 2012. The average price of Kuwait Export, which was a 31.4° API gravity, sour (2.52% sulfur content) reference crude oil, decreased to $105.04 per barrel in 2013 from $108.93 per barrel in 2012, according to data published by the Organization of the Petroleum Exporting Countries (2014, p. 6). Consequently, much of the decrease in the value of total exports from Kuwait was attributable to the decrease in the average price of exported crude oil. Kuwaiti exports to the United States were valued at $12.6 billion in 2013, of which crude oil accounted for $12.3 billion (Central Bank of Kuwait, 2014, tables 23, 35; U.S. Census Bureau, 2014b; U.S. Energy Information Administration, 2013).

The total value of Kuwaiti imports in 2013 was about $30 billion compared with a revised value of about $28 billion in 2012. Kuwait's imports from the United States in 2013 were valued at about $2.6 billion, of which aluminum accounted for about $51 million; steelmaking materials, about $16 million; and inorganic chemicals, $14 million (Central Bank of Kuwait, 2014, tables 23, 35; U.S. Census Bureau, 2014a).

Production

Data on estimated mineral commodity production are in table 1.

Structure of the Mineral Industry

KPC, the Ministry of Oil, and the Supreme Petroleum Council are the Government organizations that are responsible for the petroleum sector in Kuwait. KPC subsidiaries included Kuwait Oil Co. K.S.C. (KOC), which managed the country's crude oil and natural gas operations; Kuwait Gulf Oil Co., which managed primarily offshore crude oil and natural gas operations in the Partitioned Neutral Zone between Kuwait and Saudi Arabia (which also is known as the Divided Zone); Petrochemical Industries Co. K.S.C., which dominated the Kuwaiti fertilizer-manufacturing sector; and Kuwait National Petroleum Co. K.S.C. (KNPC), which operated the country's petroleum refineries. State-owned Kuwait Investment Authority held interests in Kuwaiti cement companies and manufacturers of steel pipe. Privately owned companies were active in the industrial minerals and metals sectors.

Commodity Review

Mineral Fuels

Petroleum and Natural Gas.—KPC continued to focus on increasing its production of crude oil and natural gas. Projects included ongoing planning of the heavy oil project in the Lower Fars field in northern Kuwait and a steam injection trial in the Wafra Joint Operations Area in the Partitioned Neutral Zone. KPC also planned to drill more wells to produce primarily natural gas. Historically, natural gas had been a coproduct of crude oil production in Kuwait (Kuwait Petroleum Corp., 2013, p. 16–17, 22–24).

KNPC continued work on the consolidation and expansion of the 466,000-barrel-per-day (bbl/d)-capacity Mina Al-Ahmadi refinery and the 270,000-bbl/d-capacity Mina Abdullah refinery to form a single 800,000-bbl/d-capacity refinery. The project was expected to be completed in 2018. KNPC also began site preparation for the new 615,000-bbl/d-capacity oil refinery at Al-Zour. KNPC expected to complete the installation of the fourth gas liquefaction train at the Mina Al-Ahmadi refinery by 2014. The gas liquefaction train would separate and condense liquefied petroleum gas (LPG) composed of butane and propane, and also natural gasoline from the wet natural gas stream that the refinery received from KOC. Preparations to add a fifth LPG train at Mina Al-Ahmadi by 2017 also were underway. Preliminary work on a planned liquefied natural gas (LNG) import terminal at Al-Zour was underway. The LNG was expected to supplement the local gas supply used for electricity generation during the summer's peak demand period (Kuwait National Petroleum Co. K.S.C., 2013, p. 23–26).

Outlook

Strong domestic demand for aggregate, cement, electrical power, glass, sand, and steel for infrastructure projects is expected to continue in the near future. A number of additional electricity-generating powerplants have been proposed.

[1]Deceased.

[2]Where necessary, values have been converted from Kuwaiti dinars (KWD) to U.S. dollars (US$) at the average rate of KWD0.2826=US$1.00 for 2013 and KWD0.27996=US$1.00 for 2012.

The powerplants could be fueled by natural gas obtained from development of known nonassociated natural gas reservoirs and increased use of domestically produced natural gas. The proposed new powerplants could provide electrical power for proposed industrial diversification and expansion projects in Kuwait and shift some volume of refined petroleum products, such as fuel oil that is currently (2013) used to fuel electricity-generating powerplants, to the export market. The ongoing expansion of the Kuwaiti petroleum production capacity (subject to the Organization of the Petroleum Exporting Countries' crude oil production allocation) is expected to continue.

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TABLE 1

KUWAIT: ESTIMATED PRODUCTION OF MINERAL COMMODITIES[1, 2]

(Metric tons unless otherwise specified)

Commodity[3]		2009	2010	2011	2012	2013
Cement		2,000,000	2,000,000	2,250,000	2,250,000	2,250,000
Iron and steel:						
Crude		450,000	500,000	800,000	1,300,000	1,500,000
Rolled-steel bar		600,000	650,000	1,100,000	1,300,000	1,300,000
Lime, hydrated and quicklime		45,000	50,000	50,000	50,000	50,000
Natural gas:[4]						
Gross	million cubic meters	13,000	13,500	16,000	18,000 r	18,000
Dry	do.	11,200	11,600	13,500	15,500 r	15,500
Nitrogen:						
N content of ammonia		470,000	380,000	520,000	490,000 r	500,000
N content of urea		450,000	340,000	460,000	405,000 r	420,000
Petroleum:						
Crude[4]	thousand 42-gallon barrels	880,000	950,000	1,000,000	1,150,000 r	1,140,000
Natural gas liquids and liquefied petroleum gases	do.	54,000	63,000 r	68,000 r	71,000 r	71,000
Refinery products:						
Gasoline (motor), naphtha, and reformate	do.	78,000	78,000	76,000 r	79,000 r	80,000
Kerosene	do.	62,000	65,000	62,000 r	67,000 r	68,000
Distillate fuel oil	do.	95,000	89,000	88,000 r	96,000 r	97,000
Residual fuel oil	do.	74,000	69,000	64,000 r	73,000 r	74,000
Other[5]	do.	26,000	26,000	16,000 r	17,000 r	17,000
Total, including refinery gains and losses	do.	344,000	335,000	306,000 r	332,000 r	336,000
Salt		13,000	14,000	15,000	15,000	15,000
Sulfur:						
Elemental, petroleum byproduct		800,000	820,000	830,000	800,000	820,000
Sulfuric acid		17,000	18,000	18,000	18,000	18,000

rRevised. do. Ditto.

1Estimated data are rounded to no more than three significant digits; may not add to totals shown.

2Table includes data available through June 27, 2014.

3In addition to commodities listed, secondary aluminum, chlorine, clays, glass, gypsum, methanol, and sand and gravel were produced, but available information is inadequate to make reliable estimates of output.

4Includes Kuwait's share of production from the Partitioned Neutral Zone.

5Includes bitumen and petroleum coke.

TABLE 2
KUWAIT: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum, secondary		Arabian Light Metals Co. K.S.C. (Kuwait Industries Co. Holding K.S.C.)	Ahmadi	NA
Cement:				
Clinker		Kuwait Cement Co. K.S.C. (Kuwait Investment Authority, 32%, and National Industries Group, 22.4%)	Kiln at Shuaiba	1,800,000
Do.		ACICO Industries Co. K.S.C.	do.	1,000,000
Gray portland		Kuwait Cement Co. K.S.C. (Kuwait Investment Authority, 32%, and National Industries Group, 22.4%)	Mill at Shuaiba	2,200,000
Do.		ACICO Industries Co. K.S.C.	do.	1,000,000
Do.		Hilal Cement Co. K.S.C.C. (Suez Cement Co., 51%)	Sulaibiya industrial area	(1)
Do.		Kuwait Portland Cement Co. K.S.C.C.	Shuwaikh	(1)
White		Kuwait Cement Co. K.S.C. (Kuwait Investment Authority, 32%, and National Industries Group, 22.4%)	Kiln and mill at Shuaiba	170,000
Iron and steel, steel:				
Crude		Al Oula Steel Manufacturing Co. K.S.C.	Shuaiba	500,000
Do.		United Steel Industrial Co. K.S.C.C. (Joint venture of local investors and Ahwaz Steel Commercial and Technical Services GmbH)	Melt shop at Shuaiba	1,000,000
Rolled:				
Bar and rod		do.	Rolling mill at Shuaiba	1,200,000
Do.		Kuwait Reinforcement Steel Manufacturing Co. (Ali Al-Sarraf International Group Co.)	do.	400,000
Pipes		Kuwait Pipes Industries and Oil Services Co. K.S.C.	Pipe mill at Sulaibiya industrial area	120,000
Do.		do.	Pipe mill at Shuwaikh	65,000
Liquefied natural gas	million cubic meters per day	Kuwait National Petroleum Co. K.S.C. (KNPC) [Kuwait Petroleum Corp. (KPC), 100%]	Mina Al-Ahmadi GasPort® import facility, Mina Al-Ahmadi	17 [2]
Natural gas	million cubic meters	Various[3]	Various fields	17,000
Natural gas liquids		Kuwait Oil Co. K.S.C. (KOC) [Kuwait Petroleum Corp. (KPC), 100%]	do.	65,000 [4]
Nitrogen:				
Ammonia		Petrochemical Industries Co. K.S.C. [Kuwait Petroleum Corp. (KPC), 100%]	Plant B, Shuaiba	657,000
Urea		do.	Plants A and B, Shuaiba	1,000,000
Petroleum:				
Coke, calcined		do.	Shuaiba	350,000
Crude	42-gallon barrels per day	Kuwait Oil Co. K.S.C. (KOC) [Kuwait Petroleum Corp. (KPC), 100%]	Southern and eastern fields (Burgan, Khasman, and Madina fields)	1,350,000
Do.	do.	Al-Khafji Joint Operations (Kuwait Gulf Oil Co., 50%, and Aramco Gulf Operations Co., 50%)	Khafji field, offshore Partitioned Neutral Zone	600,000
Do.	do.	Kuwait Oil Co. K.S.C. (KOC) [Kuwait Petroleum Corp. (KPC), 100%]	Northern fields (Abdali, Bahra, Ratqa, Matraba, Raudhatain, and Sabiya fields)	559,000
Do.	do.	do.	Western fields (Abdaliya, Kra' Al-Mero, Managish, and Umm Gudair fields)	427,000
Do.	do.	do.	South Fuwaris and South Umm Gudair fields, onshore Partitioned Neutral Zone	80,000

See footnotes at end of the table.

TABLE 2—Continued
KUWAIT: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum—Continued:				
Crude—Continued	42-gallon barrels per day	Kuwait Oil Co. K.S.C. (KOC) [Kuwait Petroleum Corp. (KPC), 100%] and Saudi Arabian Chevron Inc. (Chevron Corp., 100%)	Wafra field, onshore Partitioned Neutral Zone	80,000
Do.	do.	Kuwait Gulf Oil Co. [Kuwait Petroleum Corp. (KPC), 100%]	Hout field, offshore Partitioned Neutral Zone	NA
Refined products	do.	Kuwait National Petroleum Co. K.S.C. (KNPC) [Kuwait Petroleum Corp. (KPC), 100%]	Mina Al-Ahmadi refinery	466,000
Do.	do.	do.	Mina Abdulla refinery	270,000
Do.	do.	do.	Shuaiba refinery	200,000
Salt		Al Kout Industrial Projects Co. K.S.S.C.	Shuaiba	NA
Sulfur		Kuwait National Petroleum Co. K.S.C. (KNPC) [Kuwait Petroleum Corp. (KPC), 100%]	Mina Abdulla, Mina Al-Ahmadi, and Shuaiba refineries	990,000
Do.		Kuwait Sulphuric Acid Co.	Safat	18,000

Do., do. Ditto. NA Not available.

[1]Marketed imported bulk cement.

[2]Seasonal operations, typically April through October.

[3]Some natural gas is produced and recovered from most crude oil production operations in Kuwait and the Partitioned Neutral Zone. Nonassociated natural gas was produced from the Sabriyah field.

[4]Includes refinery-produced liquefied petroleum gases.