

2009 Minerals Yearbook

KUWAIT

THE MINERAL INDUSTRY OF KUWAIT

By Philip M. Mobbs

Kuwait's economy was structured around the production and refining of hydrocarbons. The hydrocarbon sector accounted for about 93% of total exports and about 94% of Government revenue. According to BP p.l.c. (2010, p. 6), in 2009, Kuwaiti crude oil reserves accounted for about 7.6% of the world's proven crude oil reserves. The change from 8.1% of the world's proven crude oil reserves in 2008 was more a function of additional reserves that were attributed to Indonesia than a decrease in economic oil volumes in Kuwait (Central Bank of Kuwait, 2010, table A).

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 Co. to form partnerships with other companies for 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. Executive bylaw of law No. 2 of 2008 amends Kuwait income tax decree No. 3 of 1955 and reduces the income tax to 15% from 55%.

In 2009, total exports (free on board) were valued at \$50 billion,1 of which oil exports accounted for about \$47 billion. In 2008, the value of exports was about \$87 billion, of which oil exports accounted for about \$83 billion. The significant decrease in the international market price of crude oil through mid-year accounted for a significant proportion of the 38% decrease in the value of Kuwaiti exports in 2009 compared with that of 2008 (in terms of dinars; in dollar terms, the decrease was about 42%). The monthly average price of Kuwaiti oil exports in 2009 was about \$60.61 per barrel; the average price ranged from \$40.00 per barrel in January to \$76.54 per barrel in November. In 2008, the monthly average price of Kuwaiti oil exports was about \$90.54 per barrel; the average price had reached \$127.57 per barrel in July before dropping to \$36.47 per barrel in December. The total value of imports (which included cost, insurance, and freight paid to the point of destination) in 2009 was about \$18 billion compared with about \$25 billion in 2008 (Organization of the Petroleum Exporting Countries, 2009, 2010; Central Bank of Kuwait, 2010, table A).

Production

According to BP data, Kuwait produced 3.2% of the world's crude oil in 2009. Data on estimated mineral commodity production are in table 1. Cement, crude oil, crude and processed steel, and lime output volumes each were estimated to

have decreased by about 10% in 2009 compared with those of 2008 (BP p.l.c., 2010, p. 9).

Structure of the Mineral Industry

Kuwait Petroleum Corp., the Ministry of Oil, and the Supreme Petroleum Council are the Government organizations that are responsible for the petroleum sector in Kuwait. Kuwait Oil Co. K.S.C., which was a subsidiary of state-owned Kuwait Petroleum Corp. (KPC), managed the country's crude oil and natural gas operations. Kuwait Gulf Oil Co., which was a subsidiary of KPC, managed primarily offshore crude oil and natural gas operations in the Partitioned Neutral Zone, which also is known as the Divided Zone, between Kuwait and Saudi Arabia. Petrochemical Industries Co., which was a subsidiary of KPC, dominated the Kuwaiti fertilizer sector, and Kuwait National Petroleum Co., which was a subsidiary of KPC, 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.—Work on the controversial crude oil refinery at Al-Zour stopped in March when the Government cancelled the contracts. For the past few years, there has been significant friction between the Government and the National Assembly (Parliament) concerning economic issues, especially in the hydrocarbon sector. The Kuwaiti Parliament had criticized the process that Kuwait National Petroleum used for awarding contracts to construct the \$14.5 billion refinery project, which originally was estimated to cost \$6 billion when proposed in 2001. In October, the Government proposed to request a new round of bids for the construction of the 615,000-barrel-per-day-capacity crude oil refinery (Nield, 2008, b; Agence France-Presse, 2009; Kuwait Times, 2009).

Outlook

To meet environmental and proposed power demands, Kuwait's electrical power generation plants would require significantly more natural gas than Kuwait currently produces. The development of the nonassociated natural gas deposits would partially reduce the impediment that the limited supply of natural gas had posed for industrial diversification and expansion in Kuwait. Whereas a significant expansion of the Kuwaiti petroleum industry has been under consideration for the past decade (subject to the Organization of the Petroleum Exporting Countries crude oil production allocation), the

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¹Where necessary, values have been converted from Kuwaiti dinars (KD) to U.S. dollars (US\$) at the average rate of KD0.288=US\$1.00 for 2009 and KD0.269=US\$1.00 for 2008.

differences in political opinion within the country concerning the future of Kuwait's economy will likely need to be resolved before the expansion of the petroleum sector can continue.

References Cited

Agence France-Presse, 2009, Kuwait to revive scrapped refinery project— Minister: Agence France-Presse, October 18. (Accessed November 6, 2009, at http://www,zawya.com/story.cfm/sidANA20091018T170353ZHLU05/Kuwait To Revive Scrapped Refinery Project.)

BP p.l.c., 2010, BP statistical review of world energy: London, United Kingdom, BP p.l.c., June, 45 p.

Central Bank of Kuwait, 2010, Quarterly statistical bulletin—January-March 2010: Central Bank of Kuwait. (Accessed June 22, 2010, at http://www.cbk.gov.kw/cbkweb/servlet/cbgmain?Action=qbullet.)

Kuwait Times, 2009, Kuwait scraps controversial Zour refinery project: Kuwait Times, March 21. (Accessed November 4, 2009, at http://www.kuwaittimes.new/read_news.php?newsid=MTAyPDU4ODE3NA==.)

Nield, Richard, 2008a, Contract row stalls energy plans: MEED, v. 52, no. 43, October 24, p. 53-55.

Nield, Richard, 2008b, First steps on the road to reform: MEED, v. 52, no. 43, October 24, p. 44-45.

Organization of the Petroleum Exporting Countries, 2009, Table 1—OPEC reference basket crude oil prices—2007-2009: Vienna, Austria, OPEC bulletin, January, p. 82.

Organization of the Petroleum Exporting Countries, 2010, Table 1—OPEC reference basket crude oil prices—2008-2010: Vienna, Austria, OPEC bulletin, January, p. 102.

 $\label{table 1} \textbf{KUWAIT: ESTIMATED PRODUCTION OF MINERAL COMMODITIES}^{1,2}$

(Metric tons unless otherwise specified)

Commodity	3	2005	2006	2007	2008	2009
Cement		2,145,000 4	2,200,000 4	2,200,000	2,200,000	2,000,000
Iron and steel:						
Crude		450,000	500,000	500,000	500,000	450,000
Rolled-steel bar		480,000	680,000	680,000	680,000	600,000
Lime, hydrated and quicklime		49,800 4	50,000 4	50,000	50,000	45,000
Natural gas: ⁵						
Gross	million cubic meters	14,200	14,500	14,000	14,800	14,500
Dry	do.	12,200	12,500	12,100	12,800	12,500
Nitrogen:						
N content of ammonia		466,570 4	495,000	485,000	485,000	470,000
N content of urea		365,350 4	428,000	430,000	430,000	420,000
Petroleum:						
	thousand 42-gallon barrels	939,276 4	960,000	940,000	990,000	880,000
Natural gas liquids	do.	37,887 4	40,000	38,000	44,000	44,000
and liquefied petroleum gasese						
Refinery products:						
Gasoline, motor ⁶	do.	77,000	80,000	76,000	80,000	80,000
Kerosene	do.	59,054 4	61,000	61,000	65,000	65,000
Distillate fuel oil	do.	98,000	102,000	96,000	96,000	96,000
Residual fuel oil	do.	72,000	67,000	75,000	69,000	69,000
Other ⁷	do.	17,000	20,000	19,000	19,000	19,000
Total	do.	323,000	330,000	327,000	329,000	329,000
Salt		8,100 4	13,200 4	14,000	14,000	14,000
Sulfur:						
Elemental, petroleum byproduct		836,000 r	742,000 r	830,000 r	830,000 r	830,000
Sulfuric acid		18,000	18,000	18,000	18,000	17,000

Revised. 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 21, 2010.

³In addition to commodities listed, secondary aluminum, chlorine, clays, petroleum coke, glass, methanol, steel concrete-reinforcing bar, and sand and gravel were produced, but available information is inadequate to make reliable estimates of output.

⁴Reported figure.

⁵Includes Kuwait's share of production from the Partitioned Neutral Zone.

⁶Includes naphtha.

⁷Includes bitumen, coke, liquefied petroleum gases, and propylene.

$\label{eq:table 2} \text{KUWAIT: STRUCTURE OF THE MINERAL INDUSTRY IN 2009}$

(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:		3			
Clinker		Kuwait Cement Co. K.S.C. (Kuwait Investment Authority, 32%, and National Industries Group, 22.4%)	Kilns at Shuaiba	1,800,000	
Grey portland		do.	Mills at Shuaiba	2,200,000	
Do.		Hilal Cement Co. K.S.C.C. (Suez Cement Co., 51%)	Sulaibiya industrial area	(1)	
Do.		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.	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	800,000	
Rolled:					
Bar and rod		do.	Rolling mill at Shuaiba	500,000	
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	
Natural gas	million cubic meters	Various ³	Various fields	16,000	
Natural gas liquids		Kuwait Oil Co. K.S.C. [Kuwait Petroleum Corp. (KPC), 100%]	do.	45,000	
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	639,000	
Petroleum:					
Coke, calcined		do.	Shuaiba	350,000	
Crude	42-gallon barrels	Kuwait Oil Co. K.S.C.	Southern and eastern fields (Burgan,	1,350,000	
	per day	[Kuwait Petroleum Corp. (KPC), 100%]	Khasman, and Madina fields)	•	
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. [Kuwait Petroleum	Northern fields (Abdali, Bahra, Ratqa,	559,000	
		Corp. (KPC), 100%]	Matraba, Raudhatain, and Sabiya fields)		
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	
Do.	do.	Kuwait Oil Co. K.S.C. [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. [Kuwait Petroleum Corp. (KPC), 100%]	Mina Al-Ahmadi refinery	452,000	
Do.	do.	do.	Mina Abdulla refinery	270,000	
Do.	do.	do.	Shuaiba refinery	198,000	

See footnotes at end of the table.

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TABLE 2—Continued KUWAIT: STRUCTURE OF THE MINERAL INDUSTRY IN 2009

(Metric tons unless otherwise specified)

		Major operating companies		Annual
	Commodity	and major equity owners	Location of main facilities	capacity
Salt		Al Kout Industrial Projects Co.	Shuaiba	NA
Sulfur		Kuwait National Petroleum Co. K.S.C.	Mina Abdulla, Mina Al-Ahmadi,	NA
		[Kuwait Petroleum Corp. (KPC), 100%]	and Shuaiba refineries	
Do.		Kuwait Sulphuric Acid Co.	Safat	18,000

Do., do. Ditto. NA Not available.

¹Marketed imported bulk cement.

²Nominal design capacity. Since 2006, actual production has exceeded design capacity.

³Some 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.

⁴Includes refinery-produced liquefied petroleum gases.