

THE MINERAL INDUSTRY OF KUWAIT

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Kuwait's economy revolved around the production and refining of hydrocarbons, which contributed more than 50% of Kuwait's gross domestic product (GDP) at current prices, accounted for about 91% of Government revenue, and employed about 3% of the nation's population. The GDP at constant prices increased by 7.2% in 2004 compared with 9.7% in 2003. Based on purchasing power parity valuation, the GDP in 2004 was estimated to be \$36.13 billion. Of the world's leading crude oil producers, Kuwait ranked 12th. Among the natural gas producers, it ranked 37th (KPC World, 2004a; BP p.l.c., 2005, p. 6, 22; Central Bank of Kuwait, 2005¹; International Monetary Fund, 2005²).

Trade

A majority of exports and imports were transported by sea. In 2004, total exports (free on board) were valued at \$28.8 billion,² of which oil exports accounted for about \$26.7 billion and manufactured fertilizer exports accounted for \$120 million. In 2003, the revised value of total exports was \$20.7 billion, of which oil exports accounted for about \$19 billion and manufactured fertilizer exports accounted for \$106 million. Total imports (cost, insurance, and freight paid to point of destination) in 2004 were estimated to be \$12 billion compared with \$11 billion in 2003 (Central Bank of Kuwait, 2005³).

Commodity Review

Industrial Minerals

Salt.—Ahli Industrial Projects Co. completed a plant to purify imported salt. Output would supplement production of its marine salt facility at Shuaiba. Produced salt was used primarily to produce chlorine, sodium hydroxide, and sodium hypochlorite.

Sulfur.—Kuwait National Petroleum Co. K.S.C. (KNPC) installed two new sulfur extraction units at the Mina Abdulla crude oil refinery.

Mineral Fuels

Coke.—In 2004, negotiations continued regarding the construction of a 350,000-metric-ton-per-year (t/yr)-capacity calcined coke plant. Petroleum Coke Industries Corp. planned to have the \$130-million to \$150-million plant in operation by

2007. KNPC, which operated a 600,000-t/yr-capacity petroleum coke plant at its Mina Abdulla refinery, was to provide the green petroleum coke feedstock to the calcine plant (KPC World, 2004b; Kuwait National Petroleum Co. K.S.C., undated⁴).

Natural Gas.—Domestic Kuwaiti natural gas production was insufficient to meet the demand of the industrial and power sectors, and output volumes varied because Kuwaiti gas production was associated with crude oil production that was subject to OPEC production quotas. In 2004, the Ministry of Energy continued negotiations to import natural gas, and a contract to import about 991,000 cubic meters per day from Iraq by October 2005 was signed. The initial import of more than 8 million cubic meters per day of natural gas from Iran, which originally was scheduled to begin in 2005, was rescheduled to begin in 2007. Negotiations continued for an offshore natural gas pipeline that would transport 8 billion to 15 billion cubic meters per year of natural gas from Qatar. Because of the insufficient supply of gas, the Kuwait Government delayed its planned program (originally scheduled to start in 2005) to substitute imported natural gas for the fuel oil that fired the country's powerplants (Petroleum Economist, 2003; Iran Daily, 2005; Ministry of Oil, 2004⁵).

Oil.—Parliament continued to discuss Project Kuwait, which was a proposed \$7 billion project to expand production by foreign oil companies at five oilfields in northern Kuwait to about 900,000 barrels per day (bbl/d) from 450,000 bbl/d. Because the Kuwaiti constitution prohibited foreign ownership of Kuwaiti mineral resources, the proposed Project Kuwait development was to be performed by international oil companies under service contracts that would allow ownership of the oil resources to remain under Government control. Kuwait Oil Co., which was a subsidiary of Kuwait Petroleum Corp., also proposed a new strategic program to produce an additional 900,000 bbl/d of heavy crude oil by 2020 and to increase natural gas exploration activity in Kuwait (Oster, 2003⁶; Platts, 2004⁷; Fardan, 2005⁸).

KNPC, which was a subsidiary of Kuwait Petroleum Corp., continued preparations for a new refinery at Shuaiba. The 450,000 bbl/d refinery was expected to cost \$1 billion. In addition to the new sulfur extraction units at the Mina Abdulla refinery, KNPC planned additional work on the company's older refineries to facilitate the production of low- and ultra-low-sulfur fuels from Kuwaiti crude oil, which was in the medium- to high-sulfur range. Because of the mandated reduction of the sulfur content of automotive fuels in Japan in 2004 and the similar reduction scheduled to take place in Korea by 2006, Asian importers of Kuwaiti crude oil were being forced to upgrade their domestic petroleum refineries to produce low-sulfur fuels (KPC World, 2005; Middle East Economic Digest, 2005; Platts, 2005⁹).

¹References that include a section mark (§) are found in the Internet References Cited section.

²Where necessary, values have been converted from Kuwaiti dinars (KD) to U.S. dollars (US\$) at the rate of KD0.294=US\$1.00 for 2004 and KD0.298=US\$1.00 for 2003.

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Major Source of Information

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TABLE 1
KUWAIT: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2000	2001	2002 ^c	2003 ^c	2004 ^c
Cement	1,187,000	920,700	1,584,000	1,600,000	1,600,000
Lime, hydrated and quicklime ^c	40,000	40,000	40,000	40,000	40,000
Natural gas: ^{c,3}					
Gross million cubic meters	11,000	10,900	9,900	10,000	11,000
Dry do.	9,600	9,500	8,700	8,800	9,600
Natural gas liquids ^c thousand 42-gallon barrels	41,100	44,300	40,000	40,000	45,000
Nitrogen:					
N content of ammonia	409,500	400,000	414,400 ⁴	444,400 ⁴	413,400 ⁴
N content of urea	287,600	290,000	320,000	330,000	320,000
Petroleum:					
Crude ³ thousand 42-gallon barrels	766,000	745,000	680,000	817,000	880,000
Refinery products: ^c					
Liquefied petroleum gases do.	2,997 ⁴	3,000	3,000	3,000	3,000
Gasoline, motor do.	11,757 ⁴	10,000	15,000	15,000	15,000
Kerosene do.	45,049 ⁴	30,000	45,000 ^r	45,000 ^r	45,000
Distillate fuel oil do.	83,981 ⁴	70,000	85,000 ^r	85,000 ^r	85,000
Residual fuel oil do.	57,116 ⁴	60,000	75,000 ^r	75,000 ^r	75,000
Other do.	71,769 ⁴	70,000	80,000	86,000 ^r	86,000
Total do.	269,672 ⁴	240,000	300,000 ^r	306,000 ^r	306,000
Salt ^c	100,000	100,000	100,000	100,000	100,000
Sulfur: ^c					
Elemental, petroleum byproduct	512,000	524,000	634,000	714,000	730,000
Sulfuric acid	100,000	150,000	150,000	150,000	150,000

^cEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised.

¹Table includes data available through June 20, 2005.

²In addition to commodities listed, caustic soda, chlorine, clays, clay products, petroleum coke, and sand and gravel were produced, but available information is inadequate to make estimates of output.

³Includes Kuwait's share of production from the Partitioned Neutral Zone.

⁴Reported figure.