



2005 Minerals Yearbook

BAHRAIN

THE MINERAL INDUSTRY OF BAHRAIN

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The island Kingdom of Bahrain had a total land area of about 665 square kilometers and supported a population of about 725,000 on five main islands located in the Gulf of Bahrain between Qatar and Saudi Arabia. In 2005, the gross domestic product (GDP) based on purchasing power parity was estimated to be about \$15.8 billion¹ and the GDP per capita based on purchasing power parity was estimated to be about \$19,800. Revenue associated with the production of crude oil accounted for a significant segment of the economy. The aluminum sector also figured prominently in the country's mineral economy (Bahrain Monetary Agency, 2006, p. 30; International Monetary Fund, 2006²).

Of the country's total merchandise export earnings in 2005 of about 10 billion, Bahraini exports of crude oil and refined petroleum products were valued at about \$7.8 billion compared with about \$5.5 billion in 2004. In 2005, total national merchandise imports were valued at about \$7.6 billion (Bahrain Monetary Agency, 2006, p. 31).

Commodity Review

Metals

Aluminum.—In 2005, Aluminium Bahrain B.S.C.'s (Alba) inaugurated its fifth aluminum potline, which had a design capacity of 307,000 metric tons per year (t/yr). With the startup of potline 5, Alba's facilities at Sitra had a total capacity of 837,000 t/yr (Mining Journal, 2005).

Mineral Fuels and Related Materials

Petroleum, Refined Petroleum Products, and Sulfur.—In 2005, Bahrain Petroleum Co. B.S.C. (Closed) (Bapco)

completed 27 shallow oilwells in the Bahrain Field and, in the deeper Khuff reservoir, 5 natural gas wells. The PTT Exploration and Production Co. of Thailand agreed to undertake a 1-year geologic and geophysical study of offshore oil Blocks 1 and 2 for Bapco. Bapco completed a \$3.4 million liquefied petroleum gas (LPG) project, which redirected natural gas that previously had been flared or used as refinery fuel to Bahrain Natural Gas Co. B.S.C., which recovered butane, naphtha, and propane valued at more than \$11 million from the gas stream. Construction continued on the \$658 million low-sulfur diesel production project, which would reduce the sulfur content of Bapco's diesel production to two streams of 10 parts per million (ppm) and 50 ppm, respectively, compared with recent diesel output, which contained about 7,000 ppm sulfur in 2004. Bapco continued with the development of its \$140 million refinery gas desulfurization (RGD) project, which would reduce hydrogen sulfide in the refinery's wastewater discharge and sulfur dioxide emissions from the refinery's stacks. The RGD project included plans to install a \$37 million 225-metric-ton-per-day-capacity sulfur recovery unit. Bapco and Neste Oil Corp. of Finland continued negotiations on the construction of a \$175 million 400,000-t/yr-capacity sulfur-free lubricant base oil facility [Bahrain Petroleum Co. B.S.C. (Closed), 2006, p. 9-10; Bahrain Tribune, 2004³].

References Cited

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Bahrain Petroleum Co. B.S.C. (Closed), 2006, Annual review 2005: Awali, Bahrain, Bahrain Petroleum Co. B.S.C. (Closed), 21 p.
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Internet References Cited

- Bahrain Tribune, 2004 (January 11), Bapco signs LSD plant deal, accessed February 23, 2004, at URL http://www.menafn.com/qn_news_story_s.asp?StoryId=38773.
International Monetary Fund, 2006 (April), Bahrain, World Economic Outlook Database, accessed April 19, 2006, via URL <http://www.imf.org/external/pubs/ft/weo/2006/01/data/index.htm>.

¹Where necessary, values have been converted from Bahraini dinars (BhD) to U.S. dollars (US\$) at the rate of BhD0.377=US\$1.00.

²References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1
BAHRAIN: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2001	2002	2003	2004	2005
Aluminum, smelter output, primary metal	522,749	518,924	531,991	531,626	750,710
Cement	88,700	66,986	129,256	153,483	191,400
Gas, natural:					
Gross million cubic meters	12,018	12,154	12,305	12,130	13,320
Dry do.	9,285	9,429	9,622	9,194	10,278
Methanol	412,122	405,763	370,008	398,406	375,609
Natural gas plant liquids:					
Propane thousand 42-gallon barrels	1,058	1,099	1,021	1,032	1,065
Butane do.	968	961	922	981	1,015
Naphtha do.	1,598	1,610	1,647	1,786	1,783
Nitrogen, N content of ammonia	372,000	377,400	311,900	311,300	329,745
Petroleum:					
Crude ³ thousand 42-gallon barrels	13,656	13,800	13,720	13,647	13,348
Refinery products:					
Liquefied petroleum gas do.	353	350 ^e	350 ^e	425 ^r	452
Gasoline do.	6,182	6,500 ^e	7,000 ^e	6,439 ^r	7,309
Jet fuel do.	15,497	16,000 ^e	16,000 ^e	17,268 ^r	19,956
Kerosene do.	2,777	3,000 ^e	5,000 ^e	2,436 ^r	1,101
Distillate fuel oil do.	17,188	18,000 ^e	20,000	18,210 ^r	19,278
Residual fuel oil ^c do.	25,000	26,000	29,000	28,900	29,000
Other ^e do.	20,800	21,300	15,000	19,000	20,600
Total do.	87,765	91,122	92,350	92,669	97,716
Sulfur	67,480	67,381	60,455 ^r	71,258	71,963

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

¹Table includes data available through July 12, 2006.

²In addition, iron ore was pelleted and exported for use by direct-reduction plants. Pellets were produced from imported iron ore. Granular urea has been produced from locally produced ammonia since 1998.

³Does not include production from the Abu Saafa Field.