



2006 Minerals Yearbook

OMAN

THE MINERAL INDUSTRY OF OMAN

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The economy of the Sultanate of Oman was based on the production and processing of hydrocarbons. Oman was the seventh ranked crude oil producer in the Middle East and accounted for about 0.9% of total world crude oil production (BP p.l.c., 2007, p. 8).

In 2006, total merchandise exports were valued at more than \$21.5 billion, of which crude oil accounted for \$14.3 billion; liquefied natural gas, \$3 billion; base metals and articles manufactured from base metals, \$320 million; refined petroleum products, about \$123 million; and other mineral products, about \$560 million. The value of total recorded imports was \$11 billion, of which mineral fuels accounted for \$361 million and crude minerals, \$319 million (Central Bank of Oman, 2007, p. 102, 105, 108).

Minerals in the National Economy

The Government's potential loss of revenue from the 5% decline in crude oil production in 2006 was offset by the average price received for Omani oil, which increased to \$61.69¹ per barrel compared with \$50.26 per barrel in 2005. Total Government revenues were \$13 billion in 2006; revenue from hydrocarbons increased to more than \$9.9 billion, of which crude oil accounted for \$8.4 billion, and natural gas, \$1.5 billion (Central Bank of Oman, 2007, p. 42, 51).

Production

Notable increases in Omani mineral production in 2006 compared with that of 2005 included that of chromite, which increased by 97%; silver, by 80%; ammonia, by an estimated 61%; sulfur, by an estimated 33%; and natural gas, by 24%. Gold production declined by 63% in 2006 compared with 2005; and crude petroleum, by 5%. The near doubling of national chromite output was attributed to the opening of new chromite pits by Gulf Mining and Materials Co. The increase in silver production and the decrease in gold production were attributed to changes in output of the Sohar and the Yankul Mines of Oman Mining Co. L.L.C. A full year of production at the plant of Oman India Fertilizer Co. S.A.O.C., which began production in July 2005, accounted for the estimated increase in ammonia and urea output. The increased sulfur production was attributed to the estimated output from the new Sohar oil refinery, and the drop in crude oil output was a continuation of the long-term decline of production from older oilfields (Central Bank of Oman, 2007, p. 44, 46; Gulf Mining and Materials Co., undated).

¹Where necessary, values have been converted from Omani rials (RO) to U.S. dollars (US\$) at the average rate of RO0.386=US\$1.00.

Structure of the Mineral Industry

The Ministry of Commerce and Industry regulated the mining sector in accordance with the Mining Law, Royal Decree No. 27/2003. Private mineral sector operations that were started in 2006 included the Wadi Mahram-area chromite mines and the Barka-area construction material (laterite) mine of Gulf Mining and Materials Co.

The Ministry of Oil and Gas managed the petroleum sector. Petroleum Development Oman (PDO), which was 60% state-owned, produced about 90% of the country's crude oil. In 2006, state-owned Sohar Refinery Co. L.L.C., which had been designed to export most of its output, began refining petroleum products, and the Qalhat LNG S.A.O.C. plant started production of liquefied natural gas (LNG).

Outlook

Several significant mineral-sector projects are underway in Oman. The completion of the construction of the 350,000-metric-ton-per-year (t/yr)-capacity Sohar Aluminum smelter is expected in 2008. Startup of National Mining Co. L.L.C.'s 20,000-t/yr-capacity Lasail concentrator, which would process copper ore from the Ajib copper mine, was expected in 2007. Initial output from the 1.5-million-metric-ton-per-year (Mt/yr)-capacity direct-reduced iron plant and the 720,000-t/yr-capacity steel plant at Sohar, which is owned by Shadeed Iron & Steel L.L.C. (a subsidiary of Al-Ghaith Holding PJSC of the United Arab Emirates), is expected in 2008. Companhia Vale do Rio Doce of Brazil is evaluating the construction of a 7.5-Mt/yr-capacity iron-ore-pellet plant at Sohar (Middle East Economic Digest, 2006c, d; Midrex Technologies, Inc., 2006; National Mining Co. L.L.C., 2006).

The planned commissioning of Raysut Cement Co.'s production line IV in 2007 would increase the plant's nameplate cement production capacity to about 1.8 Mt/yr, although in recent years, the plant has produced at 120% to 130% of design capacity. In 2007, commercial operations are expected to begin at Sohar International Urea and Chemical Industries S.A.O.C.'s 2,000-metric-ton-per-day (t/d) ammonia and 3,500-t/d granular urea plant at Sohar and at Oman Methanol Co.'s 3,000-t/d-capacity methanol plant. PVAXX Ltd. of Bermuda planned to use regionally produced silica sand and polyethylene at its proposed shipping pallet plant at Sohar (KHD Humboldt Wedag, 2006; Middle East Economic Digest, 2006b; Omani Center for Investment Promotion and Export Development, The, 2006).

Several enhanced-oil-recovery projects are underway or under evaluation. PDO's Harweel project's miscible gas flood at the Zalzala Field, the polymer-flood program at the Marmul Field, and the steam injection programs at the Fahud and the Qarn Alam Fields are designed to increase crude oil production from the oilfields, as is Occidental Mukhaizna L.L.C.'s steam flood of the Mukhaizna Field.

The crude oil refining capacity expansion of the Oman Refinery Co. L.L.C. to 106,000 bbl/d from 85,000 bbl/d is expected to be completed by 2007. The Government also proposed to build a 250,000-barrel-per-day-capacity crude oil refinery at Duqm (Middle East Economic Digest, 2006a; Oman Refinery Co. L.L.C., 2007).

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TABLE 1
 OMAN: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2002	2003	2004	2005	2006 ^P
Cement, hydraulic ^c	1,700,000	2,100,000	2,500,000	2,600,000 ^r	2,600,000
Chromium, gross weight	27,444	13,800 ^r	18,575	34,000 ^r	67,000
Copper, metal:					
Smelter	25,000	18,000	16,000 ^r	25,000	25,000 ^e
Refinery	24,000	17,040 ^r	15,090 ^r	24,543 ^r	24,500 ^e
Gas, natural:					
Gross million cubic meters	22,366	24,128	24,150	23,998	29,783
Dry ^c do.	14,800	17,000	17,000	17,390 ^{r,3}	21,754 ³
Gold kilograms	188	31 ^r	211 ^r	384 ^r	144
Gypsum	55,722	181,900 ^r	103,000 ^r	133,100 ^r	130,000
Iron and steel, crude steel ^c	60,000	80,000	84,000 ^r	84,000 ^r	84,000
Natural gas liquids ^c thousand 42-gallon barrels	6,000	6,000	6,000	6,000	7,000
Nitrogen:					
N content of ammonia	--	--	--	620,000	1,000,000
N content of urea	--	--	--	320,000	830,000
Petroleum:					
Crude and condensate thousand 42-gallon barrels	328,000 ^e	300,000 ^e	285,385	282,616	269,242
Refinery products: ⁴					
Liquefied petroleum gas do.	545 ^e	550 ^e	473	580	630
Gasoline do.	5,428	5,400 ^e	5,215	5,436	5,078
Jet fuel and kerosene do.	2,008	2,000 ^e	1,407	1,770	2,339
Distillate fuel oil do.	6,658	6,700 ^e	6,442	7,089	6,750
Residual fuel oil do.	14,942	15,000 ^e	14,247	15,445	14,947
Other do.	1,048	1,000 ^e	1,162	1,253	1,283
Total do.	30,629	30,700 ^e	28,946	31,573	31,027
Salt	14,410	12,300 ^r	12,400 ^r	10,900 ^r	11,000
Sand and gravel ^c	21,736,414 ³	22,000,000	23,000,000	24,000,000	25,000,000
Silver kilograms	38	9 ^r	89 ^r	122 ^r	220
Stone:					
Marble	135,930 ³	146,600 ^r	163,800 ^r	220,900 ^r	220,000
Other ^c	3,182,522 ³	3,200,000	3,500,000	3,600,000	3,600,000
Sulfur ^c	30,000	30,000	30,000	30,000	40,000

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

¹Table includes data available through October 18, 2007.

²In addition to the commodities listed, chlorine products, clay for bricks and tile, and laterite for construction were produced, but available information is inadequate to make estimates of output.

³Reported figure.

⁴Official production data does not include production from the Sohar refinery, which began operations in 2006.

TABLE 2
OMAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement		Oman Cement Co. S.A.O.G.	Kilns and mills at Rusayl	1,200,000
Do.		Raysut Cement Co.	Kilns and mills at Salalah	1,100,000
Chromite		Oman Chromite Co. S.A.O.G.	Mines near Sohar	29,000
Do.		Gulf Mining and Materials Co.	Wadi Mahram area	NA
Copper				
Ore		National Mining Co. L.L.C. (MB Holding Co. L.L.C.)	Open pit mines at Ajib and Shinas	20,000
Refined metal		Oman Mining Co. L.L.C.	Lasail, near Sohar	25,000
Gold	kilograms	do.	Sohar and Yankul	400
Iron and Steel				
Crude steel		Modern Steel Mills L.L.C. (Oman International Development and Industrial Co. S.A.O.G.; Assarain Group of Companies, Dharamsey Group, and others)	Rusayl	84,000
Rolled steel products (rebar)		Sharq Sohar Steel Rolling Mills L.L.C.	Sohar	250,000
Do.		Hadid Majan L.L.C.	Bait Al Falaj	100,000
Rolled steel products (tubes)		Al Jazeera Tube Mills Co. S.A.O.G.	Sohar	NA
Marble		Companies that quarried marble included Al Ajmi Marble Co., Al Madinah Marble Co., Al Nasser Marble Co., Al Rushaidi Marble Co., Al Shanfri Marble Co., Al Zarabi Marble Co., International Marble, and Omani Marble Co.	Quarries primarily located in the Wilayat of Ibbi	NA
Natural gas	million cubic meters	Petroleum Development Oman L.L.C. [Government, 60%; Royal Dutch Shell p.l.c., 34%; Private Oil Holdings Oman Ltd., 4%; Partex (Oman) Corp., 2%]	Gasfields and oilfields with associated natural gas in the Kauther/Yibal, the Saih Niyahda, and the Saih Rawl clusters	27,000
Natural gas, liquefied		Oman Liquefied Natural Gas L.L.C. [Government, 51%; Royal Dutch Shell plc, 30%; Total S.A., 5.54%; Korea LNG, 5%, Mitsubishi Corp., 2.77%, Mitsui E&P Middle East B.V., 2.77%; Partex (Oman) Corp., 2%; Itochu Corp., 0.92%]	Two trains at Qalhat	6,600,000
Do.	do.	Qalhat Liquefied Natural Gas S.A.O.C. (Government, 55.84%; Oman Liquefied Natural Gas L.L.C., 36.8%; Union Fenosa S.A., 7.36%)	One train at Qalhat	3,300,000
Petroleum:				
Crude	barrels per day	Petroleum Development Oman L.L.C. [Government, 60%; Royal Dutch Shell p.l.c., 34%; Private Oil Holdings Oman Ltd., 4%; Partex (Oman) Corp., 2%]	About 100 oilfields in the Bahja, the Fahud, the Harweel, the Lekhwair, the Marmul, the Nimr, the Qarn Alam, and the Yibal clusters	900,000
Do.	do.	Oxy Oman, Inc (Occidental Petroleum Corp., 65%, and Mitsui E&P Middle East B.V., 35%)	Blocks 9 and 27, includes the Safah and Al Sunienah Fields	55,000
Do.	do.	Daleel Petroleum Co. L.L.C. (Mazoon Petrogas S.A.O.C., 50%, and Mazoon Petrogas B.V.I., 50%)	Block 5	16,000
Do.	do.	Occidental Mukhaizna, L.L.C. [Occidental Petroleum Corp., 45%; Oman Oil Corp. S.A.O.C., 20%; Shell Oman Trading Co. Ltd., 17%; Liwa Energy Ltd., 15%; Total Exploration and Production Oman, 2%; Partex (Oman) Corp., 1%]	Block 53, Mukhaizna Field	8,500
Do.	do.	Petrogas E&P L.L.C. (MB Holding Co. L.L.C., 100%)	Block 5	2,000
Do.	do.	Partnership of Indago Oman Ltd., 40% (operator); LG International Corp., 50%; Eagle Energy (Oman) Ltd., 10%	Block 8, Bukha Field	1,100

See footnotes at end of table.

TABLE 2--Continued
 OMAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum--Continued:				
Refined	million barrels per year	Sohar Refinery Co. L.L.C. (Ministry of Finance, 80%, and Oman Oil Co. S.A.O.C., 20%)	Sohar	41
Do.	do.	Oman Refinery Co. L.L.C. (Ministry of Oil and Gas of Oman, 99%)	Mina Al-Fahal	30 ¹
Salt, crude, industrial		Modern Salt Co. L.L.C.	Wilayat of Ibri	NA
Silver	kilograms	Oman Mining Co. L.L.C.	Sohar and Yankul	300

NA Not available.

¹Expansion project to increase processing capacity to 37,000,000 barrels per year (106,000 barrels per day) was expected to be completed in 2007.