

THE MINERAL INDUSTRY OF CYPRUS

By Philip M. Mobbs

The mineral industry of Cyprus¹ was dominated by the production of bentonite, cement, copper, refined petroleum products, sand and gravel, and stone. Other mineral commodities produced included common clay and gypsum for local use and gypsum, ocher, and umber for export. Additional mineral-based processing activity on Cyprus included an aluminum extrusion plant, bronze and iron foundries, and plaster plants. In northern Cyprus, the mineral industry was dominated by the production of construction aggregates and stone.

In 2003, Cyprus' nominal gross domestic product (GDP) was estimated to be \$12.8 billion² (International Monetary Fund, 2004§³). In 2002 (the last year for which data were available), the nominal GDP in northern Cyprus was \$941 million; mining and quarrying accounted for a minor segment of the GDP (about 0.3% in the north and the south) and the labor force (about 1% in the north and 0.2% in the south) (Deputy Prime Ministry and Ministry of Foreign Affairs, 2002a§). In 2003, the Republic of Cyprus' population was estimated to be about 776,000 and the Turkish Cypriot population was estimated to be about 210,000 (Deputy Prime Ministry and Ministry of Foreign Affairs, 2002b§).

The island had an area of 9,250 square kilometers (km²) of which 3,355 km² was in the Turkish Cypriot area (U.S. Central Intelligence Agency, 2004§). The United Nations promoted a unification plan to join the two states, which had been separated since 1974. Border crossing checkpoints between the north and south were opened in 2003. A referendum on unification was scheduled for early in 2004. In July 2003, the Republic of Cyprus ratified an Accession Treaty with the European Union and, regardless of the outcome of the unification referendum, was scheduled to become a member of the European Union (EU) on May 1, 2004.

Trade

In 2003, domestic exports [excluding exports to ships and aircraft (shipstores)] were valued at approximately \$208 million. Of this amount, exports of minerals and mineral products were valued at approximately \$10 million compared with 2002 when domestic exports (excluding shipstores) were valued at \$365 million and mineral and mineral product exports were valued at \$17 million. A significant segment of the decline of mineral exports in 2003 was associated with the drop in copper

production. Imports of mineral fuels for local consumption or refining were valued at about \$348 million in 2003 (Statistical Service of Cyprus, 2004§).

Commodity Review

Metals

Copper, Gold, and Zinc.—By midyear, Eastern Mediterranean Minerals Ltd. of Cyprus (EMM), which was a joint venture of Oxiana Europe Ltd. of the Channel Islands (60%) and Hellenic Mining Co. of Cyprus (40%), had drilled 10 holes (a total of 1,660 meters) on the Kaledhra, the Kallikadhes, the Kreadis West, and the Petra East prospects in the Troodos Complex. In September 2003, Oxiana Europe increased its interest in the EMM joint venture to 95%; Hellenic Mining retained a 5% interest in the joint venture. Results from the Kaledhra and the Kreadis West were sufficient to end exploration on the prospects. The Kallikadhes prospect was intriguing enough for the company to drill an additional five holes late in the year; EMM, however, reported that results of the followup drill program were disappointing. The company also continued to reprocess historical geophysical data, especially in the Kalavassos and the Klirou districts, and contracted for the development of a geographic information systems database with the British Geological Survey. Additional drilling and geophysical surveys were planned for 2004 (Mining Journal, 2003; Oxiana Ltd., 2004, p. 24).

Industrial Minerals

Cement.—In October, Holcim (Liban) S.A.L. of Lebanon acquired Bogaz Endustri ve Madencilik, which operated a 150,000-metric-ton-per-year-capacity clinker grinding mill in northern Cyprus near Famagusta. Holcim reported that the plant delivered 125,000 metric tons of cement in 2002 (Holcim Ltd., 2003).

Mineral Fuels

Natural Gas and Petroleum.—In November 2003, the Electricity Authority of Cyprus, which planned to switch to burning natural gas instead of residual fuel oil by 2006, postponed the construction of a planned liquefied natural gas terminal. In June 2003, faced with the costs associated with the upgrade of the country's petroleum refinery at Larnaca to EU sulfur-free fuel standards, the Government announced its intention to cancel the planned upgrade, to close the country's petroleum refinery and associated sulfur recovery facilities in 2004, and to convert the refinery's tank farm to a fuel import and storage center until 2010 when the facilities would be scrapped.

¹Unless specifically stated, all data in this chapter are for the Republic of Cyprus in southern Cyprus because data related to the Turkish-controlled areas of northern Cyprus are sparse or unavailable.

²Where necessary, values have been converted from Cypriot pounds to U.S. dollars at the average rate of Cy,0.515=US\$1.00 for 2003 and Cy,0.6040=US\$1.00 for 2002 and from Turkish lira to U.S. dollars at the average rate of TL1,542,022=US\$1.00 for 2002.

³References that include a section mark (§) are found in the Internet References Cited section.

Outlook

In Cyprus, the value of ancient quarries as tourist attractions may eventually exceed the economic value of recovering the remaining ore and rock resources. Because of declining ore grades, Cypriot copper production from the Skouriotissa Mine has dropped. The lower ore grades and competition from lower cost imported copper could make continued operations economically unfeasible in the future. Cement demand is expected to soar in early 2004 propelled by the Government's proposed housing and road construction programs. Domestic and foreign demand for Cypriot industrial minerals, such as clay, gypsum, sand and gravel, and stone, is expected to remain strong. By mid-2004, the island's lack of hydroelectric potential and mineral fuels production will make Cyprus wholly dependent on imported coal, crude oil, and petroleum products.

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Major Sources of Information

Mines Service

1422 Nicosia, Cyprus
Telephone: +357-22309283
Fax: +357-22316872

Statistical Service of Cyprus

Michalakis Karaolis St.
1444 Nicosia, Cyprus
Telephone: +357-22602129
Fax: +357-22661313
E-mail: enquiries@cystat.mof.gov.cy

TABLE 1
CYPRUS: PRODUCTION OF MINERAL COMMODITIES^{1,2,3}

(Thousand metric tons unless otherwise specified)

Commodity	1999	2000	2001	2002	2003 ^p
Cement, hydraulic	1,157	1,398	1,369	1,438 ^r	1,637
Clays:					
Bentonite metric tons	138,853	167,500	126,600	128,400 ^r	144,859
Other:					
For brick and tile manufacture	350	285	300	350 ^r	350 ^e
For cement manufacture	360	450	440	480 ^r	550
Total	710	735	740	830 ^r	830 ^e
Copper, refined metric tons	5,004	5,197	5,176	3,695 ^r	2,552
Gypsum, crude ⁴ do.	181,546	260,000	250,000	295,000 ^r	300,000
Lime, hydrated do.	6,000	6,800	9,400	12,190 ^r	13,370
Petroleum refinery products: ⁵					
Liquefied petroleum gases thousand 42-gallon barrels	393	345	359	378	330
Gasoline do.	1,263	1,289	1,277	1,313	1,242
Kerosene and jet fuel do.	238	285	288	281	301
Distillate fuel oil do.	3,069	3,027	2,911	2,704	2,437
Residual fuel oil do.	3,292	3,274	3,156	2,914	2,411
Asphalt and bitumen do.	206	207	239	217	194
Other do.	22	16	19	17	--
Total do.	8,482	8,443	8,248	7,824	6,916
Stone, sand, gravel:					
Limestone, crushed (Havara)	2,000 ^e	1,800	1,500	2,000 ^r	1,000
Marble	2	2	2	2	2 ^e
Marl, for cement production	1,600	1,800	1,780	1,950 ^r	2,200
Sand and gravel ⁶	8,500	8,800	9,300	10,500 ^r	10,700
Building stone ⁷	63	80	55	80	103 ^e
Sulfur ^e metric tons	1,400	1,400	1,400	1,300 ^r	1,300 ^e
Umber do.	9,169	7,500	4,800 ^r	5,500 ^r	5,500

^eEstimated; estimated data are rounded to no more than three significant digits. ^pPreliminary. ^rRevised.

¹Table includes data available through July 16, 2004.

²Small quantities of the mineral pigments ocher and terra verte are mined intermittently. Mineral production data from the northern Turkish-occupied section of the country and production of secondary metals from scrap are not included in this table because available information is inadequate to make estimates of output.

³Sources of data include company annual reports, the Mines Service, and the Statistical Service of Cyprus.

⁴About 4,000 metric tons per year of gypsum was calcined.

⁵Petroleum refinery products are rounded to the nearest thousand barrels; may not add to totals shown.

⁶Includes crushed aggregate.

⁷Includes crude, semifinished, and worked stone.