

THE MINERAL INDUSTRY OF

CYPRUS

By Bernadette Michalski

The nation's mineral industry is focused on copper and an extensive range of nonmetallic minerals. The value of mining and quarrying products in 1997 was approximately \$128 million, more than two-thirds of which was attributed to the copper operations and the hydraulic cement industry. (*See table 1.*) The solvent extraction and electrowinning project at the Skouriotissa copper mine attained capacity levels by the close of 1997, its first full year of operation. The plant is designed to produce 8,000 metric tons per year (t/yr) of 99.999% copper cathode, replacing

a cementation operation. Virtually all production is exported. (*See table 2.*) The Hellenic Mining Co. holds 44% equity, Oxiana Resources NL of Australia 43.7%, Mid-East Mining 5%, Sterina Kimatiki 4.15%, and Hellenic Bank 3.15%. A feasibility study for expansion to 20,000 t/yr is under consideration. Other significant mineral production includes aggregate, cement, dimension stone, and umber. For more extensive coverage of the mineral industry of Cyprus, see the 1996 Minerals Yearbook, Volume III, International Review of Africa and the Middle East.

TABLE 1
CYPRUS: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Thousand metric tons unless otherwise specified)

Commodity	1993	1994	1995	1996	1997 e/
METALS					
Copper: 3/					
Gross weight metric tons	278	--	--	NA	NA
Cu content do.	103	--	--	1,499	3,900 4/
INDUSTRIAL MINERALS					
Cement, hydraulic	1,089	1,044	1,021	1,000	1,000
Clays:					
Bentonite metric tons	51,689 r/	50,441	71,773	70,927	48,076 4/
Other:					
For brick and tile manufacture	450	475	407	400 e/	450
For cement manufacture e/	350	375	350	350	350
Total	800	850	757	750	800
Gypsum:					
Crude metric tons	90,000	180,000	133,208	150,468	150,500
Calcined do.	3,000	4,000	4,000 e/	4,000 e/	4,000
Lime, hydrated do.	6,100	5,525	5,530	5,500 e/	5,500
Stone, sand, and gravel:					
Limestone, crushed (Havara)	3,000	3,000 e/	3,200	3,000 e/	3,000
Marble e/	50	50	50	50	50
Marl, for cement production	1,500	1,600	2,000	1,600 e/	1,600
Sand and gravel e/ 5/	6,000 4/	6,000	6,000	6,000	6,000
Building stone	100	1,436	974	800	800
Umber metric tons	6,000 e/	9,000 e/	5,415	4,604	5,000
MINERAL FUELS AND RELATED MATERIALS					
Petroleum refinery products:					
Liquefied petroleum gases thousand 42-gallon barrels	308	350	375 r/ 4/	375 r/ e/	375
Gasoline do.	799	900	900 r/ 4/	900 r/ e/	900
Kerosene and jet fuel do.	346	400	400 e/	400 e/	400
Distillate fuel oil do.	1,886	2,450	2,300 r/ 4/	2,300 r/ e/	2,300
Residual fuel oil do.	2,000	2,500 e/	2,500 r/ 4/	2,500 r/ e/	2,500
Other do.	208	200 e/	300 r/ 4/	300 r/ e/	300
Total do.	5,547	6,800	6,775 r/ 4/	6,775 r/ e/	6,775

e/ Estimated. r/ Revised. NA Not available.

1/ Table includes data available through April 30, 1998.

2/ Mineral production data from the northern Turkish-occupied section of the country are not included in this table because available information is inadequate to make reliable estimates of output levels.

3/ Hellenic Mining Co. ceased copper cementation operations from Skouriotissa Mine talings in 1993. Activity resumed in July 1996 when a solvent extraction-electrowinning plant, designed to produce 8,000 metric tons per year was commissioned.

4/ Reported figure.

5/ Includes crushed aggregate.

TABLE 2
CYPRUS: EXPORTS OF MINERAL COMMODITIES IN 1996 1/ 2/

(Metric tons unless otherwise specified)

Commodity	Total	Destinations	
		United States	Other (principal)
METALS			
Aluminum, metal including alloys:			
Scrap	72	--	United Kingdom 17; Mauritius 14; Ireland 13.
Unwrought	559	--	Netherlands 499; Germany 60.
Semimanufactures	408	--	United Kingdom 260; Ireland 52; Lebanon 51.
Copper, metal including alloys:			
Unwrought	1,492	--	United Kingdom 1,043; Greece 306; Italy 142.
Semimanufactures	value, thousands \$6	--	Poland \$4; Hong Kong \$1; Sudan \$1.
Gold, metal including alloys, unwrought and partly wrought	kilograms 8	--	United Arab Emirates 5; Yugoslavia 3.
Iron and steel, metal, semimanufactures:			
Flat-rolled products:			
Of iron or nonalloy steel:			
Not clad, plated, coated	6	--	Germany 2; Lebanon 2; United Arab Emirates 2.
Clad, plated, coated	92	--	Mainly to Israel.
Of alloy steel	3	--	All to Germany.
Bars, rods, angles, shapes, sections	25	--	Nigeria 18; Armenia 5; France 2.
Wire	897	--	United Kingdom 584; Ireland 192; Greece 77.
Tubes, pipes, fittings	136	--	United Arab Emirates 67; Lebanon 62; Greece 6.
Lead:			
Oxides	140	--	All to Kenya.
Metal including alloys:			
Scrap	317	--	All to Greece.
Semimanufactures	2	--	All to United Kingdom.
Zinc, blue powder 3/	43	--	All to Italy.
INDUSTRIAL MINERALS			
Abrasives, n.e.s.:			
Natural, corundum, emery, pumice, etc.	20	--	All to Israel.
Grinding and polishing wheels and stones	99	--	Yugoslavia 94; Greece 5.
Cement	529,407	--	Israel 280,409; Lebanon 243,551; Spain 5,297.
Clays, crude:			
Bentonite	31,397	--	United Kingdom 29,554; Denmark 1,226; Finland 559.
Unspecified	80	--	All to Egypt.
Fertilizer materials:			
Crude, n.e.s.	3	--	Thailand 2; Israel 1.
Manufactured:			
Nitrogenous	3	--	All to Lebanon.
Potassic	1	--	All to Jordan.
Unspecified and mixed	136	--	Romania 118; Israel 14; Syria 2.
Gypsum and plaster	150,921	--	Israel 113,303; Lebanon 36,038; Russia 1,580.
Precious and semiprecious stones other than diamond, natural	value, thousands \$131	--	All to Saudi Arabia.
Salt and brine	7	--	United Kingdom 2; unspecified countries 5.
Stone, sand and gravel:			
Dimension stone:			
Crude and partly worked	3,552	--	Israel 2,702; Italy 616; Greece 194.
Worked	72	--	Greece 20; Poland 20; Kuwait 17.
Gravel and crushed rock	7	--	All to Nigeria.
Sand other than metal-bearing	23	--	Greece 13; Russia 10.
Sulfur, elemental, crude including native and byproduct	72	--	All to Israel.
Vermiculite, perlite, chlorite	30	--	All to Egypt.
Other:			
Crude	4,646	2,957	United Kingdom 657; Egypt 188; Canada 163.
Precious metals, n.e.s., waste and sweepings	kilograms 2,850	--	All to United Kingdom.
MINERAL FUELS AND RELATED MATERIALS			
Asphalt and bitumen, natural	11	--	France 6; Ukraine 5.
Petroleum:			
Crude	1	--	All to Jordan.
Refinery products:			
Keresene and jet fuel	12,864	--	All to unspecified countries.
Distillate fuel oil	10,402	--	Do.

See footnotes at end of table.

TABLE 2--Continued
 CYPRUS: EXPORTS OF MINERAL COMMODITIES IN 1996 1/ 2/

(Metric tons unless otherwise specified)

Commodity	Total	Destinations	
		United States	Other (principal)
MINERAL FUELS AND RELATED MATERIALS--Continued			
Petroleum--Continued:			
Refinery products--Continued:			
Lubricants	90	--	Egypt 74; Jordan 16.
Residual fuel oil	63,603	--	Italy 22,222; unspecified countries 41,381.
Bituminous mixtures	1	--	All to Ukraine.

1/ Table prepared by Glenn J. Wallace.

2/ Excludes reexports.

3/ Includes zinc dust, flakes, powders.

Source: United Nations Statistical Office (microfiche).

TABLE 3
CYPRUS: IMPORTS OF MINERAL COMMODITIES IN 1996 1/

(Metric tons unless otherwise specified)

Commodity	Total	Sources	
		United States	Other (principal)
METALS			
Akaline-earth metals	value, thousands	\$1	-- All from United Kingdom.
Aluminum:			
Oxides and hydroxides		10	(2/) United Kingdom 8; Italy 2.
Metal including alloys:			
Scrap		22	-- Czech Republic 16; Denmark 6.
Unwrought		5,280	-- Greece 3,364; Canada 1,799; Germany 98.
Semimanufactures		2,802	16 Greece 1,862; Italy 299; United Kingdom 176.
Antimony, metal including alloys, all forms		1	-- Mainly from Lebanon.
Cadmium, metal including alloys, all forms	value, thousands	\$1	-- All from Italy.
Chromium:			
Oxides and hydroxides		39	-- Mainly from France.
Metal including alloys, all forms	value, thousands	\$1	-- All from Germany.
Cobalt:			
Oxides and hydroxides		1	-- Mainly from Italy.
Metal including alloys, all forms	value, thousands	\$6	-- Germany \$5; United Kingdom \$1.
Copper, metal including alloys:			
Unwrought	do.	\$664	\$4 Australia \$582; United Kingdom \$64; Italy \$11.
Semimanufactures		2,946	127 United Kingdom 1,255; Belgium-Luxembourg 448; Greece 385.
Gold:			
Waste and sweepings	kilograms	20	-- All from United Kingdom.
Metal including alloys, unwrought and partly wrought	do.	3,382	18 Germany 2,099; United Kingdom 868; Belgium-Luxembourg 241.
Iron and steel:			
Ore and concentrate, excluding roasted pyrite		62	-- United Kingdom 42; France 20.
Metal:			
Scrap		47	-- Lebanon 39; Sweden 8.
Pig iron, cast iron, related materials		790	-- Romania 741; United Kingdom 40; Italy 4.
Ferrous alloys:			
Ferromanganese		18	-- Norway 14; Russia 4.
Ferrosilicon	value, thousands	\$1	-- All from China.
Silicon metal 3/	do.	\$4	\$1 Mainly from Israel.
Unspecified	do.	\$1	-- All from Belgium-Luxembourg.
Steel, primary forms	do.	\$4	-- Germany \$1; Israel \$1; unspecified Asia \$2.
Semimanufactures:			
Flat-rolled products:			
Of iron or nonalloy steel:			
Not clad, plated, coated		20,637	39 Hungary 8,432; Russia 3,261; Slovakia 2,873.
Clad, plated, coated		16,999	-- Germany 3,875; Italy 3,401; Greece 3,332.
Of alloy steel		1,542	17 Germany 409; France 270; Italy 244.
Bars, rods, angles, shapes, sections		158,703	(2/) Moldova 36,935; Ukraine 31,191; Italy 30,654.
Rails and accessories		57	-- Greece 32; Netherlands 13; United Kingdom 11.
Wire		3,814	(2/) Belgium-Luxembourg 1,114; United Kingdom 689; South Africa 449.
Tubes, pipes, fittings		18,219	5 Egypt 7,602; United Kingdom 2,024; Greece 1,910.
Lead:			
Oxides		184	-- Mainly from United Kingdom.
Metal including alloys:			
Unwrought		2,463	-- United Kingdom 1,437; Greece 513; Israel 279.
Semimanufactures		290	(2/) Bulgaria 191; United Kingdom 40; Netherlands 26.
Magnesium, metal including alloys, semimanufactures		4	-- Mainly from Greece.
Manganese oxides		43	-- Germany 24; Brazil 16; United Kingdom 3.
Mercury	value, thousands	\$2	-- All from Sweden.
Nickel:			
Matte and speiss	do.	\$4	-- All from Israel.
Metal including alloys:			
Unwrought	do.	\$7	\$7
Semimanufactures		2	-- Mainly from Austria.
Platinum-group metals, including alloys, unwrought and partly wrought	value, thousands	\$188	\$46 Germany \$123; United Kingdom \$17; Italy \$2.

See footnotes at end of table.

TABLE 3--Continued
CYPRUS: IMPORTS OF MINERAL COMMODITIES IN 1996 1/

(Metric tons unless otherwise specified)

Commodity	Total	Sources	
		United States	Other (principal)
METALS--Continued			
Silver, metal including alloys, unwrought and partly wrought	value, thousands \$2,342	--	United Kingdom \$1,155; Germany \$772; Spain \$122.
Tin, metal including alloys:			
Unwrought	1	--	All from United Kingdom.
Semimanufactures	120	(2/)	Greece 61; United Kingdom 34; South Africa 21.
Titanium:			
Ore and concentrate	80	--	South Africa 40; Sri Lanka 40.
Oxides	367	204	United Kingdom 119; Germany 41; Canada 1.
Metal including alloys:			
Unwrought, including waste and scrap	8	--	Mainly from United Kingdom.
Semimanufactures	value, thousands \$3	--	Germany \$2; Italy \$1.
Tungsten, metal including alloys, semimanufactures	do. \$1	--	All from United Kingdom.
Zinc:			
Oxides	48	--	Germany 41; United Kingdom 6; Greece 1.
Blue powder 4/	1	--	All from Germany.
Metal including alloys:			
Unwrought	277	--	Russia 170; Netherlands 82; Spain 21.
Semimanufactures	4	--	Greece 3; Germany 1.
Zirconium ore and concentrate	10	--	All from Netherlands.
Other:			
Oxides and hydroxides	value, thousands \$5	--	Germany \$2; United Kingdom \$2; France \$1.
Metalloids 5/	1	--	All from China.
Precious metals, n.e.s., waste and sweepings	kilograms 8,360	200	Greece 8,070; United Kingdom 90.
INDUSTRIAL MINERALS			
Abrasives, n.e.s.:			
Natural, corundum, emery, pumice, etc.	384	5	Greece 371; India 8.
Artificial corundum	value, thousands \$2	--	Germany \$1; Switzerland \$1.
Grinding and polishing wheels and stones	224	(2/)	Italy 130; Germany 27; United Kingdom 15.
Barite and witherite	7	--	Germany 5; United Kingdom 2.
Boron materials, oxides and acids	7	--	United Kingdom 5; Italy 1; Lebanon 1.
Bromine, fluorine, iodine	8	6	Germany 1; United Kingdom 1.
Cement	128	--	Italy 50; France 42; United Kingdom 34.
Chalk	682	--	Italy 475; France 96; United Kingdom 89.
Clays, crude:			
Bentonite	72	2	United Kingdom 58; Italy 6; Hungary 3.
Kaolin	16,384	--	Greece 15,831; United Kingdom 287; Spain 223.
Unspecified	337	--	Greece 175; United Kingdom 102; Germany 54.
Diamond, natural:			
Gem, not set or strung	value, thousands \$8,379	\$53	Belgium-Luxembourg \$2,493; Russia \$1,959; Israel \$1,152.
Industrial stones	do. \$8	--	Israel \$6; India \$2.
Diatomite and other infusorial earth	195	143	Greece 22; Germany 21; United Kingdom 8.
Fertilizer materials:			
Crude, n.e.s.	508	--	Israel 380; Greece 57; Lebanon 37.
Manufactured:			
Ammonia	27	--	United Kingdom 15; Belgium-Luxembourg 6; Greece 5.
Nitrogenous	11,552	9	Bulgaria 7,537; Romania 2,000; France 1,274.
Phosphatic	1,104	--	All from Romania.
Potassic	463	--	Israel 286; Germany 173; Spain 3.
Unspecified and mixed	45,839	117	Greece 42,463; Israel 1,997; Belgium-Luxembourg 331.
Graphite, natural	22	--	All from Italy.
Gypsum and plaster	175	--	Germany 113; Greece 17; Italy 15.
Lime	value, thousands \$1	--	All from Israel.
Magnesium compounds:			
Magnesite, crude	5	--	All from United Kingdom.
Oxides and hydroxides	32	--	Greece 16; Netherlands 10; Italy 2.
Mica, crude including splittings and waste	28	--	Norway 19; United Kingdom 9.
Pigments, mineral, iron oxides and hydroxides, processed	156	1	United Kingdom 111; China 20; Belgium-Luxembourg 10.

See footnotes at end of table.

TABLE 3--Continued
CYPRUS: IMPORTS OF MINERAL COMMODITIES IN 1996 1/

(Metric tons unless otherwise specified)

Commodity	Total	Sources	
		United States	Other (principal)
INDUSTRIAL MINERALS--Continued			
Precious and semiprecious stones other than diamond:			
Natural	value, thousands	\$796	\$1 Thailand \$278; Zambia \$225; United Kingdom \$188.
Synthetic	do.	\$205	-- Switzerland \$101; Austria \$43; Thailand \$19.
Quartz crystal, piezoelectric	do.	\$2	-- All from Austria.
Salt and brine		8,099	-- Israel 2,775; Greece 2,212; Egypt 1,650.
Sodium compounds, n.e.s.:			
Soda ash, manufactured		1,063	(2/) United Kingdom 675; Italy 254; France 80.
Sulfate, manufactured		2,228	-- Spain 1,079; Germany 549; Austria 380.
Stone, sand and gravel:			
Dimension stone:			
Crude and partly worked		30,545	-- Italy 21,923; Greece 8,492; Spain 43.
Worked		20,819	-- Italy 13,242; Greece 6,453; Spain 527.
Dolomite, chiefly refractory-grade		49	-- Norway 46; Greece 3.
Gravel and crushed rock		3,859	5 Italy 1,990; Greece 1,750; France 42.
Quartz and quartzite		83	-- Greece 56; Germany 21; Belgium-Luxembourg 3.
Sand other than metal-bearing		1,243	-- Belgium-Luxembourg 358; United Kingdom 227; Germany 217.
Sulfur:			
Elemental:			
Crude including native and byproduct		1,491	-- Egypt 1,250; Lebanon 240; Israel 1.
Colloidal, precipitated, sublimed		95	-- Egypt 92; United Kingdom 3.
Dioxide		75	-- Greece 54; Germany 21.
Sulfuric acid		351	-- Belgium-Luxembourg 181; Netherlands 149; Greece 19.
Talc, steatite, soapstone, pyrophyllite		227	-- Norway 112; Finland 36; Netherlands 30.
Vermiculite, perlite, chlorite		1,560	-- Greece 1,500; Italy 60.
Other:			
Crude		87	-- Israel 36; Ireland 22; Germany 13.
Slag and dross, not metal-bearing		15,443	-- Italy 15,422; Greece 20; United Kingdom 1.
MINERAL FUELS AND RELATED MATERIALS			
Asphalt and bitumen, natural		21	(2/) Mainly from Greece.
Carbon black		6	(2/) Germany 4; Netherlands 1; United Kingdom 1.
Coal:			
Anthracite		141,454	100,165 Kuwait 27,500; Germany 13,750; Poland 20.
Bituminous		18,956	-- All from Russia.
Briquets of anthracite and bituminous coal		154	21 Australia 115; China 18.
Lignite including briquets		545	-- Australia 478; Germany 49; South Africa 18.
Coke and semicoke		317	-- Belgium-Luxembourg 161; Germany 93; Italy 62.
Gas, natural:			
Gaseous	value, thousands	\$1	-- All from Italy.
Liquefied		8	-- Do.
Peat including briquets and litter		8,779	-- Germany 4,319; Ireland 2,586; Netherlands 1,298.
Petroleum:			
Crude		748,947	-- Russia 379,025; Egypt 328,512; Syria 41,410.
Refinery products:			
Liquefied petroleum gas		24,462	-- Greece 14,825; Saudi Arabia 4,324; Lebanon 2,807.
Gasoline		101,122	31 Greece 69,185; Italy 19,135; France 7,901.
Mineral jelly and wax		239	-- Greece 57; Israel 47; Hungary 38.
Keresene and jet fuel		285,911	-- Greece 126,576; Israel 104,796; Libya 37,259.
Distillate fuel oil		224,509	-- Russia 148,295; Israel 64,154; France 4,867.
Lubricants		13,131	196 Italy 4,085; Greece 3,167; United Kingdom 2,507.
Residual fuel oil		599,181	-- Syria 566,946; Italy 32,234.
Bitumen and other residues		22,891	-- Italy 11,848; Spain 5,546; Saudi Arabia 3,995.
Bituminous mixtures		754	2 United Kingdom 327; Syria 240; Greece 80.

1/ Table prepared by Glenn J. Wallace.

2/ Less than 1/2 unit.

3/ May include high-purity silicon.

4/ Includes zinc dust, flakes, and powders.

5/ Reported under SITC item number as "selenium, tellurium, phosphorus, arsenic, etc."

Source: United Nations Statistical Office (microfiche).