



2008 Minerals Yearbook

GUATEMALA

THE MINERAL INDUSTRY OF GUATEMALA

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Mineral deposits of barite, copper, gold, lead, nickel, silver, and zinc have been discovered in Guatemala, and the Government's mining directorate, Dirección General de Minería (DIGEMIN), has identified coal, cobalt, copper, gold, iron ore, limestone, sand and gravel, and uranium as minerals that could provide investment potential for further exploration and development in the country. Not including the manufacturing of mineral commodities, such as cement or crude steel, the mineral industry accounted for about 2% of the country's gross domestic product at current prices in 2008. Guatemala was part of the San José Pact, which enabled the country to receive crude petroleum under preferential terms and pricing from Mexico and Venezuela. Venezuela also provided additional shipments of crude petroleum to Guatemala according to the terms of the Caracas Energy Accord. Guatemala was the only producer of commercial volumes of crude petroleum in Central America, although such production was still only of regional significance. In 2007 (the latest year for which data were available), about 3,650 people were employed in the mining sector (not including the mineral fuels sector or the manufacturing sector) in the country (U.S. Energy Information Administration, 2007; Dirección General de Minería, 2008, p. 17, 22; Harben, 2008; Banco de Guatemala, undated).

Production

Data on mineral production are in table 1. From 2004 through 2007, data were provided by Guatemala's Ministerio de Energía y Minas (MEM). Data on mineral production in 2008 were estimated based on published information from company and secondary sources. From year to year, information concerning the causes of some of the large percentage changes in many of the data series was unavailable. Many of these changes may appear to be large in percentage terms but do not involve globally significant volumes of production (table 1).

In 2008, gold and silver mine production increased significantly compared with levels of production in 2007. These increases were almost entirely owing to increased production by Goldcorp Inc. of Canada at the company's Marlin Mine during the year. Goldcorp expected the mine to increase production of gold by another 12% in 2009 compared with that of 2008 as production of both gold and silver continued to be ramped up at Marlin through the end of 2008 (production at the Marlin Mine started up in December 2005). The World Steel Association estimated that Guatemala's production of crude steel decreased by about 28% in 2008 compared with that of 2007. The International Lead and Zinc Study Group (ILZSG) reported that annual mine production of zinc in Guatemala increased substantially in 2006 and 2007, and was expected to increase significantly in 2008. The ILZSG expected the

Esperanza zinc mine in Huehuetenango to have been restarted in December 2007, and that production would be ramped up to about 20,000 metric tons per year (t/yr) of zinc by sometime in 2008. Apparently, the Esperanza Mine had been closed since the mid-1970s. Company information concerning this zinc mining project was not available, however, and it was unclear how much zinc was produced at Esperanza in 2008 (if any). Also according to the ILZSG, the production of secondary lead metal in Guatemala was estimated to have increased significantly in 2008 compared with that of 2007 (table 1; Goldcorp Inc., 2009, p. 17, 50; International Lead and Zinc Study Group, 2009a, p. 71; 2009b, p. 22, 37; World Steel Association, 2010, p. 4).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities. The Esperanza zinc mine or any other mine(s) that might account for the increases in production of zinc in the country in 2006, 2007, and 2008 are not included in table 2 because information from the potential operating companies or major equity owners was not available. Information from the ILZSG appeared to indicate that a company with the initials CMM might be restarting the Esperanza Mine, whereas information from a Guatemala subsidiary of KPMG International Cooperative appeared to indicate that a company with (all or part) of the name of Tenango Mining might be conducting the Esperanza zinc mining project (table 2; International Lead and Zinc Study Group, 2009a, p. 71; KPMG Consultores S.A., 2009, p. 65).

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

(Metric tons unless otherwise specified)

Commodity	2004	2005	2006	2007	2008 ^c	
Antimony	2,686	1,007	--	1,000 ^c	1,000	
Barite	70	181	--	--	--	
Basalt	thousand cubic meters	1,050	1 ^e	1,604	2,085	2,100
Of which, andesite	cubic meters	110	512	--	33,690	34,000
Cement, hydraulic ^c	thousand metric tons	2,200	2,400	2,500	2,500	2,500
Clays:						
Bentonite		81,688	135,451	20,034	51,960	52,000
Ferruginous, including shale	thousand metric tons	54	90	202	142	150
Fuller's earth (attapulgitite)		9	--	19	109	100
Kaolin		--	4,107	4,395	5,871	5,900
Coal, lignite		50	--	--	5	5
Feldspar		4,473	3,808	17,176	30,234	30,000
Gold, mine output, Au content	kilograms	--	741	5,036	7,068	7,500
Gypsum, crude	thousand metric tons	106	350	227	495	500
Iron and steel:						
Iron ore, gross weight ³		2,823	11,268	7,341	31,006	30,000
Steel, crude	thousand metric tons	232	207	292	349	250
Semimanufactures	do.	242	252	304	301	306
Jadeite		27	27	419	411	400
Lead:						
Run of mine, Pb content of ore and concentrate		47	23	28	363	500
Metal, secondary ^c		--	6,000	8,000	8,000	10,000
Lime, hydrated ^c		400	400	400	400	400
Magnesite		8,000 ^e	5,636	1,084	7,612	7,500
Natural gas, gross ^c	thousand cubic meters	620	560	490	450	400
Petroleum, crude	thousand 42-gallon barrels	7,334	6,728	5,893	4,630 ^{f,e}	4,500
Pumice	thousand cubic meters	226	82	447	220	200
Pyrolusite, manganese dioxide (MnO ₂)		5	--	--	--	--
Rhyolite		1,375	2,707	236	--	--
Salt ^c	thousand metric tons	60	60	50	50	50
Sand and gravel, construction:						
Gravel, unspecified	cubic meters	19,678	60,116	120,109	6,051	6,000
River sand and gravel	thousand cubic meters	90	367	502	237	250
Sand and gravel, common	do.	226	82	447	30	30
Volcanic ash and sand	do.	220	49	417	354	350
Silica sand		988	474	57,692	67,548	65,000
Silver, mine output, Ag content	kilograms	--	7,074	49,719	88,250 ^r	99,900
Stone:						
Dolomite		63,082	8,585	2,333	56,110 ⁴	55,000
Flagstone, phyllite	cubic meters	1,446	513	18	1,901	1,500
Limestone, crude	thousand metric tons	4,270	140	4,938	6,131 ⁵	6,000
Of which, dimension stone	do.	48	64	29 ^e	30	30
Marble:						
Block	cubic meters	33	--	--	--	--
Unspecified, including chips and pieces	thousand metric tons	75	45	50	127 ⁶	100
Rhyolite		1,375	2,707	236	--	--
Sandstone	cubic meters	180	--	--	--	--
Schist, slate	thousand metric tons	543	--	582	199	200
Stone dust	cubic meters	1,852	--	44,307	-- ^c	--
Stone, round, unworked	do.	10,000 ^c	5,799	69,114	45,900 ^c	45,000
Talc and steatite		2,863	1,631	526	1,291	1,300
Zinc, run of mine, Zn content of ore and concentrate		10	11	6,000 ^r	23,000 ^r	26,000

See footnotes at end of table.

TABLE 1—Continued
GUATEMALA: PRODUCTION OF MINERAL COMMODITIES^{1,2}

^eEstimated; estimated data are rounded to no more than three significant digits. ¹Revised. do. Ditto. -- Zero.

¹Table includes data available through March 8, 2010.

²In addition to the commodities listed, some additional construction materials (clays, gravel, miscellaneous rock, sand, and weathered tuff) are produced to meet domestic needs, but available information is inadequate to make reliable estimates of output.

³Includes combined production of hematite and iron oxide as reported by the Dirección General de Minería, Ministerio de Energía y Minas, Guatemala. Any or all of the reported production may not be of high enough grade for metallurgical use.

⁴Converted to weight measure from reported volume of production using a conversion factor of 2.899 metric tons per cubic meter.

⁵Converted to weight measure from reported volume of production using a conversion factor of 2.611 metric tons per cubic meter.

⁶Converted to weight measure from reported volume of production using a conversion factor of 2.69 metric tons per cubic meter.

TABLE 2
GUATEMALA: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
Antimony	metric tons	Minas de Guatemala S.A. (private, 100%)	Clavito, La Florida, and Los Lirios Mines, Ixtahuacan, Huehuetenango Department	1,000
Cement		Cementos Progreso S.A. (Holcim Ltd., 20%, and other private, 80%)	San Miguel plant, Sanarate, El Progreso Department, and La Pedrera plant, Guatemala City	3,000
Gold	kilograms	Montana Exploradora de Guatemala S.A. (Goldcorp Inc., 100%)	Marlin Mine, near municipalities of San Miguel Ixtahuacan and Sipakapa, Department of San Marcos	7,800
Lime	metric tons	HORCALSA S.A. (Cementos Progreso S.A., 100%)	San Miguel plant, Sanarate, El Progreso Department, and La Pedrera plant, Guatemala City	550
Petroleum, crude	thousand 42-gallon barrels	Perenco plc (100%)	Rubelsanto and West Chinaja fields, Alta Verapaz Department, and Caribe, Tierra Blanca, and Xan fields, Peten Department	6,000
Silver	kilograms	Montana Exploradora de Guatemala S.A. (Goldcorp Inc., 100%)	Marlin Mine, near municipalities of San Miguel Ixtahuacan and Sipakapa, Department of San Marcos	124,000
Steel:				
Crude		Siderúrgica de Guatemala S.A. (SIDEGUA) (Aceros de Guatemala S.A., 100%)	Electric arc furnace, near City of Escuintla, Escuintla Department	260
Semimanufactures		Industria Galvanizadora, S.A. (INGASA) (Industrias Monterrey S.A. de C.V., 100%)	Plant near Guatemala City	74

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

