

2017–2018 Minerals Yearbook

ECUADOR

THE MINERAL INDUSTRY OF ECUADOR

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In 2017 and 2018, the production of mineral commodities—notably cement, feldspar, gold, iron and steel, natural gas, crude petroleum, refined petroleum, silica sand, and silver—represented only a minor part of the economy of Ecuador (Banco Central del Ecuador, 2019, p. 14, 18). The legislative framework for the mineral sector in Ecuador is provided by law No. 45/2009. Data on mineral production are in table 1. Table 2 is a list of major mineral industry facilities. More-extensive coverage of the mineral industry of Ecuador can be found in previous editions of the U.S. Geological Survey

Minerals Yearbook, volume III, Area Reports—International—Latin America and Canada, which are available at https://www.usgs.gov/centers/nmic/south-america.

Reference Cited

Banco Central del Ecuador, 2019, Reporte de minería 2019 [Mining report 2019]: Quito, Ecuador, Banco Central del Ecuador, 18 p. (Accessed December 26, 2019, at https://contenido.bce.fin.ec/documentos/Estadisticas/Hidrocarburos/ReporteMinero012019.pdf.)

 $\label{eq:table 1} \textbf{TABLE 1}$ ECUADOR: PRODUCTION OF MINERAL COMMODITIES 1

(Metric tons, gross weight, unless otherwise specified)

Commodity ²	2014	2015	2016	2017	2018	
METALS						
Antimony, mine, Sb content		6	19	6	53	50 6
Copper, mine, concentrates, Cu content ^e	thousand metric tons	120	1	40	8	42
Gold, mine, Au content	kilograms	7,322	7,723	6,761	6,368	8,213
Iron and steel, raw steel		667,000	720,000	576,000	561,000	583,000
Silver, mine, Ag content kilograms		577	1,494 ^r	934	955	1,000 6
INDUSTRIAL MIN	ERALS					
Cement, hydraulic ^e	thousand metric tons	6,600	6,200 r	5,600	5,700	5,800
Clay and shale:						
Kaolin		40,236	63,829	40,000 r, e	40,000 e	40,000
Unspecified	thousand metric tons	776	539	966	528	301
Feldspar, mine		183,259	253,253 ^r	148,506 ^r	92,871	43,197
Pumice and related materials, pumice	thousand metric tons	1,729	1,008	832	757	800 9
Sand and gravel, industrial:						
Iron sand		408				
Silica, industrial, unspecified	thousand metric tons	80,868 ^r	84,473	62,230	41,230	105,821
Stone, sand, and gravel:	_					
Sand and gravel, construction	do.	14,845 ^r	6,653 ^r	5,379 ^r	6,852	2,623
Stone, crushed, limestone	do.	6,319	3,862 ^r	4,532	3,517	3,027
MINERAL FUELS AND RELA	ATED MATERIALS					
Natural gas, marketable	million cubic meters	578	497	530	463	349
Petroleum:						
Crude	thousand 42-gallon barrels	203,159	198,231	200,711	193,929	188,789
Refinery:						
Diesel	do.	6,433 ^r	5,696 ^r	5,795 ^r	6,052	6,028
Distillate fuel oil	do.	1,342 ^r	2,788 ^r	11,439 ^r	13,686	14,904
Gasoline	do.	26,927 ^r	29,099	27,990	29,059	30,605
Liquefied petroleum gas	do.	2,005 ^r	1,522	2,872	2,921	2,653
Residual fuel oil	do.	9,067 ^r	8,698 ^r	6,872 ^r	8,250	10,074
Other	do.	19,912 ^r	18,074 ^r	19,337 ^r	17,451	16,648
Total	do.	65,700 ^r	65,900 ^r	74,300 ^r	77,400	80,900

^eEstimated. ^rRevised. do. Ditto. -- Zero.

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¹Table includes data available through December 16, 2019. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the commodities listed, barite, bentonite, marble, and sulfur may have been produced, but available information was inadequate to make reliable estimates of output.

$\label{eq:table 2} {\sf TABLE~2}$ ECUADOR: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Thousand metric tons unless otherwise specified)

		Major operating companies		Annual	
Comr	nodity	and major equity owners	or equity owners Location of main facilities		
Cement	LafargeHolcim Ecuador S.A. (LafargeHolcim Ltd., 92.2%)		Cerro Blanco plant, Guayaquil, Guayas Province, and San Rafael grinding plant, Latacunga, Cotopaxi Province	5,500	
Do.		Unión Andina de Cementos, 98.5%	Cement plant near capital city of Quito, Pichincha Province	1,600	
Do.		Cemento Chimbarazo CA (Unión Cementera Nacional, UCEM, C.E.M), 100%	Kriobamba, Chimborazo Province	1,000	
Do.		C.E.M. Industrial Guapan S.A., 100%	Agozes, Canar Province	600	
Copper		NA	El Oro Province	200	
Gold	kilograms	Lundin Gold Inc., 100%	Fruta del Norte Mine, Santiago Province	9,700	
Do.	do.	Bella Rica Mining Cooperative	Bella Rica Mine and La Guanache-Tres de Mayo Mine, Azuay Province	3,000	
Do.	do.	Dynasty Metals and Mining Inc., 100%	Zaruma gold mine, El Oro Province	2,200	
Do.	do.	Elipe S.A., 90%	Cabo de Hornos concessions, Portavelo and Zaruma Provinces	2,000	
Natural gas	million cubic meters	Empresa Pública de Hidrocarburos del Ecuador, EP Petroecuador (Government, 100%)	Amistad field, Gulf of Guayaquil	600	
Petroleum:					
Crude	thousand 42-gallon barrels	do.	About 26 active fields, led by Auca, Orellana Province; Sacha, Sucumbios Province; and Shushufindi, Napo Province	200,000	
Do.	do.	Petroamazonas EP [Empresa Publica de Hidrocarburos del Ecuador (Government, 100%)]	About 85 active fields led by fields in the Amazon basin with operations in Guayas, Napo, Orellana, and Sucumbios Provinces	105,000	
Do.	do.	Operaciones Rio Napo [Empresa Publica de Hidrocarburos del Ecuador (Government, 100%)]	Sacha oilfield	21,000	
Refinery products	thousand 42-gallon barrels per day	Empresa Publica de Hidrocarburos del Ecuador (Government, 100%)	Esmeraldas refinery, Esmeraldas Province	110	
Do.	do.	do.	La Libertad refinery, Santa Elena Province	45	
Do.	do.	do.	Shushufindi Industrial Complex	20	

Do., do. Ditto. NA Not available.