2016 Minerals Yearbook

ECUADOR [ADVANCE RELEASE]

U.S. Department of the Interior
U.S. Geological Survey

January 2020

The Mineral Industry of Ecuador

By Jesse J. Inestroza

In 2016, the economy of Ecuador was based largely on the production of crude petroleum, feldspar, gold, iron and steel, natural gas, silica, and silver (Agencia de Regulación y Control Minero, 2017). 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

Agencia de Regulación y Control Minero, 2017, Estadística minera 2016 [2016 mineral statistics]: Agencia de Regulación y Control Minero. (Accessed December 20, 2017, at http://www.arcom.gob.ec/.)

TABLE 1
ECUADOR: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons, gross weight, unless otherwise specified)

Commodity[2, 3]		2012	2013	2014	2015	2016
METALS						
Copper, mine output, Cu content[e]	thousand metric tons	--	190 r	120 r	1 r	40
Gold, mine production, Au content	kilograms	5,319	8,676	7,322	7,723	6,761
Iron and steel, raw steel		425,000 r	570,000 r	667,000	720,000 r	576,000
Silver, mine production, Ag content	kilograms	2,934	1,198	577	2,521 r	934
INDUSTRIAL MINERALS						
Cement, hydraulic	thousand metric tons	6,025	6,670 r	6,600	5,900 r	5,600 e
Clay and shale:						
Kaolin		42,564	100,195	40,236	63,829	55,000 e
Other	thousand metric tons	1,950	1,413	776	539 r	966
Feldspar		152,590	210,142	183,259	292,564 r	132,363
Pumice and related materials, pumice	thousand metric tons	951	1,735	1,729	1,008	832
Stone, sand, and gravel:						
Sand and gravel, construction	do.	22,785	17,684	23,192	16,011	7,798
Sand, iron		7,630	2,616	408	--	--
Silica, mine production, unspecified		30,000 e	30,000 e	30,000 e	84,473	62,230
Stone, size and shape unspecified, limestone	thousand metric tons	4,532 r	6,838	6,319	5,417 r	4,532
Zeolites		28	--	--	--	--
MINERAL FUELS AND RELATED MATERIALS						
Natural gas, marketable	million cubic meters	517	515	578	497	530
Petroleum:						
Crude	thousand 42-gallon barrels	184,323	192,119	203,159	198,231	200,711
Refinery production:						
Diesel	do.	12,215	10,897	9,607	9,734	13,125
Distillate fuel oil	do.	9,048	8,718	9,167	8,698	6,872
Gasoline	do.	22,771	23,832	24,987	29,099	27,990
Liquefied petroleum gas	do.	2,674	2,604	1,975	1,522	2,872
Residual fuel oil	do.	8,238	6,784	1,037	2,788	3,280
Other	do.	16,704	16,843	18,443	14,343	21,435
Total	do.	71,700 r	69,700 r	65,200 r	66,200 r	75,600

[e]Estimated. [r]Revised. do. Ditto. -- Zero.

[1]Table includes data available through November 29, 2017. 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.

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

[3]The 2015 edition of this yearbook reported production of carbon dioxide in kilograms, as follows: 2011—512; 2012—415; 2013—295; 2014—229; 2015—82.

TABLE 2
ECUADOR: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
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.	Dynasty Metals and Mining Inc., 100%	Zaruma gold mine, El Oro Province	2,200
Do.	do.	Bella Rica Mining Cooperative	Bella Rica Mine and La Guanache-Tres de Mayo Mine, Azuay Province	3,000
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	500
Petroleum:				
Crude	thousand 42-gallon barrels	Petroamazonas EP [Empresa Publica de Hidrocarburos del Ecuador (Government, 100%)]	About 26 active fields, led by Auca, Orellana Province; Sacha, Sucumbios Province; and Shushufindi, Napo Province	200,000
Do.	do.	do.	About 85 active fields led by fields in the Amazon basin with operations in the Provinces of Guayas, Napo, Orellana, and Sucumbios	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.