

2019 Minerals Yearbook

CENTRAL AMERICA [ADVANCE RELEASE]

THE MINERAL INDUSTRIES OF CENTRAL AMERICA

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama

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BELIZE

In 2019, the production of mineral commodities—notably crude petroleum—represented only a minor part of the economy of Belize (Central Bank of Belize, 2020, p. 32, 66). The legislative framework for the hydrocarbon sector in Belize is provided by the Petroleum Act (revised 2003) and Petroleum Regulations, statutory instrument No. 112 of 1992. 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 Belize 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Central Bank of Belize, 2020, 2019 annual report & statement of accounts: Belize City, Belize, Central Bank of Belize, 138 p. (Accessed August 23, 2020, at https://www.centralbank.org.bz/docs/default-source/4.2.4-annual-reports/annual-report-2019.pdf?sfvrsn=2.)

COSTA RICA

In 2019, the production of mineral commodities—notably cement, crushed stone, diatomite, gold, petroleum refinery products, and sand and gravel—represented only a minor part of the economy of Costa Rica (Central Bank of Costa Rica, 2020, p. 8). The legislative framework for the mineral sector in Costa Rica is provided by the Mining Code law No. 6797 of 1982. 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 Costa Rica 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Central Bank of Costa Rica, 2020, Evolución del PIB real y la balanza de pagos en el cuarto trimestre de 2019 [Evolution of real GDP and balance of payments in the fourth quarter of 2019]: San Jose, Costa Rica, Central Bank of Costa Rica, 17 p. (Accessed September 1, 2020, at https://gee.bccr.fi.cr/indicadoreseconomicos/Documentos/Sector%20Producci%C3%B3n%20 y%20Empleo/Evoluci%C3%B3n%20PIB%20trimestral/Evolucion_PIB_Real%20_y_Sector_externo-IV2019.pdf.)

EL SALVADOR

In 2019, the production of mineral commodities—notably cement and raw steel—represented only a minor part of the economy of El Salvador (Banco Central de Reserva de El Salvador, 2020). The legislative framework for the mineral sector in El Salvador is provided by law No. 544/1995. 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 El Salvador 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Banco Central de Reserva de El Salvador, 2020, Gross domestic product—
Production, expenditure and income. At current prices: San Salvador,
El Salvador, Banco Central de Reserva de El Salvador. (Accessed
September 3, 2020, via https://www.bcr.gob.sv/bcrsite/?cdr=160&lang=en.)

GUATEMALA

In 2019, the production of mineral commodities—notably antimony, crude petroleum, raw steel, gemstones, gold, gypsum, lead, limestone, and nickel—represented only a minor part of the economy of Guatemala (Banco de Guatemala, 2020, p. 30). The legislative framework for the mineral sector in Guatemala is provided by Decree No. 48/1997. 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 Guatemala 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Banco de Guatemala, 2020, Guatemala en cifras [Guatemala in figures] 2019: Guatemala City, Guatemala, Ministerio de Energía y Minas, 68 p. (Accessed September 21, 2020, via http://www.banguat.gob.gt/publica/guatemala_en_ cifras 2020.pdf.)

HONDURAS

In 2019, the production of mineral commodities—notably cement, gold, lead, silver, and zinc—represented only a minor

part of the economy of Honduras (Banco Central de Honduras, 2020, p. 51). The legislative framework for the mineral sector in Honduras is provided by Decree No. 32/2013. 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 Honduras 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Banco Central de Honduras, 2020, Memoria 2019 [2019 report]: Tegucigalpa, Honduras, Banco Central de Honduras, 65 p. (Accessed September 11, 2020, at https://www.bch.hn/download/memoria/memoria_anual_2019.pdf.)

NICARAGUA

In 2019, the production of mineral commodities—notably cement, crushed stone, gold, gypsum, lime, petroleum refinery products, and silver—represented only a minor part of the economy of Nicaragua (Banco Central de Nicaragua, 2020, p. 8). The legislative framework for the mineral sector in Nicaragua is provided by law No. 525/2001. 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 Nicaragua 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Banco Central de Nicaragua, 2020, Informe trimestral del producto interno bruto—Primer trimestre 2020 [Quarterly report on gross domestic product—First quarter 2020]: Managua, Nicaragua, Banco Central de Nicaragua, 8 p. (Accessed September 11, 2020, at https://www.bcn.gob.ni/publicaciones/periodicidad/trimestral/cuentas_nacionales/cuentas_nacionales_1.pdf.)

PANAMA

In 2019, the production of mineral commodities—notably cement, copper, gold, lime, salt, and silver—represented only a minor part of the economy of Panama (Instituto Nacional de Estadística y Censo, 2020). The legislative framework for the mineral sector in Panama is provided by law No. 23/1963. 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 Panama 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/latin-america-and-canada-north-america-central-america-and-caribbean.

Reference Cited

Instituto Nacional de Estadística y Censo, 2020, Avance de cifras del Producto Interno Bruto—Anual y Trimestral 2019 [Advanced figures of the gross domestic product—Annual and quarterly 2019]: Panama City, Panama, Instituto Nacional de Estadística y Censo. (Accessed September 15, 2020, via https://www.inec.gob.pa/publicaciones/Default3.aspx?ID_PUBLICACION=996&ID_CATEGORIA=4&ID_SUBCATEGORIA=26.)

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

(Metric tons, gross weight, unless otherwise specified)

Commodity ²		2015	2016	2017	2018	2019
BELIZE						
Petroleum, crude	thousand 42-gallon barrels	528	449 ^r	360 г	301 ^r	263
COSTA RI						
Cement, hydraulic ^e	thousand metric tons	1,600	1,600	1,800	1,900	1,900
Diatomite	do.	20 e	20 e	7	7	6
Gold, mine, Au content	kilograms	100 e	100 e	4,255	5,200 ^r	4,500
Petroleum, refinery ^e	thousand 42-gallon barrels	20,000	20,000	20,000	20,000	20,000
Stone, sand, and gravel, construction:						
Sand and gravel	thousand metric tons	7,700 ^e	7,700 ^e	7,700 ^e	6,013 ^r	6,451
Stone, crushed:						
Limestone, including calcareous	materials do.	1,950 °	1,950 °	1,950 ^e	1,116 ^r	1,150
Sandstone	do.	150 e	150 e	150 e	r	
Other, unspecified	do.	6,000 r, e	6,000 r, e	6,000 r, e	5,419 ^r	4,863
EL SALVAI	OOR					
Cement, hydraulic ^e	thousand metric tons	1,000	1,000	1,000	1,000	1,000
Iron and steel:						
Raw steel		124,000	100,000	96,000	99,000	105,000
Products, semimanufactured ^e		111,000	95,000	95,000	95,000	99,000
GUATEMA	ALA	111,000	70,000	,,,,,,,,	,,,,,,,,	,,,,,,,,,,
Antimony, mine, concentrate, Sb conte			25	25 e	25 e	25 e
Barite		544	500	43	63 r	60 e
	thousand metric tons	3,500	3,600	3,700	3,800	3,800
Cleve:	thousand metric tons	3,300	3,000	3,700	3,000	3,000
Clays: Bentonite		718	10 001	20.542	16 052 f	17,000 e
			18,081	20,542	16,953 ^r 725 ^r	700 ^e
Kaolin		1,101	793	657		
Feldspar, mine		10,340	30,428	29,145	30,257 r	30,000 e
Gemstones, jadeite	1.3	589	216	1,891	1,611	1,600 e
Gold, mine, Au content	kilograms	5,641	3,826	1,646	200 e	200 e
Gypsum, mine	thousand metric tons	111	131	135	133	130 °
Iron and steel, raw steel	do.	403	314	294	300	310
Lead, mine, concentrate, Pb content		10,193	4,181	13,803	264	
Lime, hydrated ^e	thousand metric tons		170	170	170	170
Magnesite		20,000 e	23,954	16,298	4,745 ^r	6,900 e
Nickel, ferronickel, Ni content		10,826	8,688	12,416	14,688	20,323
Petroleum:						
Crude	thousand 42-gallon barrels	3,664	3,285	3,519	3,363	3,506
Refinery:						
Asphalt	42-gallon barrels	163,671	82,939	278,514	589,552	887,889
Diesel	do.	268,699	291,943	240,250	338,591	339,000 °
Kerosene	do.	3,000 e	3,000 e		521	1,801
Refinery fuel	do.	19,000 °	16,521	17,000 e	21,613	21,000 e
Pumice and related materials, pumice s	sand	387,976	569,476	570,000 °	570,000 e	570,000 °
Sand and gravel, industrial, silica		324,658	515,921	69,021	69,000 e	69,000 e
Silver, mine, Ag content	kilograms	862,197	793,083	336,943		
Stone, sand, and gravel, construction:						
Sand and gravel:						
River sand	thousand metric tons	181	99	100 e	397 ^r	390 e
Other, unspecified	do.	622	281	591	728	720 ^e
Stone, crushed:						
Basalt		12,816	50,032	60,000 ^e	60,000 ^e	55,000 e
Basaltic andesite		2,574,334	2,789,343	3,030,955	5,503,883	5,500,000 e
Dolomite		33,837	16,583	20,000 e	14,994	15,000 e
Limestone		5,036,552	2,050,691	5,583,172	2,072,312	2,100,000 e
Marble		168,331	76,152	26,254	63,207	63,000 e
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See footnotes at end of table.

TABLE 1—Continued CENTRAL AMERICA: PRODUCTION OF MINERAL COMMODITIES $^{\rm 1}$

(Metric tons, gross weight, unless otherwise specified)

Commodity ²		2015	2016	2017	2018	2019
GUATEMALA—C						
Stone, sand, and gravel, construction:-	-Continued					
Stone, crushed:—Continued						
Marl		60,957	60,000 e	60,000 ^e	60,000 e	60,000 e
Schist		358,382	556,723	394,315	361,051 ^r	360,000 e
Talc		3,779	2,733	1,981	2,187 ^r	2,100 e
Zinc, mine, Zn content		14,810	5,564	6,100		
HONDURA	AS					
Antimony, mine, concentrate, Sb conte	nt	21	3	3	12	
Cement, hydraulic ^e	thousand metric tons	1,700	1,700	1,700	1,800	1,800
Gold, mine, Au content	kilograms	2,598	2,607	2,657	2,064	1,931
Lead, mine, concentrate, Pb content		9,844	4,400	6,760	9,893	12,308
Silver, mine, Ag content	kilograms	34,369	19,275	21,785	31,182	43,579
Zinc, mine, concentrate, Zn content		22,992	14,579	20,436	28,421	29,223
NICARAGI	J A					
Cement, hydraulic ^e	thousand metric tons	700	700	900	910	910
Gold, mine, Au content	kilograms	6,814	8,391	7,377	7,703	9,190
Gypsum, including anhydrite		50,370	41,750	66,740	70,341	70,000 e
Lime		4,104	5,000 e	5,200 e	5,000 e	4,800 e
Petroleum, refinery:						
Asphalt	thousand 42-gallon barrels	132,200	113,700	101,510	128,071	120,000 e
Diesel	do.	1,421,700	993,400	1,221,340	1,520,128	1,600,000 e
Fuel oil	do.	2,236,700	2,200,900	2,118,070	1,776,491	1,700,000 e
Gasoline	do.	839,800	776,800	854,620	819,070	800,000 e
Kerosene, turbo fuel	do.	256,200	271,800	287,310	200,028	200,000 e
Liquefied petroleum gas	do.	155,300	213,600	231,260	202,284	200,000 e
Silver, mine, Ag content	kilograms	18,577	21,382	15,149	11,263	17,362
Stone, sand and gravel, construction:						
Sand and gravel	thousand metric tons	357	286	296	218	129
Stone, crushed:						
Quarried unspecified	do.	10,237	8,880	9,419	5,828	4,910
Tuff, volcanic	do.	171	181	222	199	190
Other, unspecified	do.	1,954	2,251	1,232	2,265 ^r	1,951
PANAMA	I					
Cement, hydraulic ^e	thousand metric tons	2,200	2,200	1,900	2,000	2,000
Copper, mine, Cu content						147,480
Gold, mine, Au content	kilograms	2,000 e	400 e	400 e	400 e	1,869
Lime ^e	thousand metric tons	3,500	4,000	4,200	4,400	4,500
Salt		60,000 ^e	60,000 e	41,094	38,107	40,000 e
Silver, mine, Ag content	kilograms					35,217
^e Estimated. ^r Revised. do. Ditto Zero.						-

Estimated. Revised. do. Ditto. -- Zero.

¹Table includes data available through September 17, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²Additional commodities may have been produced, but available information was inadequate to make reliable estimates of output.

${\it TABLE~2}$ CENTRAL AMERICA: STRUCTURE OF THE MINERAL INDUSTRIES IN 2019

(Thousand metric tons unless otherwise specified)

		Major operating companies		Annual
Country and commodity BELIZE		and major equity owners	Location of main facilities	capacity
		D.F. M. 1E 11 1000/	N D1 10 11 1 1 1 1 1 1 1	200
Petroleum, crude thousand		Belize Natural Energy Ltd., 100%	Never Delay and Spanish Lookout oilfields,	300
	42-gallon barrels		Cayo District	
	A RICA			
Cement, limest	*	LafargeHolcim Costa Rica S.A. (LafargeHolcim Ltd.,	Cartago cement plant, Aguas Calientes,	1,200
including ma	ırl	59.8%, and other private, 40.2%)	Cartago Province	
Do.		CEMEX Costa Rica S.A. (CEMEX S.A.B de C.V.,	Colorado de Abangares cement plant,	1,100
		98.7%, and other private, 1.3%)	Guancaste Province, and Guatuso de	
			Patarra cement grinding and bagging	
			plant, San Jose	
Clay		do.	Tajo Finca clay quarry, near city of Platanar	100
Steel, semiman	ufactures	Laminadora Costarricense S.A. (ArcelorMitta Brasil	Rolling mill, steel manufacturing complex,	450
		S.A., 100%)	Limon Province	
Stone, limeston	ie	CEMEX Costa Rica S.A. (CEMEX S.A.B de C.V.,	Cerro Pena Blanca limestone quarry,	300
		98.7%, and other private, 1.3%)	Guancaste Province	
Do.		LafargeHolcim Costa Rica S.A. (LafargeHolcim Ltd.,	La Chilena and three other quarries near	650
		59.8%, and other private, 40.2%)	Cartago cement plant, Cartago Province	
EL SAI	VADOR			
Cement		Cemento de El Salvador S.A. de C.V. (LafargeHolcim	El Ronco and Maya plants, near Metapan,	1,900
		Ltd., 64.25%, and other private, 35.75%)	Santa Ana Department	
Steel:				
Raw		Corporación Industrial Centroamericana S.A. de	Electric arc furnace, Quezaltepeque,	125
		C.V. (private, 100%)	La Libertad Department	
Semimanufa	ctures	do.	Billet casting machine and rolling mill,	110
			Quezaltepeque, La Libertad Department	
Stone, limeston	ie	Cemento de El Salvador S.A. de C.V. (LafargeHolcim	Quarries near Aldea El Zapote and Santa	440
Stone, inneston		Ltd., 64.25%, and other private, 35.75%)	Ana, Santa Ana Department	110
GUAT	EMALA	214, 0112079, 4114 01161 2117410, 2017079	. ma, sama . ma s eparament	
Antimony		Minas de Guatemala S.A. (private, 100%)	Clavito, La Florida, Los Lirios, and	NA
running		ivillias de Guatemaia 5.71. (private, 10070)	Torlon Mines, Ixtahuacan,	1171
			Huehuetenango Department	
Do.		do.	Los Angeles Mine, Guatemala Department	NA
Do.	metric tons	do.	Cantera Los Manantiales Mine,	160
D0.	metric tons	do.	•	100
<u> </u>		C 4 P C 4 1000/	Chiquimula Department	(000
Cement		Cementos Progreso S.A., 100%	San Gabriel plant, San Juan, Sacatepequez	6,000
			Department, San Miguel plant, Sanarate,	
			El Progreso Department, and La Pedrera	
			plant, Guatemala City	
Gold	kilograms	Goldcorp Inc., 100%	Marlin Mine, near municipalities of San	6,500
			Miguel Ixtahuacan and Sipakapa,	
			San Marcos Department	
Do.		Entre Mares de Guatemala, S.A.	Asuncion Mita, Jutiapa Department	NA
Do.		Exploraciones Mineras de Guatemala, S.A.	Progreso VII Derivada Mine, San Jose del	NA
			Golfo and San Pedro Ayampuc	
			municipalities, Guatemala Department	
Lead		Pan American Silver Corp., 100%	Escobal Mine, Laguna de Ayarza, Santa Rosa	800
			Department	
Lime		HORCALSA S.A. (Cementos Progreso S.A., 100%)	San Miguel plant, Sanarate, El Progreso	180
			Department	
Nickel		Compañía Guatemalteca de Niquel, S.A.	Fenix Mine, El Estor municipality,	21,000
		(Solway Investment Group, 98.2%, and Government	Izabal, Department	
		1 /	, 1	

See footnotes at end of table.

TABLE 2—Continued CENTRAL AMERICA: STRUCTURE OF THE MINERAL INDUSTRIES IN 2019

(Thousand metric tons unless otherwise specified)

Country and commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
	MALA—Continued	and major equity owners	Election of main facilities	сараспу
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	4,500
Silver	kilograms	Pan American Silver Corp., 100%	Escobal Mine, Laguna de Ayarza, Santa Rosa Department	6,200
Do.	do.	Goldcorp Inc., 100%	Marlin Mine, near municipalities of San Miguel Ixtahuacan and Sipakapa, San Marcos Department	2,000
Steel:				
Raw		Siderúrgica de Guatemala S.A. (SIDEGUA) {Corporación Aceros de Guatemala S.A. [Corporación Centroamericana del Acero S.A. (Gerdau S.A., 30%, and other private, 70%), 100%], 100%}	Electric arc furnace, near city of Escuintla, Escuintla Department	800
Semima	nufactures	Indeta S.A. (INDETA) {Corporación Aceros de Guatemala S.A. [Corporación Centroamericana del Acero S.A. (Gerdau S.A., 30%, and other private, 70%), 100%], 100%}	Rolling mill at Colonia San Ignacio, Mixco, near Guatemala City	200
Zinc	kilograms	Pan American Silver Corp., 100%	Escobal Mine, Laguna de Ayarza, Santa Rosa Department	6,200
Н	IONDURAS			
Cement		Cementos Argos SA de CV, 53.3%, and other private, 46.7%	Piedras Azules plant, municipality of Comayagua, Comayagua Department	1,300
Do.		Cementos del Norte S.A. de C.V. (Inversiones Continental S.A., 75.8%, and LafargeHolcim Ltd., 24.2%)	Rio Bijao plant, municipality of San Pedro Sula, Cortes Department	1,100
Gold	kilograms	Aura Minerals Inc., 100%	San Andres Mine, municipality of La Union, Copan Department	3,300
Lead		Ascendant Resources Inc, 100%	El Mochito Mine, Santa Barbara Department, 90 kilometers south of San Pedro Sula	15
Silver	kilograms	do.	do.	60,000
Zinc N	ICARAGUA	do.	do.	40
Cement		CEMEX Nicaragua S.A. (CEMEX S.A.B. de C.V., 100%, but on lease from Government)	San Rafael del Sur plant, 45 kilometers from Managua, and milling plant in Managua	600
Cement, cl	linker	LafargeHolcim de Nicaragua S.A. (LafargeHolcim Ltd., 70%, and other private, 30%)	Nagarote grinding plant, San Rafael del Sur	350
Gold	kilograms	B2 Gold Corp., 100%	La Libertad Mine, 110 kilometers east of Managua	4,500
Do.	do.	B2 Gold Corp., 95%	Limon Mine, Talavera deposit, 160 kilometers north of Managua	1,200
Do.	do.	Mineros S.A., 100%	Bonanza Mine, North Caribbean Coast Autonomous Region	4,000
Cement	PANAMA	CEMEX Panamá (Cemex Latam Holdings S.A., 100%)	Cemement plant, Panama	2,100
Do.		Argos Panamá S.A. (Cemento del Grupo Argos, 100%)	Quebrada Ancha plant, municipality of	1,300
Copper		Cobre Panamá [First Quantum Ltd., 90% and Korea	Colon, Province of Colon Cobre Panama Mine, Donoso District	300
Gold	kilograms	Resources Corp., 10%] do.	Colon, Province of Colon do.	2,000
Silver	do.	do.	do.	70,000

^eEstimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.