



2013 Minerals Yearbook

CUBA

THE MINERAL INDUSTRY OF CUBA

By Yadira Soto-Viruet

In 2013, Cuba was estimated to rank 7th among the world's leading producers of cobalt (as a byproduct of nickel processing) and 10th among the world's leading producers of nickel. Other mineral commodities produced in the country included bentonite, cement, crushed stone, feldspar, gypsum, lime, limestone, marble, nitrogen, salt, silica sand, and sulfuric acid. Cuba also produced natural gas, petroleum, and petroleum products. In 2012, the Government created the Ministerio de Energía y Minas (MEM) through passage of law Decree No. 301. The MEM is responsible for establishing Government policy for the energy and mining sectors (Cubaencuentro, 2012; Matos, 2013, p. 2; Kuck, 2014; Shedd, 2014).

Minerals in the National Economy

In 2013, Cuba's real gross domestic product (GDP) increased by 2.7% compared with that of 2012. The industrial manufacturing sector (excluding the sugar industry) made up about 13.2% of the country's GDP; the construction sector, about 6.0%; the sector encompassing electricity, gas, and water, about 1.4%; and the mining and quarrying sector, about 0.6%. In 2013, about 33,000 workers were employed in the mining and quarrying sector, which accounted for about 1% of the workforce in the country compared with 39,000 in 2012. In 2013, about 471 enterprises operated in the industrial manufacturing sector, about 184 enterprises operated in the construction sector, and about 21 enterprises operated in the mining and quarrying sector (Oficina Nacional de Estadística e Información, 2014, p. 128, 137, 144, 168).

Production

In 2013, marble production increased by 23% to 9,600 cubic meters from 7,800 cubic meters in 2012. Bentonite production decreased by 50% to 335 metric tons (t) from 670 t; gypsum, by 34% to 87,000 t from 131,000 t; feldspar, by 16% to 3,200 t from 3,800 t; and estimated cobalt, by 14% to 4,200 t from a revised 4,900 t. Data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Mineral Trade

In 2013, the total value of Cuba's exports was about \$228 million¹ compared with about \$241 million in 2012 (revised). Mining products accounted for about 13.6% (about \$31 million) of Cuba's total exports. The country's major export

partners were, in order of the percentage of Cuba's total exports they received, Venezuela (43%), Canada and the Netherlands (9% each), China (7%), and Spain (3%). The total value of Cuba's imports was about \$635 million in 2013 compared with about \$596 million in 2012. Its major import trade partners were, in order of the percentage of Cuba's total imports they supplied, Venezuela (33%), China (10%), and Spain (8%) (Oficina Nacional de Estadística e Información, 2014, p. 184–190).

Commodity Review

Metals

Cobalt and Nickel.—Moa Nickel S.A., which was a joint venture between Sherritt International Corp. of Canada and the Government (50% each), produced a total of 33,542 t of nickel and 3,319 t of cobalt in 2013 compared with 34,263 t of nickel and 3,792 t of cobalt in 2012. Moa Nickel is located in Holguin Province and had an annual capacity of about 37,000 t of mixed sulfides (nickel and cobalt). The joint venture planned to begin the construction of a 2,000-metric-ton-per-day sulfuric acid plant at Moa in the third quarter of 2014 and expected initial production to take place in the fourth quarter of 2015. Sherritt reported that the new plant would provide the necessary sulfuric acid production capacity to eliminate all the company's purchases of sulfuric acid. The new sulfuric acid plant would also support future metals expansion plans, which would include increasing the annual production capacity to 46,000 t of mixed sulfides (Sherritt International Corp., 2013, p. 6; 2014, p. 7–8, 26).

Mineral Fuels

Petroleum.—Sherritt held gross working-interests (ranging from 40% to 100%) in various petroleum production-sharing contracts (PSCs) with Government-owned Unión Cuba-Petróleo. Sherritt operated the Puerto Escondido, the Varadero West, and the Yumuri oilfields located on the northern coast. In 2013, the company employed about 300 workers, of which about 90% were Cuban nationals. The company's share of the oil produced from these three fields combined (based on the percentage of its gross working-interest) was about 20,042 barrels per day (bbl/d) in 2013, all of which the company sold to the Government. Sherritt planned to develop two new wells each at Puerto Escondido and Yumuri and to conduct a well-optimization program at Varadero West in 2014. Sherritt applied for a 10-year extension of its Puerto Escondido and Yumuri PSCs, which would allow for further development drilling. Sherritt was also seeking to come to an agreement with the Government for four new exploration PSCs located on the country's northern coast. Negotiations with the Government were underway, and the company expected the four PSCs to be signed in 2014. Sherritt expected its share of oil production

¹Where necessary, values have been converted from Cuban pesos (CUP) to U.S. dollars (US\$) at an annual average exchange rate of CUP0.0432=US\$1.00 for 2012 and 2013.

to decrease to 19,000 bbl/d of oil owing to an overall decrease in output as a result of a decrease in reservoir rates (Sherritt International Corp., 2014, p. 13–14, 42).

References Cited

- Cubaencuentro, 2012, Crean en Cuba Ministerio de Energia y Minas: Cubaencuentro, November 28. (Accessed December 22, 2014, at <http://www.cubasi.cu/cubasi-noticias-cuba-mundo-ultima-hora/item/12841-crean-en-cuba-ministerio-de-energia-y-minas>.)
- Kuck, P.H., 2014, Nickel: U.S. Geological Survey Mineral Commodity Summaries 2014, p. 108–109.
- Matos Velunza, Leandro, 2013, XI national energy seminar to support decision making, La Habana, 25–27 de junio de 2013: Havana, Cuba, Ministerio de Energia y Minas, 20 p.
- Oficina Nacional de Estadística e Información, 2014, Anuario estadístico de Cuba 2013—Sector Externo: Oficina Nacional de Estadística e Información, 445 p. (Accessed December 22, 2014, at <http://www.one.cu/aec2013.htm>.)
- Shedd, K.B., 2014, Cobalt: U.S. Geological Survey Mineral Commodity Summaries 2014, p. 46–47.
- Sherritt International Corp., 2013, 2012 annual report: Toronto, Ontario, Canada, Sherritt International Corp., 148 p. (Accessed August 6, 2014, at <http://www.sherritt.com/getattachment/7a7b0634-0dd4-46c4-bcda-19d73042fa9c/2012-Annual-Report>.)
- Sherritt International Corp., 2014, 2013 annual report: Toronto, Ontario, Canada, Sherritt International Corp., 164 p. (Accessed June 20, 2014, at <http://www.sherritt.com/getattachment/57810da2-6579-44e2-8dc2-66a94feee216/2013-Annual-Report>.)

TABLE 1
CUBA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ^{2,3}	2009	2010	2011	2012	2013
METALS					
Cobalt, mine output, Co content ^e	4,600 ^r	4,800 ^r	5,100 ^r	4,900 ^r	4,200
Nickel, mine output, recoverable laterite (limonitic and serpentinitic), Ni content ^e	70,000	69,700	72,500	68,200	66,000
Steel, crude	265,800	277,600	282,100	277,000 ^e	280,000 ^e
INDUSTRIAL MINERALS					
Cement, hydraulic	1,625,700	1,631,400	1,736,300	1,824,800 ^r	1,659,000
Clays:					
Bentonite	670	228	1,244	670	335
Kaolinite ^e	2,000	100 ⁴	300	400	400
Feldspar	4,700	2,800	3,100	3,800	3,200
Gypsum	thousand metric tons	78	111	131	87
Lime	46,000	49,700	38,000	54,100	52,400
Nitrogen, N content of ammonia	27,200	36,000	45,200	59,200 ^r	63,700
Salt	thousand metric tons	266	272	281	216
Sand:					
Calcareous	thousand cubic meters	1,693	1,686	1,785	1,811
Silica	cubic meters	16,400	11,100	20,400 ^r	24,700
Stone:					
Limestone	thousand metric tons	2,900	2,600	2,700	2,800
Marble	cubic meters	5,200	4,300	6,700	7,800
Stone, crushed	thousand cubic meters	3,416	3,234	3,542	3,943
Sulfuric acid	thousand metric tons	423	423	417	399 ^r
Volcanic ash	62,100	72,300	96,500	256,000	278,900
Zeolites	25,800	30,900	44,600	41,900	43,800
MINERAL FUELS AND RELATED MATERIALS					
Natural gas, marketed	thousand cubic meters	1,155,300	1,072,500	1,019,800	1,034,500
Petroleum: ⁵					
Crude	thousand 42-gallon barrels	17,614	19,507	19,422 ^r	19,340 ^r
Refinery products: ⁶					
Asphalt	metric tons	80,200	86,900	79,600	81,100 ^r
Petroleum coke	thousand 42-gallon barrels	18	41	37	6 ^r
Gasoline, motor	do.	4,197	4,844	4,286	3,539 ^r
Kerosene	do.	182	2	28	235 ^r
Liquefied petroleum gas	do.	537	691	585	483 ^r
Lubricants	do.	277	342	358	349 ^r
Naphtha	do.	1,376	736	1,341	2,864 ^r
Total	do.	86,788	93,555	86,235	88,576 ^r

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto.

¹Table includes data available through January 20, 2015.

²In addition to the commodities listed, Cuba also produces crude construction materials, but data on such production are not available, and information is inadequate to make reliable estimates of output.

³Source: Oficina Nacional de Estadística e Información, Anuario Estadístico de Cuba 2013.

⁴Reported figure.

⁵Production has been converted from metric tons to barrels by using the U.S. Energy Information Administration factor of 6.449 barrels per metric ton (bbl/t) of crude petroleum.

⁶Production has been converted from metric tons to barrels by using the U.S. Energy Information Administration's factor of 5.51 bbl/t for petroleum coke; 8.53 bbl/t for gasoline; 7.73 bbl/t for kerosene; 11.63 bbl/t for liquefied petroleum gas; 7.00 bbl/t for lubricants; and 8.22 bbl/t for naphtha.

TABLE 2
CUBA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
Ammonia		NA	Revolucion de Octubre plant, Nuevitas, Camaguey Province	200
Cement		Cementos Cienfuegos S.A. (Government, 50%, and Holcim Ltd., 50%)	Cienfuegos, Cienfuegos Province	1,500
Do.		Fábrica de Cemento 26 de julio	Nuevitas, Camaguey Province	600
Do.		Fábrica de Cemento Mártires de Artemisa	Artemisa, Artemisa Province	600
Do.		Cementos Curacao N.V.	Barrio Mujica, Mariel, Artemisa Province	1,110
Do.		Fábrica de Cemento Siguaney	Siguaney, Sancti Spiritus Province	300
Cobalt		Moa Nickel S.A. (Government, 50%, and Sherritt International Corp., 50%)	Moa Bay Mine and processing plant, Moa, Holguin Province	4
Nickel		Empresa Niquelífera Ernesto Che Guevara (Government, 100%)	Ernesto Che Guevara Mine and processing plant, Punta Gorda, Holguin Province	34
Do.		Moa Nickel S.A. (Government, 50%, and Sherritt International Corp., 50%)	Moa Bay Mine and processing plant, Moa, Holguin Province	37
Do.		Empresa Niquelífera Comandante René Ramos Latour (Government, 100%)	René Ramos Latour Mine and processing plant, Nicaro, Holguin Province	12 ¹
Petroleum:				
Crude	thousand 42-gallon barrels	Empresa de Perforación y Extracción de Petróleo del Centro	Northern coast between Havana and Cardenas, primarily Mayabeque Province	12
Do.	do.	Sherritt International Corp. (gross working interests of 40% to 100% in various production-sharing contracts with the Government)	Puerto Escondido, Varadero West, and Yumuri	7,000
Refinery products	do.	PDV-Cupet S.A. (Government, 51%, and Petróleos de Venezuela S.A., 49%)	Cienfuegos, Cienfuegos Province	23,700
Do.	do.	Hermanos Díaz refinery (Government, 100%)	Santiago de Cuba, Santiago de Cuba Province	8,000
Do.	do.	Ñico López refinery (Government, 100%)	City of Havana	44,500
Do.	do.	Sergio Soto refinery (Government, 100%)	Cabaiguan, Sancti Spiritus Province	NA
Sand		Algaba quarry	Near Trinidad, Sancti Spiritus Province	50
Do.		Malabe quarry	NA	30
Do.		Cajobabo	Imias, Guantanamo Province	NA
Steel		Grupo Metalúrgico Acinox (Government, 100%), including: Antillana de Acero	Cotorro, La Havana Province	600
Do.		Camagüey	Las Tunas, Las Tunas Province	370
Do.		4 other steel plants	NA	NA
Zeolites		Empresa Geominera Holguin	San Andres plant, Holguin Province	75
Do.		do.	El Chorillo plant, Camaguey Province; Tasajeras plant, Villa Clara Province	NA

Do., do. Ditto. NA Not available.

¹Operations suspended in March 2012.