



2019 Minerals Yearbook

PARAGUAY AND URUGUAY [ADVANCE RELEASE]

THE MINERAL INDUSTRIES OF PARAGUAY AND URUGUAY

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PARAGUAY

In 2019, the production of mineral commodities represented only a minor part of Paraguay's economy. During the year, the mineral industry was dominated mainly by the production of cement. The country's real gross domestic product (GDP) growth rate was 0.2% in 2019 compared with a growth rate of 3.4% in 2018. Manufacturing continued to be the leading economic activity in the country, contributing about 20% of Paraguay's total GDP. The construction sector contributed 6% of the total GDP, whereas the logging, fishing, and mining sector made only a minor contribution of about 1%. In the first quarter of 2019, Paraguay was initially impacted by droughts that affected mainly the country's agricultural sector and electric power and water sector, which then were followed by heavy rains that caused flooding and displacement, also affecting the livestock and construction sectors. As a result, the manufacturing, trade, and transportation sectors were also indirectly affected during the first quarter of 2019. Paraguay continued to rely on crude petroleum and refinery products imports to meet domestic demand (Economic Commission for Latin America and the Caribbean, 2019; Banco Central del Paraguay, 2020).

Government Policies and Programs

The legislative framework for the mineral sector in Paraguay is provided by the mining law No. 3180/2007 as amended by law No. 4269/2011 and law No. 4935/2013. In 2018, the country's mining law was regulated through Decree No. 8699, of March 14, which aimed to increase transparency in the processing of applications, permits, and mining concessions. The Viceministerio de Minas y Energía [Vice-Ministry of Mines and Energy], which is part of the Ministerio de Obras Públicas y Comunicaciones [Ministry of Public Works and Communications] (MOPC), is the Government entity responsible for the administration of the mining sector (República del Paraguay, 2013, p. 1–2; 2018, p. 1).

Production

Data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Iron and Steel.—In October, state-owned Aceros del Paraguay S.A. (ACEPAR) closed its steel plant at Villa Hayes

after Henan Complant Mechanical & Electrical Equipment Group Co., Ltd. of China, which was the company that was leasing the plant, failed to fulfill its contractual obligations. During the year, ACEPAR continued to seek investors to lease the plant, which required an investment of at least \$20 million to bring the plant to its full operating capacity of about 150,000 metric tons per year of raw steel (Benítez, 2019, 2020; Hoy, 2019, Infonegocios, 2019; ULTIMAHORA, 2019).

Titanium.—Uranium Energy Corp. of the United States held an exploration permit for the Alto Parana titanium project, which is located in eastern Paraguay in the Department of Alto Parana. The company, which acquired the project in 2017, had the right to explore for titanium at Alto Parana for a maximum of 6 years. In 2017, inferred mineral resource estimates at Alto Parana were reported to be 4.94 billion metric tons at an average grade of 7.41% titanium dioxide (TiO₂) and 23.6% iron oxide (Fe₂O₃) at a cutoff grade of 6.0%. The company planned to develop a mine and smelter to produce high-quality titanium slag and pig iron products. A preliminary economic assessment for the project began in 2019, and a 500-meter drilling campaign was scheduled to be completed in 2020 (U.S. Securities and Exchange Commission, 2019; Uranium Energy Corp., 2020a; 2020b, p. 8, 25).

Outlook

Paraguay's GDP growth was forecasted to decrease by 1.0% in 2020. The logging, fishing, and mining sector is expected to continue to be a minor contributor to the GDP in 2020. The country is expected to continue to rely on imports of crude petroleum and refinery products to meet domestic demand (Banco Central del Paraguay, 2020; International Monetary Fund, 2020).

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URUGUAY

Uruguay’s mineral industry was dominated by the production of raw steel, such industrial minerals as cement and natural gemstones, and petroleum refinery products. In 2019, Uruguay’s real GDP increased by 0.2% compared with an increase of 1.6% in 2018. Mining and quarrying did not play a significant role in the country’s economy and accounted for only about 0.2% of the GDP. Uruguay is not a hydrocarbon-producing country and has no proven hydrocarbon reserves. As a result, the country relied completely on crude petroleum and natural gas imports for its domestic needs as well as for the production of petroleum refinery products. Petroleum refinery products continued to be produced at the country’s sole petroleum refinery and accounted for 1.2% of the country’s total GDP (Banco Central del Uruguay, 2020).

In 2019, imports of crude petroleum totaled 15.0 million barrels (Mbbbl); of which Angola supplied 43%, followed by the United States (27%), Nigeria (25%), and Colombia (5%). Uruguay continued to receive all its natural gas imports from Argentina, through the Gasoducto del Litoral

(CR. Federico Slinger) and the Gasoducto Cruz del Sur pipelines. In 2019, natural gas imports totaled 97.3 million cubic meters (Administración Nacional de Combustibles, Alcohol y Portland, 2020, p. 38–39; Ministerio de Industria, Energía y Minería 2020a; Uruguay XXI, 2020, p. 2–3, 6–8).

Government Policies and Programs

The legislative framework for the mineral sector in Uruguay is provided by the Mining Code (law No. 15.242 of January 8, 1982), which was updated in February 28, 2014. Large-scale mining (“minería de gran porte”) is regulated by law No. 19.126 of September 11, 2013. The law establishes taxes and environmental standards for potential large-scale mining projects. The exploration and production of hydrocarbons in the country are regulated by law No. 14.181 of 1974. Under the law, all deposits of crude petroleum and associated substances located in the country belong to the Nation and can be explored and extracted by the Government (Uruguay XXI, 2020, p. 5).

The Ministerio de Industria, Energía y Minería [Ministry of Industry, Energy and Mining] (MIEM) is the Government agency responsible for the administration of the energy, industry, mining, and telecommunications sectors. The Dirección Nacional de Minería y Geología [National Directorate of Mines and Geology], which is part of the MIEM, is the authority that regulates mining activities in the country and issues mineral licenses. The Administración Nacional de Combustibles, Alcoholes y Portland (ANCAP) is a Government-owned holding company created by law No. 8.764 of October 15, 1931. Among its other duties, the ANCAP is involved in the production of alcohol, petroleum derivatives, and cement (Administración Nacional de Combustibles, Alcoholes y Portland, 2020, p. 8; Ministerio de Industria, Energía y Minería, 2020b).

ANCAP, by Decree No. 111/019 of April 29, 2019, launched the Ronda Uruguay Abierta (Open Uruguay Round) to petroleum companies interested in onshore and offshore hydrocarbon exploration. The Open Uruguay Round included five onshore hydrocarbon exploration blocks and six offshore exploration blocks (Uruguay XXI, 2020, p. 5, 13).

Production

During fiscal year 2019 (June 1, 2018, to May 31, 2019), gold production in Uruguay decreased by 89% to 94 kilograms, which was attributed to the shutdown of operations at the San Gregorio project. San Gregorio was the only gold mining operation in the country (table 1; Orosur Mining Inc., 2019, p. 7).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Gold.—Orosur Mining Inc. (OMI) of Canada, through its subsidiary Loryser S.A., owned and operated the San Gregorio project located in the Department of Rivera about 450 kilometers (km) north of the capital city of Montevideo. OMI placed

San Gregorio on care-and-maintenance status in 2018, mainly because of lower grades at the mine. During fiscal year 2019, the company reported that all its operations and explorations in the country, including the San Gregorio project, had been discontinued. As of May 31, 2018, total proven and probable mineral reserves at San Gregorio were reported to be 2.11 million metric tons at an average grade of 1.42 grams per metric ton gold (Orosur Mining Inc., 2018, p. 8, 48; 2019, p. 7, 13, 28).

Industrial Minerals

Cement.—ANCAP held a 99.8% interest in Cementos del Plata S.A., which operated the Minas plant, located in Lavalleja Department, and the Paysandu plant, located in Paysandu Department. In 2019, total cement output from Cementos del Plata increased by 9% to 303,866 metric tons (t) from 278,748 t in 2018. The increase was attributed to a 21% increase in production at the Minas plant. ANCAP reported that all its cement production was sold to the domestic market in 2019 (Administración Nacional de Combustibles, Alcoholes y Portland, 2019, p. 70; 2020, p. 77).

Mineral Fuels and Related Materials

Petroleum Refinery Products.—La Teja refinery, located near Montevideo, continued to be the only petroleum refinery in the country. The refinery, which was operated by ANCAP, had the capacity to produce about 18 million barrels per year of petroleum refinery products. Imports of crude petroleum entered the country through the Terminal Petrolera del Este, located in San Ignacio, Maldonado Department, and then transported by a 180-km pipeline to the refinery. In 2017, ANCAP temporarily (between February and September) shut down its operations at La Teja owing to scheduled maintenance at its units. As a result, imports of crude petroleum decreased to 3.8 Mbbbl in 2017 from an average of between 14 and 15 Mbbbl during previous years, and imports of petroleum refinery products increased to meet domestic demand. La Teja refinery resumed its operations in 2018. Production of petroleum refinery products was estimated to be about the same as in 2018, which totaled about 14.0 Mbbbl. ANCAP reported that the refinery's next scheduled maintenance shutdown would be in 2023 (table 1; table 2; Administración Nacional de Combustibles, Alcohol y Portland, 2018, p. 92; 2019, p. 25; 2020, p. 137; Ministerio de Industria, Energía y Minería, 2019, p. 17–18).

Outlook

Uruguay's GDP was forecasted to decrease by 3.0% in 2020. The Government is expected to continue its efforts to promote

investment in the country's offshore and onshore hydrocarbon exploration in 2020; however, the country is expected to continue to rely on crude petroleum and natural gas imports to meet domestic demand (International Monetary Fund, 2020).

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TABLE 1
PARAGUAY AND URUGUAY: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

Country and commodity ²	2015	2016	2017	2018	2019
PARAGUAY					
Cement, hydraulic ^c thousand metric tons	1,300 ^r	1,300	1,500 ^r	1,500 ^r	1,500
Iron and steel: ³					
Pig iron	73,000	50,000	38,000	39,000	40,000 ^e
Raw steel	48,000	35,000	24,000	25,000	26,300
Lime ^c	90,000	90,000	80,000	80,000	80,000
URUGUAY ⁴					
Cement, hydraulic ⁵ thousand metric tons	902 ^r	742 ^r	817	812	737
Clay:					
Bentonite	4,250	6,650	6,640	7,760 ^r	6,726
Unspecified	30,890	8,760 ^r	2,690 ^r	1,760 ^r	1,800 ^e
Gemstones, agate, including amethyst	15,210	9,780	13,030	12,610 ^r	14,924
Gold, mine, Au content ⁶ kilograms	1,664	1,113	1,100	860	94
Iron ore, mine:					
Gross weight	11,520	2,590	2,530	6,290 ^r	6,282
Fe content	4,608	970	950	940	940
Iron and steel, raw steel ³	97,000	61,000	60,000	60,000	62,300
Petroleum, refinery ⁷ thousand 42-gallon barrels	14,862	16,645	3,600 ^r	14,000 ^r	14,000 ^e
Stone, other, size and shape unspecified:					
Dolomite	17,180	19,730	17,540 ^r	14,530 ^r	17,306
Granite	2,630	2,430	2,850	1,980 ^r	2,000 ^e
Limestone thousand metric tons	1,542	1,488	1,363	1,362 ^r	1,159
Other do.	1,383	1,918	1,382 ^r	1,738 ^r	1,616
Talc	590	290	100	420 ^r	400 ^e

^eEstimated. ^rRevised. do. Ditto.

¹Table includes data available through June 9, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, construction materials (clay, limestone, marble, and sand) may have been produced, but available information was inadequate to make reliable estimates of output.

³Source: World Steel Association.

⁴In addition to the commodities listed, feldspar, marble, and talc were produced in small quantities. Source: Ministerio de Industria, Energía y Minería-Dirección Nacional de Minería y Geología and Instituto Nacional de Estadística. Data are for fiscal year beginning on April 1 and ending on March 31.

⁵Based on total sales of cement (domestic and exports).

⁶Source: Orosur Mining Inc. Production is based on fiscal year, with a starting date of April 1 of the year shown.

⁷Source: Ministerio de Industria, Energía y Minería -Dirección de Energía.

TABLE 2
PARAGUAY AND URUGUAY: 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 ^c
PARAGUAY				
Cement		Industria Nacional del Cemento	Puerto Vallemi plant, about 350 kilometers northwest of Asuncion	1,060
Do.		do.	Villeta plant, about 25 kilometers south of Asuncion	730
Do.		Yguazú Cementos S.A. (Intercement Brasil S.A., 51%, and Concret-Mix S.A., 49%)	Villa Hayes plant in Presidente Hayes Department	750
Iron and steel, raw steel		Aceros del Paraguay S.A. (ACEPAR)	Plant in Villa Hayes, about 25 kilometers northeast of Asuncion ¹	150
URUGUAY				
Cement		Cementos Artigas S.A. (Votorantim Cimentos, 51%, and Cementos Molins S.A., 49%)	Minas plant in Lavalleja Department	500
Do.		do.	Sayago plant in Montevideo	NA
Do.		Cementos del Plata S.A. [Administración Nacional de Combustibles, Alcohols y Portland (ANCAP), 99.8%]	Minas plant in Lavalleja Department and Paysandu plant in Paysandu Department	530
Gold, mine, Au content	kilograms	Loryser S.A. [Orosur Mining Inc. (OMI), 100%]	San Gregorio Mine in Rivera Department, about 450 kilometers north of Montevideo ²	2,000
Iron and steel, raw steel		Gerdau Laisa S.A. (Gerdau S.A., 100%)	Plant in Montevideo	100
Petroleum, refinery products	thousand 42-gallon barrels	Administración Nacional de Combustibles, Alcohols y Portland (ANCAP)	La Teja refinery near Montevideo	18,000

^cEstimated. Do., do, Ditto. NA Not available.

¹Closed in October 2019.

²San Gregorio mining operations were shut down in fiscal year 2019.