



2015 Minerals Yearbook

ISLANDS OF THE CARIBBEAN [ADVANCE RELEASE]

THE MINERAL INDUSTRIES OF THE ISLANDS OF THE CARIBBEAN

ARUBA, DOMINICAN REPUBLIC, HAITI, JAMAICA, TRINIDAD AND TOBAGO, AND OTHER ISLANDS

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ARUBA

Mining did not play a significant role in Aruba's economy. In 2015, the country's sole refinery continued to operate as a crude petroleum and refined products storage terminal. During the year, the Government of Aruba signed a memorandum of understanding with the United States-based Citgo Petroleum Corp., which is an indirect wholly owned subsidiary of Petroleos de Venezuela S.A., to explore the possibility of reopening the 235,000-barrel-per-day (bbl/d) refinery. In 2012, Valero Energy Corp. of the United States had suspended operations at the refinery owing to inadequate profit margins (table 2; Urribarri and Parraga, 2015).

Reference Cited

Urribarri, Sailu, and Parraga, Marianna, 2015, Update 2—Aruba, Citgo Petroleum to explore reactivating refinery: Thomson Reuters, September 25. (Accessed September 8, 2016, at <http://www.reuters.com/article/refinery-aruba-citgo-pete-idUSL1N11V1F320150925>.)

DOMINICAN REPUBLIC

In 2015, the Dominican Republic's mineral industry was dominated by the production of bauxite, cement, copper, gold, and silver. The country's mineral sector is regulated by Mining Law No. 146 of June 4, 1971. According to the law, exploration and mining concessions or contracts are awarded by the Government. An exploration concession gives an exclusive right for a period of 3 years, and a mining concession gives the right for a period of 75 years. The Ministerio de Energia y Minas (MEM) is responsible for administering national policy in the energy and mining sectors. The Viceministerio de Minas, which is under the MEM, is the agency responsible for regulating, auditing, promoting, and developing the mining sector (table 2; Ministerio de Energia y Minas, 2016a–c).

In 2015, the Dominican Republic submitted an Extractive Industries Transparency Initiative (EITI) candidature application to the EITI board. The EITI is a global standard to promote the open and accountable management of oil, gas, and mineral resources, in particular by addressing key governance issues in the mining sector. The country's candidature application was expected to be approved by the EITI Board in 2016 (Ministerio de Energia y Minas, 2015b; Extractive Industries Transparency Initiative, 2016a, b).

Minerals in the National Economy

The Dominican Republic's real gross domestic product (GDP) increased by 7.0% in 2015 compared with that of 2014. The positive growth in the GDP was attributed mainly to a 19% increase in the output of the construction sector; however, the output of the mining and quarrying sector decreased by 10% compared with an increase of 20% in 2014. The decreased output of the mining and quarrying sector was mostly attributable to a decrease in gold and silver production, which accounted for about 80% of the country's mining and quarrying production. As of October, 9,945 people were employed in the mining and quarrying sector (Banco Central de la República Dominicana, 2016a, p. 9, 12, 27).

In 2015, the total value of the Dominican Republic's exports decreased by about 5% to \$9.4 billion from about \$9.9 billion in 2014. The total value of mineral exports decreased by 22% in 2015, which was attributed to a decrease in the export values of copper, silver, and gold by 42%, 41% and 21%, respectively. In 2015, the total value of gold exports accounted for about 13% of the country's total exports and silver exports accounted for about 0.5%. The country imported about \$305 million worth of crude petroleum (about 6.0 million barrels) (Mbbbl) and about \$177 million worth of natural gas in 2015 (Banco Central de la República Dominicana, 2016b, c).

Production

In 2015, production of travertine increased by 196% to 6,680 cubic meters from 2,257 cubic meters in 2014, and production of bauxite increased by about 20% to 1.7 million metric tons (Mt) from 1.4 Mt. Production of marble decreased by 61% to 1,214 cubic meters from 3,156 cubic meters; silver, by 28% to 91,928 kilograms (kg) from 127,712 kg; clay, by 25% to 91,330 cubic meters from 121,737 cubic meters; copper, by 21% to 7,324 metric tons (t) from 9,262 t; and gold, by 13% to 30,454 kg from 35,081 kg. Data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 lists major mineral industry facilities in the country.

Commodity Review

Metals

Bauxite and Alumina.—Sierra Bauxita Dominicana was the sole producer of bauxite in the Dominican Republic. The company mined bauxite from Las Mercedes deposit in Pedernales Province, which had estimated reserves of about 4 Mt at an average grade of about 46% aluminum oxide. Bauxite was transported to the Port of Cabo Rojo for export. In 2014 (the latest year for which data were available), China received about 1,130,000 dry metric tons of bauxite, followed by Canada, which received about 21,800 dry metric tons. In June, the MEM notified Sierra Bauxita Dominicana to halt mining operations and exports; the halt in mining operations was a Government prerequisite for the implementation of a comprehensive development plan for sustainable tourism in the area, which was thought would bring greater benefits to communities in the medium and long terms by preserving the environment and improving living conditions (El Nuevo Diario, 2013; Ministerio de Energía y Minas, 2015a; Dirección General de Minería, 2016, p. 5).

Gold.—GoldQuest Mining Corp. of Canada, through its subsidiary Gold Quest Dominicana SRL, owned 100% interest in the Romero gold-copper project, which is located in San Juan Province. A prefeasibility study, which included the Romero and the Romero South (formerly La Escandalosa Sur) deposits, was underway during the year. The company announced the revision of its preliminary economic assessment and reported that the project had the capacity to be developed as an underground mine with a mine life of 9 years. As of October 2013, indicated mineral resources at the Romero project were 19.4 Mt at average grades of 2.63 grams per metric ton (g/t) gold, 3.7 g/t silver, 0.63% copper, and 0.29% zinc and inferred mineral resources were 10.0 Mt at average grades of 1.64 g/t gold, 3.8 g/t silver, 0.36% copper, and 0.42% zinc. GoldQuest Mining applied for a mining license to develop the Romero project on October 23 (GoldQuest Mining Corp., 2016, p. 3, 5–6).

Nickel.—In August, Glencore plc of Switzerland sold 100% of its shares in Falconbridge Dominicana S.A. (Falcondo) to Americano Nickel Ltd., which was owned by Global Special Opportunities Ltd. of the Bahamas. After the sale, Falcondo was jointly owned by Americano Nickel (85.3%), the Government of the Dominican Republic (10%), Franco-Nevada Corp. of the United States (4.1%), and a private interest (0.6%). Falcondo, which was placed on care-and-maintenance status in 2013 owing to low nickel prices, had the capacity to produce 29,000 metric tons per year (t/yr) of nickel in ferronickel. As of 2014, total nickel ore reserves were estimated to be 71.2 Mt at an average grade of 1.31% nickel. Operations at Falcondo were expected to resume in 2016 (Falconbridge Dominicana S.A., 2015; Glencore plc, 2015a, p. 72–73; 2015b; 2016, p. 196).

References Cited

- Banco Central de la República Dominicana, 2016a, Informe de la economía dominicana Enero-Diciembre 2015 [Report on the Dominican economy January-December 2015]: Santo Domingo, Dominican Republic, Banco Central de la República Dominicana, 138 p. (Accessed September 8, 2016, at http://www.bancentral.gov.do/publicaciones_economicas/infeco/infeco2015-12.pdf.)
- Banco Central de la República Dominicana, 2016b, Sector externo—Exportaciones—Anual [External sector—Exports—Annual]: Santo Domingo, Dominican Republic, Banco Central de la República Dominicana. (Accessed September 8, 2016, at http://www.bancentral.gov.do/estadisticas_economicas/externo/.)
- Banco Central de la República Dominicana, 2016c, Sector externo—Importaciones de crudo y derivados [External sector—Imports of crude oil and derivatives]: Santo Domingo, Dominican Republic, Banco Central de la República Dominicana. (Accessed September 8, 2016, at http://www.bancentral.gov.do/estadisticas_economicas/externo/.)
- Dirección General de Minería, 2016, Proyecto extracción de bauxita y rehabilitación ambiental del depósito de Las Mercedes, Pedernales [Bauxite extraction project and environmental rehabilitation of Las Mercedes deposit, Pedernales]: Dirección General de Minería, 8 p. (Accessed September 26, 2016, at <http://www.dgm.gov.do/transparencia/images/docs/publicaciones/Informes/Informe%20Extraccion%20de%20Bauxita%20en%20Las%20Mercedes%20con%20finalidad%20de%20su%20cierre%20correcto.pdf>.)
- El Nuevo Diario, 2013, Informan reinicio minería de bauxita crea 450 nuevos empleos en Pedernales [The restart of bauxite mining creates 450 new jobs in Pedernales]: Pedernales, Dominican Republic, El Nuevo Diario, August 7.
- Extractive Industries Transparency Initiative, 2016a, About: Extractive Industries Transparency Initiative. (Accessed September 26, 2016, at <https://eiti.org/about/who-we-are/>.)
- Extractive Industries Transparency Initiative, 2016b, Dominican Republic: Extractive Industries Transparency Initiative. (Accessed September 26, 2016, at <https://eiti.org/dominican-republic/>.)
- Falconbridge Dominicana S.A., 2015, Actualización de las actividades de reinicio en la República Dominicana: Falconbridge Dominicana S.A. (Accessed September 14, 2016, at http://www.falcondo.do/update_falcondo.html.)
- Glencore plc, 2015a, Annual report 2014: Baar, Switzerland, Glencore plc, 204 p. (Accessed September 14, 2016, at http://www.glencore.com/assets/investors/doc/reports_and_results/2014/GLEN-2014-Annual-Report.pdf.)
- Glencore plc, 2015b, Sales of Tampakan, Falcondo and Sipilou: Baar, Switzerland, Glencore plc, August 14, 1 p. (Accessed September 14, 2016, at <http://www.glencore.com/assets/media/doc/news/2015/201508140800-Sales-of-Tampakan-Falcondo-and-Sipilou.pdf>.)
- Glencore plc, 2016, Annual report 2015: Baar, Switzerland, Glencore plc, 202 p. (Accessed September 14, 2016, at http://www.glencore.com/assets/investors/doc/reports_and_results/2015/GLEN-2015-Annual-Report.pdf.)
- GoldQuest Mining Corp., 2016, Management's discussion and analysis—December 2015: GoldQuest Mining Corp., 23 p. (Accessed September 26, 2016, at http://www.goldquestcorp.com/images/pdf/financials/GoldQuest_-_Q415_MDA_FINAL.pdf.)
- Ministerio de Energía y Minas, 2015a, Energía y Minas ratifica paralización de extracción y exportación de bauxita [Energy and Mines ratified the stoppage of extraction and export of bauxite]: Santo Domingo, Dominican Republic, Ministerio de Energía y Minas, July 1. (Accessed September 26, 2016, at <http://www.mem.gob.do/index.php/noticias/item/energia-y-minas-ratifica-paralizacion-de-extraccion-y-exportacion-de-bauxita>.)
- Ministerio de Energía y Minas, 2015b, Ministerio de Energía y Minas continúa encuentros con sociedad civil como requisito para la incorporación de RD a la ITIE [Ministry of Energy and Mines continues meetings with civil society as a requirement for the incorporation of DR to the EITI]: Santo Domingo, Dominican Republic, Ministerio de Energía y Minas, November 6. (Accessed September 6, 2016, at <http://www.mem.gob.do/index.php/noticias/item/ministerio-de-energia-y-minas-continua-encuentros-con-sociedad-civil-como-requisito-para-la-incorporacion-de-rd-a-la-itie>.)
- Ministerio de Energía y Minas, 2016a, Ley minera No.146 [Mining law No.146]: Santo Domingo, Dominican Republic, Ministerio de Energía y Minas, 42 p. (Accessed October 24, 2017, at https://www.mem.gob.do/transparencia/images/docs/base_legal/LeyMinera146.pdf.)
- Ministerio de Energía y Minas, 2016b, Quiénes somos [Who we are]: Santo Domingo, Dominican Republic, Ministerio de Energía y Minas. (Accessed September 14, 2016, at <http://www.mem.gob.do/index.php/sobre-nosotros/quienes-somos>.)
- Ministerio de Energía y Minas, 2016c, Viceministerio de Minas [Vice Ministry of Mines]: Santo Domingo, Dominican Republic, Ministerio de Energía y Minas. (Accessed September 14, 2016, at <http://www.mem.gob.do/index.php/sobre-nosotros/viceministerios>.)

HAITI

Haiti occupies the western part of the Island of Hispaniola in the Caribbean and possesses economic mineral deposits similar to those of the Dominican Republic, although these deposits have remained largely undeveloped. The country's undeveloped mineral resources included copper, gold, and silver. The country's real GDP increased by 1.7% in 2015 compared with 2.8% in 2014. The mineral sector did not play a significant role in Haiti's economy and made only a minor contribution of about 0.1% to the country's GDP (Institut Haïtien de Statistique et d'Informatique, 2015; Eurasian Minerals Inc., 2016; World Bank, The, 2016).

Prospecting for, exploring for, or mining mineral and energy resources requires concessions and permits from Le Bureau des Mines et de l'Énergie [Bureau of Mining and Energy], which is under the Ministère des Travaux Publics, Transports et Communications [Ministry of Public Works and Communications]. In 2013, the Government suspended all mining projects in the country to initiate new legislation to reform the country's mining law (Decree No. 19 of March 8, 1976), which continued to be under review in 2015 (U.S. Department of State, 2015, p. 4–5; International Trade Administration, 2017).

Eurasia Minerals Inc. of Canada and its joint-venture partner Newmont Mining Corp. of the United States continued to keep their exploration program along a 130-kilometer trend of Haiti's Massif du Nord belt on care-and-maintenance status while revisions to the mining law were pending. The joint venture covered six exploration areas, which included La Miel, La Mine, Northeast Haiti, and Northwest Haiti. On November 2, Eurasia Minerals announced the sale of its interests in the country to Newmont Mining and terminated its joint-venture partnership with Newmont Mining. Eurasia Minerals also held 100% interest in the Grand Bois gold-copper project, which also was on care-and-maintenance status since 2013. Cimenterie Nationale S.E.M. (CINA) was the only cement producer in the country and had the capacity to produce 850,000 t/yr. Cementos Argos S.A. of Colombia held a 65% interest in CINA, which was located in Cabaret (table 2; Eurasian Minerals Inc., 2016, p. 19–20; EMX Royalty Corp., 2017).

References Cited

- EMX Royalty Corp., 2017, Haiti: EMX Royalty Corp. (Accessed October 24, 2017, at <https://www.emxroyalty.com/asset-portfolio/haiti/>.)
- Eurasian Minerals Inc., 2016, 20-F annual report for fiscal year ending December 31, 2015: Eurasian Minerals Inc., March 30, 155 p. (Accessed September 7, 2016, at <https://emxroyalty.com/site/assets/files/3292/2015-q4-fs.pdf>.)
- Institut Haïtien de Statistique et d'Informatique, 2015, Les comptes économiques en 2014 [The economic accounts in 2015]: Institut Haïtien de Statistique et d'Informatique, 1 p. (Accessed September 6, 2016, at http://www.ihsi.ht/pdf/comptes_economiques_en_2015.pdf.)
- International Trade Administration, 2017, Haiti—Mining and minerals: International Trade Administration, U.S. Department of Commerce, June 26. (<https://www.export.gov/article?id=Haiti-Mining-and-Minerals>.)
- U.S. Department of State, 2015, 2015 investment climate—Haiti: U.S. Department of State, June, 25 p. (Accessed September 7, 2016, at <http://www.state.gov/documents/organization/241797.pdf>.)
- World Bank, The, 2016, Haiti—World data bank—World development indicators: The World Bank (Accessed March 14, 2019, at <https://data.worldbank.org/country/Haiti>.)

JAMAICA

Jamaica's mineral industry continued to be dominated by bauxite and alumina production. In 2015, the country was the world's seventh-ranked producer of bauxite (accounting for 3.3% of world production) and the eighth-ranked producer of alumina (accounting for 1.6% of world production). Industrial minerals produced in the country included cement, gypsum, lime, limestone, pozzolan, sand and gravel, shale, and silica sand. The country also produced petroleum refinery products (Bray, 2017).

Minerals in the National Economy

In 2015, Jamaica's real GDP increased by 0.7% compared with that of 2014. The mining and quarrying sector made up about 1.7% of the country's GDP in 2015. Mining and quarrying increased by 0.6% compared with a 0.9% increase in 2014. During the year, employment in the mining, quarrying, and refining industry decreased by 6.5% to 5,800 people from 6,200 in 2014. The total value of goods exported from Jamaica was about \$1.3 billion in 2015 compared with about \$1.4 billion in 2014, and bauxite and alumina accounted for about 53% of the total value of exports (Bank of Jamaica, 2016a, p. 23, 26; 2016b).

Production

In 2015, production of petroleum refinery products increased by 16% to 7.7 Mbbl from 6.6 Mbbl in 2014. Data on mineral production are in table 1.

Structure of the Mineral Industry

Bauxite was produced by Alumina Partners of Jamaica (Alpart) and West Indies Alumina Co. (Winalco), which were wholly owned by United Company RUSAL Plc of Russia; Jamaica Aluminum Co. (Jamalco), which was jointly owned by Noble Group Ltd. of Singapore (55%) and the Government (45%); and Noranda Bauxite Ltd., which was jointly owned by the Government (51%) and Noranda Aluminum Holding Corp. of the United States (49%). These companies had a combined bauxite production capacity of about 15.2 million metric tons per year (Mt/yr). Alpart, Jamalco, and Winalco also produced alumina; the companies had a combined production capacity of about 4.3 Mt/yr. Trinidad Cement Ltd. of Trinidad and Tobago, through its subsidiary Caribbean Cement Co. Ltd., owned the country's only cement company. Caribbean Cement was located in Rockfort and had the capacity to produce 2.2 Mt/yr of cement. The joint venture between the Government (51% interest) and Petroleos de Venezuela S.A. (49%) owned Petrojam Ltd., which was the sole oil refinery in the country. Petrojam's refinery was located in Kingston Port and had the capacity to produce about 30,000 bbl/d (table 2).

References Cited

- Bank of Jamaica, 2016a, 2015 annual report: Kingston, Jamaica, Bank of Jamaica, 239 p. (Accessed September 28, 2016, at http://www.boj.org.jm/uploads/pdf/boj_annual/boj_annual_2015.pdf.)

Bank of Jamaica, 2016b, Jamaica in figures, 2015: Kingston, Jamaica, Bank of Jamaica, 2 p. (Accessed September 27, 2016, at http://www.boj.org.jm/uploads/pdf/jam_figures/jam_figures_2015.pdf.)

Bray, E.L., 2017, Bauxite and alumina: U.S. Geological Survey Mineral Commodity Summaries 2017, p. 32–33.

TRINIDAD AND TOBAGO

Trinidad and Tobago was the largest oil and natural gas producer in the Caribbean. Other minerals produced in the country included cement, fertilizers, iron and steel, and such mineral fuels as methanol, natural gas liquids, and petroleum refinery products. According to the BP Statistical Review of World Energy (BP p.l.c., 2016), the proven crude petroleum reserves of Trinidad and Tobago were estimated to be 700 Mbbl, and its natural gas reserves were estimated to be 0.3 trillion cubic meters. The country also housed one of the Western Hemisphere's largest natural gas processing facilities—the Phoenix Park Gas Processors Ltd. natural gas liquids complex. In 2015, Trinidad and Tobago was the leading supplier of imported liquefied natural gas (LNG) to the United States, accounting for about 77% of the United States LNG imports (BP p.l.c., 2016, p. 6, 20, 28; U.S. Department of Energy, 2016).

The Ministry of Energy and Energy Affairs (MEEA) is the Government entity responsible for the monitoring, enforcement, and regulation of the energy and mineral sectors of the country. The state-owned Petroleum Company of Trinidad and Tobago Ltd. (Petrotrin) was engaged in the exploration, development, and production of hydrocarbons and the manufacturing and marketing of petroleum products (Ministry of Energy and Energy Affairs, 2016; Petroleum Company of Trinidad and Tobago Ltd., 2016).

Minerals in the National Economy

In 2015, Trinidad and Tobago's real GDP decreased by 1.8% compared with that of 2014, and the energy sector GDP decreased by 3.1% compared with that of 2014. According to the Central Bank of Trinidad and Tobago, the economy's heavy dependence on the energy sector continued to be a key vulnerability for Trinidad and Tobago. The decrease in the international price of fuel minerals had a negative effect on the domestic economy—a consequence of the heavy dependency. In 2015, the decreases mainly in crude petroleum and natural gas production were attributed to planned and unplanned maintenance work and upgrade activities undertaken by key energy producers. In 2015, energy exports (which included crude petroleum, natural gas, and petrochemicals) accounted for 78% of the total value of the country's exports compared with 83% in 2014. About 51,200 workers were employed in the manufacturing sector (including mining and quarrying) in 2015, and about 20,500 workers were employed in the petroleum and natural gas sector (Central Bank of Trinidad and Tobago, 2016a, p. 5; 2016b, p. 5, 40; 2016d, p. 26; 2016e). Exports of crude petroleum totaled 11.3 Mbbl compared with 11.9 Mbbl in 2014; fertilizers, 4.9 Mt compared with 4.8 Mt in 2014; methanol, 5.5 Mt, which was about the same amount as in 2014; and natural gas liquids, 10.2 Mbbl compared with 10.8 Mbbl. The country also exported about 656,000 t of direct-reduced iron, 120,000 t of iron and

steel billets, and 186,000 t of cement (Central Bank of Trinidad and Tobago, 2016c, p. 8–10).

Production

In 2015, production of sulfur increased by 100% to 10 t from 5 t in 2014; urea, by 24% to 547,400 t from 441,817 t; and petroleum refinery products, by 20% to 45.8 Mbbl from 38.2 Mbbl. The increase in urea production was attributed to the resumption of production at the PCS Nitrogen Trinidad Ltd. plant, and the increase in petroleum refinery products production was attributed to the completion of extensive renovations at Petrotrin's Pointe-a-Pierre refinery, which was the only refinery in the country. Production of crude steel and direct-reduced iron decreased by 45% each, which was attributed to the suspension of operations at ArcelorMittal Steel Point Lisas Ltd., which was a subsidiary of ArcelorMittal S.A. of Luxembourg, in November. The suspension was attributed to the decline in the international prices of iron and steel (table 1; Central Bank of Trinidad and Tobago, 2016a, p. 14, 16; 2016b, p. 18).

Structure of the Mineral Industry

Ammonia was produced at the Methanol Holdings (Trinidad) Ltd. Ammonia Urea Nitrate Melamine complex and by Caribbean Nitrogen Co. Ltd., Nitrogen (2000) Unlimited, PCS Nitrogen (Trinidad) Ltd., Point Lisas Nitrogen Ltd., Trinidad Nitrogen Co. Ltd., and Yara Trinidad Ltd. These companies had a combined ammonia production capacity of about 6.1 Mt/yr. Natural gas liquids were produced by Phoenix Park Gas Processors, which was 51% owned by state-owned National Gas Company of Trinidad and Tobago (table 2).

References Cited

- BP p.l.c., 2016, BP statistical review of world energy—June 2016: London, United Kingdom, BP p.l.c., June, 48 p. (Accessed September 7, 2016, at <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>.)
- Central Bank of Trinidad and Tobago, 2016a, Annual economic survey: Port of Spain, Trinidad and Tobago, Central Bank of Trinidad and Tobago, 121 p. (Accessed October 24, 2017, at https://www.central-bank.org.tt/sites/default/files/reports/Annual%20Economic%20Survey%202015_0.pdf.)
- Central Bank of Trinidad and Tobago, 2016b, Economic bulletin: Port of Spain, Trinidad and Tobago, Central Bank of Trinidad and Tobago, July, v. 28, no. 2, 98 p. (Accessed October 24, 2017, at <https://www.central-bank.org.tt/sites/default/files/reports/EB%20July%202016%20Updated%20as%20at%2016.9.16.pdf>.)
- Central Bank of Trinidad and Tobago, 2016c, Economic bulletin—Statistical appendix: Port of Spain, Trinidad and Tobago, Central Bank of Trinidad and Tobago, March, v. 28, no. 1, 52 p. (Accessed October 24, 2017, at <https://www.central-bank.org.tt/sites/default/files/reports/Appendix%20Tables%20-%20March%202016.pdf>.)
- Central Bank of Trinidad and Tobago, 2016d, Financial stability report 2015: Port of Spain, Trinidad and Tobago, Central Bank of Trinidad and Tobago, 60 p. (Accessed September 29, 2016, at <https://www.central-bank.org.tt/sites/default/files/reports/FSR%202015.pdf>.)
- Central Bank of Trinidad and Tobago, 2016e, Labour force annual: Port of Spain, Trinidad and Tobago, Central Bank of Trinidad and Tobago. (Accessed October 24, 2017, at <https://www.central-bank.org.tt/statistics/data-centre/labour-force-annual>.)
- Ministry of Energy and Energy Affairs, 2016, About us: Port of Spain, Trinidad and Tobago, Ministry of Energy and Energy Affairs. (Accessed September 7, 2016, at <http://www.energy.gov.tt/about-us/>.)

Petroleum Company of Trinidad and Tobago Ltd., 2016, Our company: Point-a-Pierre, Trinidad and Tobago, Petroleum Company of Trinidad and Tobago Ltd. (Accessed September 7, 2016, at <https://www.petrotrin.com/en/About%20Us/Our%20Company.aspx>.)
 U.S. Department of Energy, 2016, Trinidad and Tobago—Overview: U.S. Department of Energy, October. (Accessed September 7, 2016, at <http://www.eia.gov/beta/international/analysis.cfm?iso=TTO>.)

OTHER ISLANDS OF THE CARIBBEAN

The economies of the other islands of the Caribbean did not depend upon domestic mineral production for purposes of trade or economic growth, and mineral production data were not available.

TABLE 1
 ISLANDS OF THE CARIBBEAN: PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

Country and commodity	2011	2012	2013	2014	2015
DOMINICAN REPUBLIC^{3,4}					
Metals:					
Bauxite	--	10,522	769,530	1,446,311	1,724,162
Copper, mine output, Cu content	11,777	11,737	10,379	9,262	7,324
Gold, mine output, Au content kilograms	495	4,106	26,084	35,081	30,454
Nickel, Ni content:					
Mine output, laterite ore	1,143,000	1,301,694	1,100,000	--	--
Ni contained in ferronickel, smelter	13,528	15,186	9,400 ⁵	--	--
Silver, mine output, Ag content kilograms	18,169	27,296	78,228	127,712	91,928
Industrial minerals:					
Cement, hydraulic	3,996,500	4,130,000	4,245,720	5,018,313 ^f	5,000,000 ^e
Clay cubic meters	17,050	154,693	251,055	121,737	91,330
Gypsum do.	31,177	116,181	90,111	151,936	152,495
Sand:					
Calcareous do.	27,500	32,700	--	--	--
Silica do.	20,518	25,581	10,256	--	2,500
Stone:					
Marble do.	6,137	6,014	2,444	3,156	1,214
Dolomite do.	3,000	3,000	4,000	3,000	3,000 ^e
Limestone do.	2,619,099	5,096,936	3,609,927	1,844,572	1,911,323
Pozzolan do.	91,933	76,366	35,579	--	--
Travertine do.	1,001	2,161	3,039	2,257	6,680
JAMAICA^{6,7}					
Metals:					
Bauxite and alumina:					
Bauxite, dry equivalent, gross weight thousand metric tons	10,190	9,290	9,510	9,725	9,658
Alumina do.	1,960	1,758	1,855	1,851	1,865
Industrial minerals:					
Cement, hydraulic	766,274	760,300	824,893	830,061	808,000
Gypsum	79,521	64,753	48,322	45,201	45,200 ^e
Lime	79,250	84,264	106,281	104,140	104,100 ^e
Sand and gravel thousand metric tons	2,475	2,599	1,902	2,118	2,100 ^e
Silica sand	13,965	13,945	15,824	15,833	15,800 ^e
Stone:					
Limestone thousand metric tons	2,451	2,233	1,949	2,138	2,100 ^e
Pozzolan do.	130	107	112	129	130 ^e
Mineral fuels and related materials:					
Petroleum refinery products thousand 42-gallon barrels	8,590	8,510	8,060	6,590	7,655
TRINIDAD AND TOBAGO^{8,9}					
Metals:					
Iron and steel:					
Direct-reduced iron	1,705,600	1,684,300	1,749,700	1,633,000	901,100
Steel, crude ¹⁰	603,500	624,000	615,800	483,300	266,500
Industrial minerals:					
Cement, hydraulic	827,000	654,100	801,600	836,500	840,100
Fertilizers thousand metric tons	5,715	5,453	5,129	5,172	5,453
Nitrogen, N content of anhydrous ammonia	5,444,300	4,466,000	4,640,000	4,730,447	4,905,320
Sulfur	11	2	10	5	10

See footnotes at end of table.

TABLE 1—Continued
ISLANDS OF THE CARIBBEAN: PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

Country and commodity	2011	2012	2013	2014	2015	
TRINIDAD AND TOBAGO ^{8,9} —Continued						
Mineral fuels and related materials:						
Methanol	thousand metric tons	5,904	5,491	5,633	5,481	5,516
Natural gas, gross	million cubic meters	42,883	42,705	42,244	42,085 ^r	39,603
Natural gas liquids	thousand 42-gallon barrels	16,043	12,890	12,573	11,992	10,992
Petroleum:						
Crude	do.	33,550	29,915	29,617	29,659	28,700
Refinery products	do.	50,098	39,060	48,177	38,212	45,766
Urea		616,247	521,000	490,000	441,817	547,400

⁶Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through September 26, 2016.

²The countries of Aruba, The Bahamas, Barbados, Dominica, Martinique, and St. Kitts and Nevis were known to have produced mineral commodities, including aragonite, cement, lime, limestone, petroleum refinery products, pumice, salt, sand and gravel, stone, and sulfur, but production data have not been available for such a length of time and production amounts have been so small relative to global totals that reliable production estimates could no longer be made.

³In addition to the commodities listed, the Dominican Republic also produced petroleum refinery products.

⁴Sources: Oficina Nacional de Estadística—Volumen de producción de productos mineros por producto, según año 2003–2015 [National Bureau of Statistics—Volume of Production of Mining Products By Product, for the Years 2003 to 2015].

⁵Source: Glencore Xstrata plc.

⁶In addition to the commodities listed, Jamaica also produced clay, marble, marl, and shale.

⁷Sources: The Bank of Jamaica and the Ministry of Science, Technology, Energy and Mining, Mines and Geology Division.

⁸In addition to the commodities listed, Trinidad and Tobago also produced clay, limestone, and sand and gravel, but available information was inadequate to make reliable estimates of output.

⁹Sources: Central Bank of Trinidad and Tobago and the Ministry of Energy and Energy Affairs.

¹⁰Based on billet production.

TABLE 2
ISLANDS OF THE CARIBBEAN: STRUCTURE OF THE MINERAL INDUSTRIES IN 2015

(Metric tons unless otherwise specified)

Country and commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity ^c	
ARUBA				
Petroleum, refinery	42-gallon barrels per day	Valero Aruba Refinery (Valero Energy Corp., 100%)	Southern Aruba	235,000 ¹
BAHAMAS, THE				
Petroleum, refinery	thousand 42-gallon barrels	Bahamas Oil Refining Company International Ltd. (Buckeye Partners L.P., 80%)	Storage facilities, Freeport	21,600 ¹
BARBADOS				
Cement		Arawak Cement Company Ltd. (Trinidad Cement Ltd., 100%)	Checker Hall, Saint Lucy	360,000
DOMINICAN REPUBLIC				
Bauxite		Sierra Bauxita Dominicana	Mercedes, Pedernales	NA
Copper		Corporación Minera Dominicana (Perilya Ltd., 100%)	Maimon, Monseñor Nouel	15,000
Gold	kilograms	do.	do.	600
Do.	do.	Pueblo Viejo Dominicana Corp. (Barrick Gold Corp., 60%, and Goldcorp Inc., 40%)	Pueblo Viejo	35,000
Do.	do.	Las Lagunas Project (PanTerra Gold. Ltd., 100%)	Las Lagunas	1,600 ²
Nickel		Falconbridge Dominicana S.A. (Falcondo) (Americano Nickel Ltd., 85.3%; Government, 10%; Franco-Nevada Corp., 4.1%; private interests, 0.6%)	Loma Las Peguera, Bonao	29,000 ³
Petroleum, refinery	42-gallon barrels per day	Refinería Dominicana de Petróleo S.A. (Government, 51%, and Petróleos Venezuela S.A., 49%)	Haina Port	34,000

See footnotes at end of table.

TABLE 2—Continued
ISLANDS OF THE CARIBBEAN: STRUCTURE OF THE MINERAL INDUSTRIES IN 2015

(Metric tons unless otherwise specified)

Country and commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
DOMINICAN REPUBLIC—				
Continued				
Silver	kilograms	Corporación Minera Dominicana (Perilya Ltd., 100%)	Maimon, Monseñor Nouel	15,000
Do.	do.	Las Lagunas Project (PanTerra Gold. Ltd., 100%)	Las Lagunas	14,000 ²
Do.	do.	Pueblo Viejo Dominicana Corp. (Barrick Gold Corp., 60%, and Goldcorp Inc., 40%)	Pueblo Viejo	110,000
HAITI				
Cement		Cimenterie Nationale S.E.M. [Cementos Argos S.A. (CINA), 65%]	Cabaret	850,000
JAMAICA				
Alumina		Alumina Partners of Jamaica (Alpart) (United Company RUSAL Plc, 100%)	Nain, St. Elizabeth	1,650,000 ⁴
Do.		Jamaica Aluminum Co. (Jamalco) (Noble Group Ltd., 55%, and Government, 45%)	Halse Hall, Clarendon	1,400,000
Do.		West Indies Alumina Co. (Winalco) (United Company RUSAL Plc, 100%)	Ewarton Works, St. Catherine and Kirkvine Works, Manchester	1,210,000 ⁵
Bauxite		Alumina Partners of Jamaica (Alpart) (United Company RUSAL Plc, 100%)	Nain, St. Elizabeth	4,900,000 ⁴
Do.		Jamaica Aluminum Co. (Jamalco) (Noble Group Ltd., 55%, and Government, 45%)	Manchester	1,800,000
Do.		Noranda Bauxite Ltd. (Noranda Aluminum Holding Corp., 49%, and Government., 51%)	St. Ann	4,500,000
Do.		West Indies Alumina Co. (Winalco) (United Company RUSAL Plc, 100%)	Russell Place and Schwallenburgh	4,000,000
Cement		Caribbean Cement Co. Ltd. (Trinidad Cement Ltd., 74%)	Rockfort, Kingston	2,200,000
Petroleum, refinery	42-gallon barrels per day	Petrojam Ltd. (Government, 51%, and Petróleos de Venezuela S.A., 49%)	Kingston Port	30,000
TRINIDAD AND TOBAGO				
Ammonia		Methanol Holdings (Trinidad) Ltd. (Consolidated Energy Ltd., 100%)	Point Lisas Industrial Estate	650,000
Do.		Caribbean Nitrogen Co. Ltd. (EOG Resources Trinidad Ltd., KOCH Industries, Man Ferrostaal, and Proman Group)	do.	650,000
Do.		Nitrogen (2000) Unlimited (EOG Resources Trinidad Ltd., KOCH Industries, Man Ferrostaal, and Proman Group)	Point Lisas Industrial Estate	650,000
Do.		PCS Nitrogen (Trinidad) Ltd. (Potash Corp., 100%)	do.	2,200,000
Do.		Point Lisas Nitrogen Ltd. (CF Industries Holdings Inc, 50%, and KOCH Fertilizer LLC, 50%)	do.	650,000
Do.		Trinidad Nitrogen Co. Ltd. (Tringen I and II) (Government, 51%, and Yara International ASA, 49%)	do.	1,000,000
Do.		Yara Trinidad Ltd. (Yara International ASA, 100%)	do.	300,000
Cement		Trinidad Cement Ltd.	Claxton Bay	1,200,000
Clay		Trinidad Aggregate Products Ltd.	Depot Road, Longdenville	NA
Iron and steel		ArcelorMittal Steel Point Lisas Ltd. (ArcelorMittal, 100%)	Point Lisas Industrial Estate	2,700,000
Limestone, blue		Cumaca Blue Limestone Products Ltd.	Cumaca Road, Valencia	NA
Do.		Cumana Enterprise Limited	Toco Road, Cumana	NA
Do.		Harripersad Dookeran	Quarry Road, Guaracara	NA
Do.		Hermitage Limestone Ltd.	Tumbason Road, Arima	NA
Do.		Saiscon Ltd.	Corosal Road, Mayo	NA
Do.		Springbank Quarry Ltd.	Heights of Guanapo, Arima	NA
Do.		St. Alban's Sand and Gravel Co. Ltd.	Cumaca Road, Cumaca	NA
Do.		RRJ Ltd.	Tabaquite Road, Guaracara	NA

See footnotes at end of table.

TABLE 2—Continued
ISLANDS OF THE CARIBBEAN: STRUCTURE OF THE MINERAL INDUSTRIES IN 2015

(Metric tons unless otherwise specified)

Country and commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
TRINIDAD AND TOBAGO—				
Continued				
Liquefied natural gas		Train 1 (BP (Barbados) Holding SRL, 34%; BG Atlantic 1 Holding Ltd., 26%; Shell LNG Port Spain BV, 20%; NGC Trinidad and Tobago LNG Ltd., 10%; Summer Soca LNG, 10%)	Point Fortin	3,000,000
Do.		Trains 2 and 3 (BP Train 2/3 Holding SRL, 42.5%; BG 2/3 Investment Ltd., 32.5%; Shell LNG Port Spain BV, 25%)	do.	6,600,000
Do.		Trains 4 (BP (Barbados) Holding SRL, 37.78%; BG Atlantic 4 Holdings Ltd., 28.89%; Shell LNG Port Spain BV, 22.22%; Trinidad and Tobago LNG, 11.11%)	do.	5,200,000
Methanol		Atlas plant (Methanex Corp., 63.1%)	Point Lisas Industrial Estate	1,700,000
Do.		Titan plant (Methanex Corp., 100%)	do.	850
Do.		Methanol Holdings (Trinidad) Ltd., of which:	do.	4,800,000
		Plant 1		(480,000)
		Plant 2		(550,000)
		Plant 3		(570,000)
		Plant 4		(580,000)
		Plant 5		(1,900,000)
Natural gas liquids	42-gallon barrels per day	Phoenix Park Gas Processors Ltd. (National Gas Company of Trinidad and Tobago, 51%)	Port of Savonetta	70,000
Sand and gravel		29 quarries	Matura, Sangre Grande, Turure and Valencia	NA
Petroleum:				
Refinery	42-gallon barrels per day	Petroleum Company of Trinidad and Tobago Ltd. (Petrotrin) (Government, 100%)	Pointe-a-Pierre	168,000
Crude	do.	Greater Angostura (BHP Billiton Ltd., 45%; Total S.A., 30%; Chaoyang, 25%)	Greater Angostura oilfield	100,000
Urea	metric tons	PCS Nitrogen Trinidad Ltd. (Potash Corp. of Saskatchewan, Inc., 100%)	Point Lisas Industrial Estate	748,000
Do.	do.	Ammonia Urea Nitrate Melamine complex (Methanol Holdings Ltd.)	do.	NA

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

¹Storage facilities.

²Las Lagunas project involves the reprocessing of gold and silver refractory tailings from previous operations at the Pueblo Viejo Mine.

³Placed on care-and-maintenance status.

⁴Operations suspended.

⁵Operations at Kirkvine Works have been suspended since 2009.