ANTIGUA AND BARBUDA

Although the mining sector played a minor role in the economies of Antigua and Barbuda in 2000, tourism, which was the dominant sector, accounted for more than one-half of the gross domestic product (GDP). The GDP purchasing power parity in 1999 was $524 million. As of July 2000, the population was estimated to be 66,000. In 1998, exports were $38 million; petroleum products accounted for 48% of the total value of exports (U.S. Central Intelligence Agency, 2000, World factbook 2000—Antigua and Barbuda—Economy, accessed August 14, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/ac.html).

The Government agency that oversees the mineral industries is the Ministry of Public Works, Utilities, and Energy. The Government also operates a petroleum refinery that uses imported oil.

Sand and gravel and crushed stone industries supported the local construction industry. Devcon International Corp. of the United States operated the largest quarry on Antigua, which produced aggregates from boulders to manufactured sand (Devcon International Corp., 2000, Antigua, accessed August 29, 2001, at URL http://www.devcon.com/mainpages/AMP.html). C.O. Williams Ltd. of the United States also had quarrying operations on the islands. Limestone and salt were other mineral commodities produced on Antigua and Barbuda.

ARUBA

In 2000, the mining sector played a minor role in the economy of Aruba; tourism, which was the main sector of the Aruban economy, represented nearly 70% of the GDP, although offshore banking and oil refining and storage were also important. The GDP purchasing power parity in 1999 was $1.6 billion. The official results of the Aruba Census 2000 show that the population increased to 90,506. In 1998, exports were $1.17 billion led by oil reexports and transport equipment (U.S. Central Intelligence Agency, 2000, World factbook 2000—Aruba—Economy, accessed August 14, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/aa.html).

In 2000, Coastal Corp. of the United States operated a 280,000-barrel-per-day (bbl/d) refinery in Aruba. It was closed temporarily in April 2001 after an accidental explosion. The refinery produced mainly distillates, jet fuel, fuel oil, and refinery feedstocks (Worldfuels.com, April 18, 2001, Refinery blast, shutdown extends U.S. distillate rally, accessed January 8, 2002, at URL http://www.worldfuels.com/archive/snapshot/snap041801.htm). In 2000, it completed a $250 million expansion and upgrade that boosted its overall crude distillation capacity by 65,000 bbl/d and enabled the refinery to run heavier grades of crude oil. As part of its expansion, Coastal Corp. entered into a 100,000-bbl/d crude supply contract with Mexico's state oil company Petroleos Mexicanos S.A. de C.V. (Petroleumworld.com, April 20, 2001, Coastal delays partial restart of 280,000 bbl/d Aruba refinery, accessed August 29, 2001, at URL http://www.petroleumworld.com/story3356.htm).


THE BAHAMAS

In 2000, the mining sector played a minor role in the economy of the Bahamas. The leading sectors were tourism and offshore banking; tourism accounted for more than 60% of the GDP, which, based on purchasing power parity in 1999, was $5.58 billion. The population as of July 2000 was estimated to be 295,000. In 1998, exports were $362.8 million led by cement, crawfish, pharmaceuticals, refined petroleum products, and rum (U.S. Central Intelligence Agency, 2000, World factbook 2000—The Bahamas—Economy, accessed August 14, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/bf.html). Other than cement and refined petroleum products, mineral products produced by The Bahamas were aragonite, salt, sand and gravel, and stone.

Reflecting a growing concern for the environment, the Government created a Ministry of the Environment that will deal with environmental and development issues. Among other duties, it will examine the impact of mining on the environment, waste management, forestry issues, water management, and the coastal environment (Washington Times, March 29, 2000, The Bahamas emphasizes importance of environment with establishment of new ministry, accessed May 8, 2001, at URL http://www.internationalspecialreports.com/theamericas/00/bahamas/16.html).

Morton Bahamas Salt Co. of the United States, which was the major salt producer on the Islands, produced about 900,000 metric tons (t) of salt in 2000. On the island of Inagua, Morton Bahamas, which was the only major industry and largest employer, produced about 500 metric tons per year (t/yr) of salt at the second largest solar saline operation in North America (Interknowledge.com, 2000, Inagua, accessed August 30, 2001, at URL http://www.interknowledge.com/bahamas/bsinin01.htm). Nationwide, Morton Bahamas sold its salt to water softener companies (Expedia.com, 2000, Inagua—Morton Bahamas Salt Co., accessed June 7, 2001, at URL http://www.internationalproperties.com/TheAmericas/00/bahamas/16.html).

Bahamas Oil Refining Co. [a subsidiary of the Venezuelan...
state oil company Petroleos de Venezuela, S.A. (PDVSA)] operated a terminal with 20 million barrels (Mbbl) of crude and products storage capacity. In 2000, the capacity actually in use was 10.2 Mbbl, of which 4 Mbbl was devoted to crude oil storage; 4.7 Mbbl, fuel oil; and 1.5 Mbbl, distillates and gasoline. In September 2000, the president of PDVSA discussed with Government officials of the United States the possibility of using this storage facility for an emergency reserve of heating oil to alleviate supply problems during winters in the United States (Petroleos de Venezuela, S.A., September 15, 2000, Venezuela explores new energy cooperation possibilities with the United States, accessed August 30, 2001, at URL http://www.pdv.com/news/english/2000/ciavalidini_wyny_en.html).

In the past 5 years, The Bahamas Maritime Authority (a Government-owned corporation) has transformed the country’s shipping industry into the third largest ship registry in the world. The ship registry has grown to more than 1,500 vessels that carry more than 27 million gross metric tons (Washington Times, March 29, 2000, Maritime Authority grows ship registry to 3rd largest in the world, accessed May 8, 2001, at URL http://www.internationalspecialreports.com/theamericas/00/bahamas/transportation_shipping/index.html).

Teekay Shipping Corp. (a Bahama-based provider of international crude oil and petroleum product transportation services through a fleet of medium-sized oil tankers) was a company whose growth was reflective of the growth in the Bahamian shipping industry. For example, revenues more than doubled to $644 million from about $300 million in 1999; this increase was mostly driven by an increase in charter rates and a shift in preferences by customers to Teekay’s newer environmentally safer vessels; the preference shift followed after a series of oil spills by older tankers in recent years. The company’s growth also benefited from lower interest rates and vessel operating expenses (Teekay Shipping Corp., 2000, Annual report—Financial highlights, accessed August 14, 2001, at URL http://www.teekay.com/PDFs/AR_DEC00.pdf).

BARBADOS

In 2000, the mining sector played a minor role in the economy of Barbados. In recent years, the economy has begun to diversify away from sugarcane cultivation and into manufacturing and tourism, and the Government has begun efforts to privatize state-owned enterprises. The GDP purchasing power parity in 1998 was $2.9 billion. The population as of July 2000 was estimated to be 275,000. In 1998, exports were valued at $211 million; export commodities were sugar and molasses, rum, other food and beverages, chemicals, electrical components, and clothing (U.S. Central Intelligence Agency, 2000, World factbook 2000—Barbados—Economy, accessed August 15, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/bb.html). The principal mineral commodities produced were crude petroleum and natural gas. Industrial mineral production included cement, clays, limestone, and sand and gravel.

The Ministry of Environment, Energy, and Natural Resources is the Government agency responsible for the mining sector of Barbados. Plans to privatize its energy companies, which include the Barbados National Oil Company and the National Petroleum Company, have been announced, but no timetable has been set.

BERMUDA

In 2000, the mining sector played a minor role in the economy of Bermuda; tourism and international finance dominated the economy. The GDP purchasing power parity in 1999 was $2 billion. The population as of July 2000 was estimated to be 63,000. In 1998, exports, which were mainly reexports of pharmaceuticals to the United Kingdom and the United States, were valued at $32 million (U.S. Central Intelligence Agency, 2000, World factbook 2000—Bermuda—Economy, accessed August 15, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/bd.html). All mineral commodity requirements except for some local stone production, primarily coralline limestone, were imported.


Electricity in Bermuda was provided by Bermuda Electric Light Co. Ltd. (Belco) and was generated by using imported fuel oil. In 2000, Belco investigated the market potential for electric-powered vehicles and imported some from Georgia Power of the United States. Natural gas was also imported from
Shell Oil Co. of the United Kingdom. The natural gas was distributed by Bermuda Gas and Utility Co., Masters Ltd. of Bermuda, and Sunshine Co. Ltd. of Bermuda. The Government of Bermuda levied import duties on the fuel oil and the natural gas (Bermuda-online.org, July 23, 2001, Electricity and natural gas are expensive in Bermuda, accessed August 31, 2001, at URL http://www.bermuda-online.org/electctgas.htm).

CUBA


Mining contributed significantly to Cuba’s revenue through foreign trade and because of interest by the international sector as a result of recent changes in investment and mining laws. Nickel production and trade continued to dominate the mining sector. Cuba’s nickel reserves were the world’s fourth largest and its reserves base was the world’s largest; Cuba was the sixth leading producer of mined nickel (Kuck, 2001). Production of cobalt, which is a byproduct of nickel operations, has also been important to Cuba’s mineral sector. In 2000, Cuba was the sixth leading world producer of cobalt with about 7% of the total world mine production (Shedd, 2001). In addition, Cuba produced moderate amounts of ammonia, cement, chromite, copper, gold, gypsum, petroleum and petroleum products, salt, silica sand, steel, sulfur as a byproduct of petroleum refining, and other construction materials (table 1).

Mining activity in Cuba is regulated by the constitution, Law No. 76 (the mining law), Law No. 77 (the foreign investment law), and Law No. 88 (the environmental law).

El Ministerio de la Industria Básica is the Government entity with responsibility for energy, geology and mining, and basic chemistry. Mineral concessions are awarded by the Oficina Nacional de Recursos Minerales, which is an agency under the Ministerio de Industria Básica; it was created in 1995 as a result of the new mining law. The Oficina Nacional de Recursos Minerales is also charged with protecting Cuba’s mineral and hydrocarbon resources, controlling mineral production, and ensuring the preservation of the environment in areas of mineral activity.

Geology and mining are overseen by the Government companies Unión Geológica Minera S.A. (Geominera) and Unión del Niquel S.A. Geominera is responsible for the exploration and production of all metallic and nonmetallic minerals, except nickel. The company works in joint venture (shared-risk ventures) with foreign private companies and has focused its activities in commodities with high potential, like gold and silver. Unión del Niquel is responsible for the production and processing of nickel and cobalt. The company works independently and with private companies to produce nickel from three active mines in western Cuba.

Government-owned Cubapetróleo S.A. (CUPET) is responsible for exploring, refining, and marketing petroleum. CUPET has three drilling and production subsidiaries, four refineries, distribution companies, and a lubricants company. It works in association with private companies in an effort to increase production from the existing fields and has production-sharing contracts in 45 blocks (Ministerio de la Industria Básica, [undated], [untitled], accessed September 10, 2001, at URL http://www.cubagob.cu/des_eco/minbas.htm). Corporación de Cemento also reports to the Ministerio de la Industria Básica. Cuba’s clay, marble, and other construction material sectors report to the Ministerio de Construcción (Ministry of Construction) (Otero Costafreda, 1999). Mineral production continued to be dominated by the Government. Recent changes in mining and foreign investment legislation, however, are changing the nature of the industry. Government and foreign private companies have formed joint corporations (mixed enterprises). Exploration and production contracts between the Government and foreign private companies may be of shared risk or with risk assumed by the foreign company.

At yearend 2000, 392 economic associations with foreign capital were operating in Cuba; most of them were dedicated to mining, exploration and production of petroleum, tourism, and construction. Foreign companies also participated in the cement, electricity, financial, natural gas industries, among others. About 50% of the foreign investment in Cuba comes from the European Union. Companies from Canada have invested significantly in Cuba (The Government of the Republic of Cuba, [2001], Inversion extranjera en Cuba [Foreign investment in Cuba], accessed September 12, 2001, at URL http://www.cubagob.cu/otras_info/cpi/inversion.htm).

Since the dissolution of the Soviet Union in the early 1990s, Cuba’s foreign trade has changed significantly. In 2000, Europe, which was Cuba’s main trading partner, received 60% of Cuba’s exports and was the source of about 40% of Cuba’s imports (The Government of the Republic of Cuba, 2001), Comercio exterior [Foreign trade], accessed September 12, 2001, at URL http://www.cubagob.cu/otras_info/ONE/comercio_exterior.htm).

Production of mined nickel (nickel content of nickel oxide, nickel-cobalt sulfide, and nickel-cobalt ammonium liquor) increased by 7.4% to 71,400 t in 2000. Production of nickel and cobalt, which was concentrated in the northeastern side of the Island, came from three operations, two of which produced nickel oxide and one that produced the intermediate product, nickel-cobalt sulfide. The sulfide producer Moa S.A. was a mining and processing operation that is part of a vertically integrated joint-venture company between the Government of Cuba and Sherritt International Corp. (50% each); the joint venture was formed in 1994 and had facilities in The Bahamas, Canada, and Cuba. Production from the Moa operation
increased by 9% to 29,520 t of nickel-cobalt with a nickel content of about 27,300 t (Sherritt International Corp., 2001, p. 7). Nickel production from the nickel oxide plant in Nicaro and Punta Gorda was about 40,000 t. An ammonium liquor in the nickel oxide production produced about 1,100 t of nickel.


In late 2000, RAO Norilsk Nickel of Russia was considering investing in another nickel project in the Holguín Province, eastern Cuba. Construction of Las Camariocas was suspended; this plant was being constructed before the collapse of the former Soviet Union (FSU). The Cuban Government has been trying to find a new investor for the plant since foreign investment laws were modified in the mid-1990s.

Production of steel increased to about 336,200 t; this was an 11% increase since 1999 and a 45.5% increase in 5 years. The German steel plant builder Sket Walzwerkstechmik was to invest $110 million in 2000, at URL http://www.devcon.org/2001/mainpages/News.htm).

The Dominican Republic is regulated by Mining Law 146, which was promulgated and published in the Official Gazette No. 9231 in June 1971. The tax section of the mining law was modified by law 11-92 in 1992. Income tax was reduced from 40% to 25%. The Government agency responsible for administering the mining law is the Dirección General de Minería, which is part of the Secretaría de Estado y Comercio.

In 1995, the foreign investment law was revised with law 16-95. The law gave similar rights to foreign and domestic investors. Under the law, foreign investment must be registered with the Central Bank within 90 days from the date of investment. Foreign investment is prohibited in the disposal of dangerous or radioactive and toxic waste not produced in the country, areas that affect public health and the balance of the environment, and manufacturing of equipment and materials directly related to national defense and security. Regulation No.

DOMINICA

In 2000, the mining sector played a minor role in the economy of Dominica. Although efforts were underway to develop the tourism industry, agriculture continued to be the leading sector. The GDP based on purchasing power parity in 1998 was $225 million. The population as of July 2000 was estimated to be 72,000. In 1998, exports were valued at $60.8 million; bananas accounted for 50% of the total value of exports (U.S. Central Intelligence Agency, 2000, World factbook 2000—Dominica—Economy, accessed August 15, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/ do.html). Dominica’s mineral products were cement, clay, limestone, pumice, sand and gravel, and volcanic ash.

In February 2000, Devcon sold its cement and ready-mix operations in Dominica for approximately $3.9 million. Additional terms of the transaction were undisclosed (Devcon International Corp., February 24, 2000, [untitled], accessed August 16, 2001, at URL http://www.devcon.org/mainpages/News.htm).

The Dominican Republic’s real GDP increased by 7.8%. The mineral industry of the Dominican Republic, which continued to be small, represented about 2% of the GDP. Mining increased by 9.2% stimulated by higher output and a higher average price of nickel, which was the country’s most important mineral to the economy. The construction sector increased by 5.2% (Banco Central de la República Dominicana, 2001, p. 1, 5).

The country produced cement, gypsum, ferronickel, marble, petroleum refinery products, salt, sand and gravel, and steel. Production of construction minerals partially met the Dominican Republic’s domestic demand. Production of gold and silver was suspended in 1999 and was not resumed in 2000 (table 1). The Dominican Republic did not produce petroleum in 2000, and domestic production of petroleum refinery products was not enough to meet the requirements for domestic consumption.

In 2000, Cuba’s gross electric generation was 15,029 gigawatthours, which was a 3.7% increase from that of 1999. During the year, 70% of Cuba’s electricity was generated with domestic petroleum. Cuba’s government agency Unión Eléctrica de Cuba signed a contract with Alstom S.A. of France, which was the world’s second largest power turbine manufacturer, to modernize the thermoelectric plant in the Matanzas Province so that it could accept high-sulfur petroleum. Alstom was one of the foreign companies collaborating in a 3-year, $167 million program that began in 1997 to upgrade 45% of Cuba’s generating capacity built by Czechoslovakia and the FSU. In 1999, 41% of the upgrade had been completed (U.S.-Cuba Trade and Economic Council, Inc., 2000, Alstom S.A. of France confirms US$20 million contract to modernize power plant, accessed August 28, 2001, at URL http://www.cubatrade.org/2000hlights.html).
360 provides definitions and details to administer law 16-95.

Mineral production in the Dominican Republic was by the Government and the private sector. The sole producer of gold and silver Government-owned Rosario Dominicana S.A. was idle during the year. Corporación Dominicana de Empresas Estatales held minority interest in the production of gypsum, marble, nickel, and salt. Cemex Dominicana S.A. [a subsidiary of Cementos Mexicanos S.A. de C.V. (CEMEX)] invested in the Dominican gypsum mine; Cemex Dominicana was also known as Cementos Nacionales. The Government also held 50% interest in the only petroleum refinery Refinería Dominicana de Petróleo S.A.

Production of cement was about 2 million metric tons (Mt). In early 2000, CEMEX announced a $187 million investment in Cemex Dominicana. A large portion of the investment ($145 million) was planned to increase the company’s clinker capacity from 600,000 t to 2.2 million metric tons per year (Mt/yr). The new clinker line was scheduled to be completed in 2 years. CEMEX was also investing $22 million in a new vertical mill that would increase the facility’s grinding capacity by 50% to 2.4 Mt/yr. In addition, Cemex Dominicana will become self-sufficient in power with a $20 million investment in 18-megawatt (MW) generating plant, which began in 2000 (Cemento Mexicanos S.A. de C.V., 2000).

In 2000, nickel continued to be the most important mineral to the Dominican economy and the major source of foreign earnings from the mining sector. According to U.S. Geological Survey data, the country ranked 10th in world nickel mine production and 12th in plant production. The only nickel producer was Falconbridge Dominicana C. por A. (Falcona) [a subsidiary of Falconbridge Ltd. of Canada (85.26%), the Government of the Dominican Republic (10.64%), and Redstone Resources, Inc. (4.1%)]. Falcono produced ferronickel near the town of Bonao. Production of ferronickel increased by 17.7% to 72,488 t with an nickel content of 27,829 t. Shipments of ferronickel increased by 13.5% to 71,065 t with a nickel content of 27,226 t.

The private sector with 12 private and independent producers produced 46% of the electricity generated in the Dominican Republic in 2000. Total production was 9.8 billion kilowatthours (kWh); this was a 5.4% increase from that of 1999, and consumption increased by 10.8% to 5.8 billion kWh (Banco Central de la República Dominicana, 2001, p. 16).

In 2000, AES Corp. of the United States began construction of a 300-MW $340 million electric powerplant near Santo Domingo (AES Corp., 2000). The construction of the gas-fired plant was scheduled for completion in 2002. BP Amoco plc agreed to supply liquefied natural gas to AES for its projects in the Dominican Republic (Alexander’s Gas & Oil Connections, August 7, 2000, BP Amoco agrees to LNG sale to AES for Dominican Republic, accessed September 7, 2000, at URL http://www.gasandoil.com/goc/company/cnl03250.htm). In addition to the plant, AES has Los Mina 210-MW powerplant and a 50% participation in EDE Este, which is the electric distribution company in the eastern part of the country.

GRENADA

In 2000, the mining sector played a minor role in the economy of Grenada. Although tourism was the leading sector, the construction and trade sectors grew significantly. The GDP purchasing power parity in 1999 was $360 million. The population as of July 2000 was estimated to be 89,000. In 1998, exports were $26.8 million; export commodities were mainly agriculture products (U.S. Central Intelligence Agency, 2000, World factbook 2000—Grenada—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/gj.html). Limestone and sand and gravel were produced for the local construction industry.

In January, the Grenada Airports Authority began construction projects that will cost nearly $15 million primarily to construct a new terminal and resurface the runway at Point Salines International Airport. The airport was also seeking additional flights from the United States, in particular, flights by Continental Airlines, Inc., and Delta Air Lines, Inc. After American Airlines, Inc., of the United States and BWIA West Indies Airways Ltd. of Trinidad and Tobago stopped flights, only Air Jamaica Airlines flew to Grenada (Caribbean Aviation, June 1, 2001, Caribbean airports—Grenada airport, accessed August 31, 2001, at URL http://www.caribbeanaviation.com/airports.htm#gnd).

GUADELOUPE AND MARTINIQUE

Guadeloupe and Martinique were administered as Overseas Departments of France. In 2000, mining played a minor role because their economies were led by agriculture, tourism, light industry, and services. The islands depended on France for large subsidies and imports. The GDF purchasing power parity in 1996 was nearly $8 billion ($3.7 billion for Guadeloupe and $4.2 billion for Martinique). Their combined population as of July 2000 was estimated to be about 840,000. In 1997, exports were valued at $390 million; major exports were bananas, refined petroleum products, rum, and sugar (U.S. Central Intelligence Agency, 2000, World factbook 2000—Guadeloupe—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/gp.html; U.S. Central Intelligence Agency, 2000, World factbook 2000—Martinique—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/mb.html). Cement, clays, lime, pumice, salt, sand and gravel, and stone were mineral commodities produced. Petroleum products were refined on Martinique by Societe Anonyme de Raffinage des Antilles from imported crude oil.

HAITI

In 2000, the mining sector played a minor role in the economy of Haiti; small-scale agriculture was the main sector. The GDP based on purchasing power parity in 1999 was $9.2 billion. The population as of July 2000 was estimated to be 6,900,000. In 1998, exports, which consisted of agricultural products, were valued at $322 million (U.S. Central Intelligence Agency, 2000, World factbook 2000—Haiti—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/hai.html). Haiti was involved in the production of cement, the mining of clays and limestone for cement production, the quarrying of marble, the production of marine salt, and the dredging for sand and gravel and other minerals used in the construction industry. In northern Haiti, deposits of chrome, copper, gold, iron ore, lead, manganese, silver, sulfur, tin, and zinc are small and undeveloped.

KWG Resources, Inc., of Canada had two properties in Haiti with gold and copper resources—Grand Bois and Morne Bossa.
Bossa, which also covers an area of 25 km² and is 10 kilometers (km) southeast of Cap Haitien, had a resource estimated to be 2.2 Mt at a grade of 1.8 g/t gold (KWG Resources, Inc., 2000, Exploration, accessed August 17, 2001, at URL http://www.kwg-resources.com/explore).

Other companies active in the mining sector included the Canadian companies Mazarin Mining Corp. and St. Genevieve Resources Ltd. St. Genevieve Resources estimated that two small gold mines near Cap Haitien could yield at least $100 million during the next 10 years (Welcome to the Caribbean.com, [undated], Caribbean mining, accessed August 17, 2001, at URL http://www.welcometothe.caribbean.com/mining.htm).

JAMAICA

Leading industries in Jamaica in 2000 were bauxite mining and tourism. The GDP based on purchasing power parity was $8.8 billion in 1999. In 1998, exports were valued at $1.4 billion; alumina and bauxite accounted for more than 50% of the total value of exports; others were bananas, rum, and sugar. Jamaica’s population as of July 2000 was estimated to be 2,700,000 (U.S. Central Intelligence Agency, 2000, World factbook 2000—Jamaica—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/jm.html). Jamaica also produced cement, gold, gypsum, secondary lead, lime, limestone, petroleum refinery products, salt, and other construction materials.

The Ministry of Mines and Energy was the Government agency responsible for the mining sector of Jamaica. Legislation that governs the mineral sector includes the Mining Act, the Mining Regulations, the Minerals (Vesting) Act, the Mines and Health Regulations, the Bauxite and Alumina Encouragement Act, the Quarries Control Act, the Quarries Regulation, and the Gunpowder and Explosive Act (Mines and Geology Division, 1998, p. 29). The Ministry’s Mines and Geology Division supports the Ministry through research and ensures compliance with the mining laws. The Jamaica Bauxite Institute is responsible for monitoring and regulating the bauxite industry and serves as the Government adviser in all matters that concern the subsector.

Production of minerals in Jamaica was led by the private sector, but the Government was a partner or had minority equity in several mineral producing companies. Large international companies, such as Alcan, Inc., of Canada, Alcoa Inc. and Kaiser Aluminum Corp. of the United States, and Norsk Hydro A/S of Norway through their Jamaican subsidiaries, sometimes in partnership with the Government or with each other, were responsible for all the bauxite and alumina produced in Jamaica.

Internationally, Jamaica continued to rank among the leading producers of bauxite and alumina; it produced 8.8% of the world’s bauxite and about 7.4% of the world’s alumina (Plunkert, 2001). In 2000, total bauxite production (crude bauxite for exports plus bauxite converted to alumina) decreased by 5.1% to about 11.1 Mt. The main reason for this decrease was an explosion in July 1999 at Jamaica’s largest bauxite mining company Kaiser’s Gramercy alumina refinery in Louisiana. Shipments were expected to resume to the Gramercy refinery by the end of October 2000 (United Steelworkers of America Local #329, October 5, 2000, Kaiser Jamaica to resume shipment to U.S. plant, accessed March 19, 2001, at URL http://www.uswa329.org/October_2000/oct05c.htm).

In an effort to improve production efficiency, Jamaica Alumina Co. (Jamaica Alumina Co. [Jamalco] [a joint venture between Alcoa (50%) and the Government of Jamaica (50%)]) and Alumina Partners of Jamaica (Alipart) [a joint venture between Kaiser Aluminum (65%) and Norsk Hydro (35%)], which were two of the bauxite and alumina producers in Jamaica, agreed to form a joint venture to merge their bauxite mining operations. The merger, which was approved by the Jamaican Cabinet in 1999, was possible because both companies will be mining bauxite in South Manchester Parish by 2001. This joint venture required Jamalco to construct 16 km of railroad to connect the existing railroad at Parnassus with a new railhead in St. Jago, which also will be built by Jamalco as part of the agreement (Jamaica Gleaner, April 28, 1999, Today’s business—Bauxite companies to merge in July, accessed March 31, 2000, at URL http://www.jamaica-gleaner.com/gleaner/19990428/business/b1.html).

In 2000, Alcan owned a 93% interest in Alcan Jamaica Co., which was Alcan’s division that operated bauxite mines and two alumina refineries. The remaining 7% was owned by the state-owned Jamaica Bauxite Mining Ltd. Swiss-based Glencore International AG expressed interest in acquiring Alcan’s bauxite interests in Jamaica (Mbendi Information Services, May 3, 2001, Jamaica—Mining—Overview, accessed August 17, 2001, at URL http://www.mbendi.co.za/indy/ming/am/jm/p0005.htm).


In 1999, the Government of Jamaica sold its 43% stake in the Caribbean Cement Co. Ltd., which was the only cement producer in Jamaica, to Trinidad Cement Ltd., Trinidad and Tobago. Trinidad Cement paid $29.4 million to the National Investment Bank of Jamaica (Jamaica Gleaner, April 22, 1999, Today’s business—Carib cement sale official, accessed August 4, 2000, at URL http://www.jamaica-gleaner.com/gleaner/19990422/business/b7.html). Later in the year, Trinidad Cement increased its share of Caribbean Cement to 74%. In 2001, company officials announced a hike in cement prices to local customers in an effort to combat increasing energy costs.

In 2000, Rugby Jamaica Lime and Minerals Ltd. (a partnership of Rugby Group plc of the United Kingdom and Clarendon Lime Ltd. of Jamaica) completed construction of a lime plant in Halse Hall, Clarendon Parish. The $25 million plant, which was built at the Jamalco alumina refinery property, has a capacity to produce 125,000 t/yr of lime. The company signed a long-term contract with Jamalco for 85,000 t/yr of lime and was negotiating other contracts with Alcan and Alpart (Caribbean News Agency, January 17, 2001, Business news—Jamaica’s bauxite industry back on track, accessed January 11, 2002, at URL http://www.cananews.com/cbi/businessupdate1160.htm).


Petrojam Ltd. of Jamaica planned to begin operation of a powerplant that will generate energy by using petcoke, which is a material made from crude oil and was previously handled as waste and which they will burn to generate the equivalent of 120 MW of capacity (Washington Times, 2000a). In 1998, electricity production was 6.4 billion kWh and electricity consumption in 1998 was 5.9 billion kWh (U.S. Central Intelligence Agency, 2000, World factbook 2000—Jamaica—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/jm.html).

On October 24, 2000, the Jamaica Ship Registry was officially launched. Besides Kingston, the island boasts eight active deepwater ports. Kingston Wharves Ltd. of Jamaica recently began a modernization project that could take 4 years to complete at a cost of $39 million (Washington Times, 2000b).

MONTSERRAT

In 2000, mining played a minor role in the economy of Montserrat. Severe volcanic activity has caused significant economic and social disruption in Montserrat since 1995. The United Kingdom, of which Montserrat is a dependent territory, committed about $100 million between 1996 and 1998 to help reconstruct the economy and has programmed additional aid for 1999 to 2001. In 2000, the construction sector was the leading industry, and the GDP based on purchasing power parity in 1998 was $31 million. Montserrat’s population as of July 2000 was estimated to be 6,400. In 1998, exports were valued at $303 million; petroleum products accounted for 98% of exports (U.S. Central Intelligence Agency, 2000, World factbook 2000—Montserrat—Economy, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/nt.html).

Aggregate was quarried on Saint Martin by Bouwwbedrijf Bowne Winden N.V. (a subsidiary of Devcon International Corp.). Production was consumed primarily by the local construction industry. Devcon produced and distributed ready-mix concrete, crushed stone, concrete block, and asphalt in the eastern Caribbean. In March 2000, Devcon sold 100% control of its cement import terminal on Saint Martin to Holderbank Financiere Glaris Ltd. of Switzerland (MarketPlaceCement, March 30, 2000, Consolidation of market network in Central America and the Caribbean—“Holderbank” acquires stake in Guatemala-based Cementos Progreso and five cement import terminals in the Caribbean, accessed September 4, 2001, at URL http://www.global-cement.dk/cement%20news/week13/holdconsol.htm).


Petroleum activities in the Netherlands Antilles were administered by Saba Bank Resources NV (jointly owned by the Government of the Netherlands Antilles and the Governments of Saba, Saint Eustatius, and Saint Martin). In 2000, Saba Bank sponsored a geologic review of offshore sediments that are located 5 km southwest of the island of Saba;
results indicated the potential of a resource of 500 Mbbbl of oil
(Oil & Gas Journal, 2000).

PDVSA leased the Curaçao Isla refinery from the
Government of the Netherlands Antilles and had plans to invest
$200 million during the next 10 years to upgrade the refinery’s
facilities. In June 2000, PDVSA canceled plans to upgrade Isla
and instead put its refinery in Cienfuegos, Cuba, into operation.
The Curaçao Isla refinery had a capacity of 116.8 million
barrels per year (U.S. Energy Information Administration, May
2001, Caribbean fact sheet—Oil and natural gas—Refining,
emeu/cabs/carib.html).

SAINT KITTS AND NEVIS

In 2000, the mining sector played a minor role in Saint Kitts
and Nevis. The economy of the Nation of Saint Kitts and Nevis
has traditionally been dependent on the sugarcane industry, but
the Government has recently increased efforts to expand
tourism. In 1998, Hurricane Georges caused significant
economic damages and limited GDP growth. The GDP
purchasing power parity in 1998 was $244 million. The
population of Saint Kitts and Nevis as of July 2000 was
estimated to be 39,000. In 1998, exports were valued at $42
million and comprised machinery, food, electronics, beverages,
and tobacco (U.S. Central Intelligence Agency, 2000, World
factbook 2000—Saint Kitts and Nevis—Economy, accessed
factbook/geos/sc.html). Saint Kitts and Nevis produced salt,
crushed stone, and sand and gravel.

In August 2000, a $5.1 million project to construct a 2,160-
square kilometer (24,000-square-foot) passenger terminal at
Newcastle Airport was undertaken with an anticipated
dedication date of July 2001. The Government expected the
new terminal to help increase arrivals by 20% per year
(Caribbean Aviation, June 1, 2001, Caribbean airports—Nevis
airport, accessed August 31, 2001, at URL

SAINT LUCIA

In 2000, Saint Lucia’s economy depended on bananas,
tourism, and small-scale manufacturing; mining played a minor
role. Prior to 1994, St. Lucia added small computer-driven
information technology and financial services as development
objectives. Recent investment has been in a petroleum storage
and transshipment terminal built by Ameranda Hess Corp. of
the United States. The Caribbean Development Bank funded an
airport expansion project. The GDP based on purchasing power
parity in 1998 was $656 million. Saint Lucia’s population as of
July 2000 was estimated to be 156,000. In 1998, exports were
valued at $75 million; export commodities were agricultural
products, and clothing (U.S. Central Intelligence Agency, 2000,
World factbook 2000—Saint Lucia—Economy, accessed
factbook/geos/st.html; U.S. Department of State, April 2001,
Background notes—Saint Lucia—Economy, accessed
index.cfm?docid=2344). Gravel and sand pits and pumice
quarries supplied the island’s construction sector, which is tied
to hotel expansion.

SAINT VINCENT AND THE GRENADINES

In 2000, mining played a minor role in the economy of Saint
Vincent and the Grenadines; agriculture, construction, and
tourism were leading sectors. The GDP based on purchasing
power parity in 1999 was $309 million. The population as of
July 2000 was estimated to be 115,000. In 1998, exports were
valued at $47.8 million and were led by bananas (U.S. Central
Intelligence Agency, 2000, World factbook 2000—Saint
Vincent and the Grenadines—Economy, accessed August 16,
geos/vc.html). Saint Vincent and the Grenadines produced
cement, salt, and sand and gravel.

TRINIDAD AND TOBAGO

Leading industries in Trinidad and Tobago in 2000 were
petroleum, chemicals, and tourism. The GDP based on
purchasing power parity was $9.4 billion in 1999. Trinidad
and Tobago’s population as of July 2000 was estimated to be
1,175,523. In 1998, exports were valued at $2.4 billion and
were led by petroleum and petroleum products. The country
has become the world’s largest exporter of ammonia and the
second largest exporter of methanol (U.S. Central Intelligence
Agency, 2000, World factbook 2000—Trinidad and
Tobago—Economy, accessed August 16, 2001, at URL
Trinidad and Tobago also produced ammonia, asphalt, cement,
direct reduced iron, limestone, natural gas, petroleum and
petroleum products, and sulfur.

The Ministry of Energy and Energy Industries is the
Government agency responsible for the mining sector of
Trinidad and Tobago. Production of mineral commodities in
Trinidad and Tobago was by the Government and the private
sector.

Trinidad Cement Ltd. [owned by the Government of Trinidad
and Tobago (80%) and CEMEX (20%)] was the only cement
producer in Trinidad and Tobago. In 2000, cement production
increased by 7.8% to 742,645 t from 688,400 t in 1999.

Production of petroleum in Trinidad and Tobago was by the
Government-owned Petrotrin and by the private sector
represented by BP Amoco Energy Co. of Trinidad and Tobago
Ltd. (BP Amoco Energy), Trinmar Ltd. (a joint venture between
Petrotrin and Texaco Trinidad, Inc.), and Trinidad and Tobago
Marine Petroleum Co. (Trintomar) (a joint venture of National
Gas Co., Enron Oil and Gas Trinidad Ltd., and Mora Oil
Ventures). In 2000, production of crude petroleum decreased
by 4.4% to almost 43.6 Mbbbl from more than 45.6 Mbbbl; this
reduction reversed last year’s 2% increase and marked the
lowest production level in 10 years. Production of refinery
products climbed by 7.9% to more than 57.5 Mbbbl from more
than 53.3 Mbbbl.

Investment in petroleum exploration totaled $99.7 million in
2000, which included five exploratory wells onshore and seven
wells offshore (Ministry of Energy and Energy Industries, 2000,
Industry focus—Oil—2000 exploration & production review
http://www.energy.gov.tt/applicationloader.asp?app=articles&
id=552). In August 2000, New Horizon Exploration Ltd. of
Trinidad and Tobago announced that it had formed a joint
venture with Petrotrin to develop the Parrylands block E oil
field. New Horizon planned to invest up to $35 million to
develop the field and expected to recover up to 30 Mbbl (Businesswire, August 3, 2000, Trinidad oil field to be produced through a joint venture with New Horizon Exploration Trinidad & Tobago, Ltd. and Petrotrin, accessed August 4, 2000, at URL http://www.businesswire.com/webbox/bw.080300/202160268.htm).

Production of natural gas, which has been the driving force behind the rapid development of the petrochemical manufacturing sector in Trinidad and Tobago, increased by 16.9% to 15,483 million cubic meters in 2000 from 13,240 million cubic meters in 1999; the change from 1998 to 2000 was nearly 50% (Ministry of Energy and Energy Industries, 2000, Industry focus—Oil—2000 exploration & production review and forecast for 2001, accessed January 11, 2002, at URL http://www.energy.gov.tt/applicationloader.asp?app=articles&id=552). The three leading producers were BP Amoco Energy, British Gas Trinidad, and Enron Corp.

In July 2000, BP plc and Spain’s Repsol YPF announced the discovery of 2 trillion cubic feet of natural gas off the southeast coast of Trinidad. This was BP’s third major gas discovery in the past 3 years off of Trinidad. BP owned 70% of the exploration license, and Repsol YPF owned 30% (Alexander’s Gas & Oil Connections, June 23, 2000, Discoveries—BP Amoco and Repsol find offshore gas in Trinidad, accessed August 29, 2001, at URL http://www.gasandoil.com/goc/discover/dix02559.htm).

In August 2000, Atlantic LNG (jointly owned by BP, British Gas, Cabot Oil & Gas Corp. of the United States, National Gas, and Repsol) signed an agreement to expand its natural gas facility at Port Fortin. The project was expected to cost about $1 billion, and upon completion, the facility will be the sixth largest natural gas facility in the world after those in Algeria, Indonesia, Qatar, Malaysia, and Australia (Atlantic LNG, August 29, 2000, Expansion, accessed August 30, 2000, at URL http://atlanticlng.com/media/032300.html). Infrastructure developments in Trinidad and Tobago include the creation of a Ministry of Transport and the opening of the international airport at Piarco, just outside Port of Spain. The Minister of Infrastructure noted, “In five years you should not be able to recognize Trinidad and Tobago because the mandate of this ministry is to change dramatically the infrastructure of the country” (Washington Times, 2001).

In 1999, a $100 million 225-MW natural-gas-fueled powerplant of InmCOGEN (a subsidiary of York Research Corp. of the United States) began commercial operation (York Research Corp., 1999). Most of the company’s output in 2000 (equivalent to 195 MW) was to be sold to the Government’s distribution company Trinidad and Tobago Electricity Commission under a 30-year agreement. In 1998, total electricity production in Trinidad and Tobago was 4.8 billion kWh, and electricity consumption was 4.4 billion kWh (U.S. Central Intelligence Agency, 2000, Trinidad and Tobago—Economy, World factbook 2000, accessed August 16, 2001, at URL http://www.odci.gov/cia/publications/factbook/geos/td.html).

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Oil & Gas Journal, 2000, Caribbean’s Saba bank area: Oil & Gas Journal, v. 98, no. 40, October 2, p. 46-52.


2000b, Jamaica—New international ship registry is set to bring Jamaica’s maritime sector to the next level: Washington Times Special International Report, November 30, p. 3.


York Research Corp., 1999, Commercial operation of 225 MW $100 million power plant in Trinidad and Tobago: York Research Corp. press release, September 13, 1 p.

Major Sources of Information

Banco Central de la República Dominicana
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Fax: (809) 686-7488

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Kingston Mall
Jamaica, W.I.
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Fax: (876) 967-3688

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Government Offices, Riverside Plaza
Port of Spain
Republic of Trinidad and Tobago
Telephone: (868) 623-6708
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<td>65,000</td>
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<td>Sulfur, byproduct of petroleum</td>
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<td>77,000</td>
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<td>172,728</td>
<td>259,181</td>
<td>252,929 267,659</td>
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<td>Clay and shale</td>
<td>120,000</td>
<td>120,000</td>
<td>120,000</td>
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<td>20,000</td>
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<td>20,000</td>
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<td>35 28</td>
<td>37 37</td>
<td>47 38</td>
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<td>Marketed do.</td>
<td>15 12</td>
<td>15 15</td>
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<tr>
<td>Limestone e/</td>
<td>1,500,000</td>
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<td>1,500,000</td>
<td>1,500,000</td>
<td>1,500,000</td>
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<tr>
<td>Sand e/</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
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<tr>
<td>Petroleum: Crude thousand 42-gallon barrels</td>
<td>380 328</td>
<td>585 708 t/</td>
<td>516 560</td>
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<td>2,277 2,300 e/</td>
<td>2,300 2,300</td>
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<td>Asphalt</td>
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<td>59,400</td>
<td>68,400</td>
<td>73,300</td>
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<td>1,437,900 t/</td>
<td>1,706,600 t/</td>
<td>1,713,400 t/</td>
<td>1,784,600 t/</td>
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<td>Chromite</td>
<td>37,300</td>
<td>44,000</td>
<td>46,000</td>
<td>52,000 t/</td>
<td>50,000 e/</td>
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<td>Cobalt, mine output, Co content: Oxide, oxide sinter, sulfide, ammoniacal liquor precipitate 8/</td>
<td>2,437 t/</td>
<td>2,683 t/</td>
<td>2,987 t/</td>
<td>2,877 t/</td>
<td>3,096</td>
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<td>Sulfide and ammoniacal liquor precipitate</td>
<td>2,113 2,274</td>
<td>2,521 2,417</td>
<td>2,607</td>
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<td>Copper, mine output, Cu content</td>
<td>2,362 t/</td>
<td>2,208 t/</td>
<td>1,351 t/</td>
<td>1,090 t/</td>
<td>1,000</td>
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<td>Feldspar</td>
<td>12,100 14,700</td>
<td>14,400 4,100</td>
<td>5,000 e/</td>
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<td>19,300 t/</td>
<td>37,200 t/</td>
<td>124,200 t/</td>
<td>460,000 t/</td>
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<td>Gold e/</td>
<td>250 250</td>
<td>1,000 1,000</td>
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<td>Gypsum e/ thousand tons</td>
<td>130 130</td>
<td>130 130</td>
<td>130</td>
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<td>Iron and steel, crude</td>
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<td>283,327 t/</td>
<td>302,662 r/</td>
<td>336,169</td>
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<td>Kaolin</td>
<td>15,500 11,500</td>
<td>11,000 11,000</td>
<td>10,400 10,000 e/</td>
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<tr>
<td>Lime thousand tons</td>
<td>98 t/</td>
<td>106 t/</td>
<td>93 t/</td>
<td>100 e/</td>
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<tr>
<td>Nickel, Ni content: Mine output, oxide, oxide sinter, sulfide, ammoniacal liquor precipitate</td>
<td>51,220 t/</td>
<td>58,881 t/</td>
<td>64,752 t/</td>
<td>62,627 t/</td>
<td>68,305</td>
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<tr>
<td>Metallurgical products: 8/ Granular oxide, oxide sinter, powder</td>
<td>26,730 t/</td>
<td>33,571 t/</td>
<td>38,192 t/</td>
<td>37,510 t/</td>
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<td>Sulfide</td>
<td>24,066 t/</td>
<td>24,507 t/</td>
<td>25,176 t/</td>
<td>24,999 t/</td>
<td>27,288</td>
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<td>Ammoniacal liquor</td>
<td>425</td>
<td>803</td>
<td>1,385</td>
<td>1,119</td>
<td>1,125</td>
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<tr>
<td>Total</td>
<td>51,221 t/</td>
<td>58,881 t/</td>
<td>64,753 t/</td>
<td>62,627 t/</td>
<td>68,305</td>
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<td>Nitrogen, N content of anhydrous ammonia e/ thousand tons</td>
<td>135 135</td>
<td>135 135</td>
<td>135 135</td>
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<td>Petroleum: Crude 9/ thousand 42-gallon barrels</td>
<td>9,518 t/</td>
<td>9,425 t/</td>
<td>10,823 t/</td>
<td>13,777 t/</td>
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<td>Salt</td>
<td>159,800 t/</td>
<td>163,600 t/</td>
<td>134,600 t/</td>
<td>159,100 t/</td>
<td>160,000</td>
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<td>1,861,200 1,775,700</td>
<td>1,800,000</td>
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<td>Silica sand do.</td>
<td>110,900 t/</td>
<td>92,900 t/</td>
<td>94,500 t/</td>
<td>91,200 t/</td>
<td>100,000 e/</td>
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<td>3,301,300</td>
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<td>Cement, hydraulic</td>
<td>1,641,875 1,835,017</td>
<td>1,884,562 2,000,000 e/</td>
<td>2,000,000 e/</td>
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<td>Gold kilograms</td>
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<td>2,349</td>
<td>1,424 t/</td>
<td>651</td>
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<td>69,419 61,561</td>
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<td>35,874 24,999</td>
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<td>Limestone thousand tons</td>
<td>980 1,000 e/</td>
<td>1,000 e/</td>
<td>605 e/</td>
<td>703</td>
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<td>Marble cubic meters</td>
<td>2,117 2,126</td>
<td>2,687 2,700 t/</td>
<td>4,057</td>
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<td>Nickel, Ni content: Metal, ferronickel: Smelter</td>
<td>30,376 32,588</td>
<td>25,220 2,449</td>
<td>27,829</td>
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<td>26,554 24,012</td>
<td>27,226</td>
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See footnotes at end of table.
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<td><strong>DOMINICAN REPUBLIC—Continued 10/</strong></td>
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<td>Nickel, Ni content—Continued:</td>
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<td>Mine output, laterite ore</td>
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<td>49,152</td>
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<td>Petroleum, refinery products:</td>
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<td>Liquefied petroleum gas thousand 42-gallon barrels</td>
<td>300 c/</td>
<td>409</td>
<td>480</td>
<td>433</td>
<td>450 c/</td>
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<td>Gasoline, motor do.</td>
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<td>1,877</td>
<td>1,906</td>
<td>1,900 c/</td>
</tr>
<tr>
<td>Kerosene do.</td>
<td>95 c/</td>
<td>88</td>
<td>84</td>
<td>71</td>
<td>90 c/</td>
</tr>
<tr>
<td>Jet fuel do.</td>
<td>1,805 c/</td>
<td>1,741</td>
<td>1,763</td>
<td>1,788</td>
<td>1,800 c/</td>
</tr>
<tr>
<td>Distillate fuel oil do.</td>
<td>2,700 c/</td>
<td>2,754</td>
<td>2,888</td>
<td>2,656</td>
<td>2,700 c/</td>
</tr>
<tr>
<td>Residual fuel oil do.</td>
<td>4,600 c/</td>
<td>4,359</td>
<td>4,506</td>
<td>4,408</td>
<td>4,400 c/</td>
</tr>
<tr>
<td>Total do.</td>
<td>11,600 c/</td>
<td>11,276</td>
<td>11,598</td>
<td>11,262</td>
<td>11,300 c/</td>
</tr>
<tr>
<td><strong>Salt:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine do.</td>
<td>49,719</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Rock</td>
<td>11,330</td>
<td>10,479</td>
<td>5,672</td>
<td>5,436</td>
<td>12,200</td>
</tr>
<tr>
<td>Total</td>
<td>61,049</td>
<td>60,479</td>
<td>55,672</td>
<td>55,436</td>
<td>62,200</td>
</tr>
<tr>
<td><strong>Sand and gravel thousand cubic meters</strong></td>
<td>9,602</td>
<td>10,894</td>
<td>12,933</td>
<td>15,398</td>
<td>16,246</td>
</tr>
<tr>
<td><strong>Silver kilograms</strong></td>
<td>17,017</td>
<td>12,406</td>
<td>12,933</td>
<td>15,398</td>
<td>16,246</td>
</tr>
<tr>
<td><strong>GUADELOUPE e/ 5/ 11/</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td>230,000</td>
<td>230,000</td>
<td>230,000</td>
<td>230,000</td>
<td>230,000</td>
</tr>
<tr>
<td>Lime</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Pumice</td>
<td>210,000</td>
<td>210,000</td>
<td>210,000</td>
<td>210,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Salt</td>
<td>48,000</td>
<td>48,000</td>
<td>48,000</td>
<td>50,000</td>
<td>49,000</td>
</tr>
<tr>
<td><strong>SAN KITTS AND NEVIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand and gravel do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravel cubic meters</td>
<td>400,000 v/</td>
<td>400,000 v/</td>
<td>400,000 v/</td>
<td>427,300 v/</td>
<td>450,000 v/</td>
</tr>
<tr>
<td>Sand do.</td>
<td>2,000,000 v/</td>
<td>2,000,000 v/</td>
<td>2,000,000 v/</td>
<td>2,053,500 v/</td>
<td>2,000,000 v/</td>
</tr>
<tr>
<td>Stone, marble do.</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>131 4/</td>
</tr>
<tr>
<td><strong>TRINIDAD AND TOBAGO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt, natural</td>
<td>18,100</td>
<td>15,396</td>
<td>18,735</td>
<td>12,600</td>
<td>9,897</td>
</tr>
<tr>
<td>Cement, hydraulic 13/</td>
<td>617,100</td>
<td>652,500</td>
<td>690,400</td>
<td>688,400</td>
<td>742,645</td>
</tr>
<tr>
<td>Gas, natural: 13/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross million cubic meters</td>
<td>7,127</td>
<td>9,137</td>
<td>10,294</td>
<td>13,240</td>
<td>15,483</td>
</tr>
<tr>
<td>Marketed do.</td>
<td>7,049</td>
<td>7,379</td>
<td>8,651</td>
<td>11,917</td>
<td>14,175</td>
</tr>
</tbody>
</table>

See footnotes at end of table.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/ Estimated data are rounded to no more than three significant digits; may not add to totals shown.</td>
<td>2/ Table includes available data through September 2001.</td>
<td>3/ In addition to commodities listed, crude construction materials (lime, sand, stone, etc.) may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.</td>
<td>4/ Reported figure.</td>
<td>5/ In addition to commodities listed, crude construction materials (sand and gravel, etc.) may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.</td>
</tr>
<tr>
<td>Iron and steel:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct-reduced iron 13/</td>
<td>954,000 r/</td>
<td>1,140,000 r/</td>
<td>1,073,333 r/</td>
<td>1,379,000 r/</td>
<td>1,530,000</td>
</tr>
<tr>
<td>Steel, crude</td>
<td>695,000</td>
<td>736,000</td>
<td>781,425</td>
<td>728,952</td>
<td>741,469</td>
</tr>
<tr>
<td>Semimanufactures (billets) 13/</td>
<td>643,600</td>
<td>747,000</td>
<td>776,900</td>
<td>723,900</td>
<td>723,000</td>
</tr>
<tr>
<td>Lead, refined (secondary) e/</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
</tr>
<tr>
<td>Natural gas liquids thousand 42-gallon barrels</td>
<td>4,460 13/</td>
<td>4,113 14/</td>
<td>6,254 14/</td>
<td>6,573 13/</td>
<td>6,932 14/</td>
</tr>
<tr>
<td>Nitrogen, N content of anhydrous ammonia 15/</td>
<td>1,801,000</td>
<td>1,771,700</td>
<td>2,271,300</td>
<td>2,771,000 r/</td>
<td>2,686,400</td>
</tr>
<tr>
<td>Petroleum:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude thousand 42-gallon barrels</td>
<td>47,171 13/</td>
<td>45,166 14/</td>
<td>44,759 14/</td>
<td>45,662 13/</td>
<td>43,593 14/</td>
</tr>
<tr>
<td>Refinery products do.</td>
<td>41,067 13/</td>
<td>33,525 14/</td>
<td>49,019 14/</td>
<td>53,320 13/</td>
<td>57,533 14/</td>
</tr>
<tr>
<td>Stone, limestone thousand tons</td>
<td>1,600 e/</td>
<td>1,219</td>
<td>1,100</td>
<td>1,100 e/</td>
<td>1,100 e/</td>
</tr>
<tr>
<td>Sulfur, byproduct of petroleum e/ 16/</td>
<td>5,000</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
</tbody>
</table>

e/ Estimated.  r/ Revised. -- Zero.

1/ Estimated data are rounded to no more than three significant digits; may not add to totals shown.
2/ Table includes available data through September 2001.
3/ In addition to commodities listed, crude construction materials (lime, sand, stone, etc.) may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
4/ Reported figure.
5/ In addition to commodities listed, crude construction materials (sand and gravel, etc.) may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
6/ Barbados also presumably produced clays and stone, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
7/ Cuba also presumably produced marble and stone, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
8/ The Government of Cuba reports figures of nickel-cobalt content of granular and powder oxide, oxide sinter, and sulfide production. By using an average cobalt content in these products of 0.9% in total granular and powder oxide, 1.1% in total oxide sinter, and 4.5% in total sulfide, the cobalt content of reported nickel-cobalt production was determined to be 1.16% of granular and powder oxide, 1.21% of oxide sinter, 7.56% of sulfide, 25% of ammoniacal liquor. The remainder of reported figures would represent the nickel content.
9/ Production has been converted from metric tons to barrels by using the U.S. Energy Information Administration's factor of 6.449 barrels per metric ton of crude petroleum.
10/ In addition to commodities listed, crude construction materials (gravel, stone, etc.) may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
11/ Guadeloupe and Martinique also presumably produced stone, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
12/ In addition to commodities listed, asphalt, lime, and salt may be also produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.
13/ Source: Central Bank of Trinidad and Tobago Annual Economic Survey.
14/ Source: Ministry of Energy and Energy Industries.
16/ Sulfur as a byproduct of natural gas may be produced, but information is inadequate for reliable output estimates.