



state oil company Petroleos de Venezuela, S.A. (PDVSA)] operated a terminal with 20 million barrels (Mbbbl) of crude and products storage capacity. In 2000, the capacity actually in use was 10.2 Mbbbl, of which 4 Mbbbl was devoted to crude oil storage; 4.7 Mbbbl, fuel oil; and 1.5 Mbbbl, 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](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.internationalreports.com/theamericas/00/bahamas/transportation\\_shipping/index.html](http://www.internationalreports.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 other 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](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, 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 energy companies, which include the Barbados National Oil Company and the National Petroleum Company, have been announced, but no timetable has been set.

In 2000, Barbados crude oil production declined to 560,000 barrels (bbl) from 708,000 bbl in 1999. Barbados has an oil-refining agreement with Trinidad and Tobago's Petroleum Company of Trinidad and Tobago Ltd. (Petrotrin), which refines Barbados' oil and then returns it for domestic consumption (U.S. Energy Information Administration, May 2001, Caribbean fact sheet—Barbados, accessed January 10, 2002, at URL <http://www.eia.doe.gov/emeu/cabs/carib.html>).

In 2000, the Energy Minister announced the resumption of Barbados' small oil-drilling program; officials suspended the project at the beginning of 1999 owing to low oil prices. The oil-drilling program was largely concentrated in the Woodbourne lease area, offshore Barbados. The Woodbourne lease area was being exploited for oil by the Barbados Government and Conoco, Inc., of the United States (Worldoil.com, August 2000, Special focus—South America, accessed August 17, 2001, at URL [http://www.worldoil.com/magazine/MAGAZINE\\_DETAIL.asp?ART\\_ID=1197&MONTH\\_YEAR=Aug-00](http://www.worldoil.com/magazine/MAGAZINE_DETAIL.asp?ART_ID=1197&MONTH_YEAR=Aug-00)).

In 2000, Conoco and TotalFinaElf of France signed an agreement with the Government to extend their joint venture that was exploring for oil and gas offshore. Under the agreement, TotalFinaElf will receive 35% of Conoco's holding in a deepwater permit located in the Orinoco river delta.

Several infrastructure projects have been undertaken since 1999. One, a \$70 million investment, was approved for renovating the Grantley Adams International Airport during a 5-year period. Some of the money for this project would be used to enlarge the runway, to develop new cargo areas, and to improve security. Another investment project was a 5-year, \$128 million urban renewal project to upgrade the infrastructure in key tourism areas (Findarticles.com news service, September 20, 1999, A boost for Barbados, accessed August 31, 2001, at URL [http://www.findarticles.com/cf\\_0/m0VOU/11\\_296/56002984/p1/article.jhtml](http://www.findarticles.com/cf_0/m0VOU/11_296/56002984/p1/article.jhtml)).

## 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.

Alcan (Bermuda) Ltd. [a subsidiary of Aluminum Company (Alcan), Inc., of Canada] traded in bauxite with Alcan Shipping (Bermuda) Limited. It chartered dry bulk carriers for transport of bauxite and alumina (Bermuda International Business Network, [undated], Alcan (Bermuda) Limited, accessed April 11, 2001, at URL <http://www.bn.com/bizdirectory/trading/intrading2.html>).

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-dine.org/electgas.htm>).

## CUBA

In 2000, Cuba's GDP increased by 5.6% from that of 1999. Mining and quarrying increased by 14.4%; construction, by 9.7%; and transport and communication, by 9.1%; commerce and tourism, by 5.4%; and industrial production, by 4.3% (The Government of the Republic of Cuba, [2001], Producto interno bruto [Gross domestic product], accessed September 12, 2001, at URL [http://cubagob.cu/otras\\_info/ONE/Producto\\_interno\\_bruto.htm](http://cubagob.cu/otras_info/ONE/Producto_interno_bruto.htm)). Investment was estimated to have increased by 16%—going to energy generation, natural gas development, housing construction, petroleum exploration and production, telecommunications, transportation, tourism (Ministerio de Economía y Planificación, [undated], Informe económico—Año 2000, [Economic report—2000], accessed August 28, 2001, at URL [http://www.cubagob.cu/des\\_eco/mep/cuba2000.htm](http://www.cubagob.cu/des_eco/mep/cuba2000.htm)).

The Government planned a 5% increase in the GDP for 2001 with a 14% increase in investment, a 15% increase in tourism, and a 5% increase in nickel production (The Government of the Republic of Cuba, 2001, Desarrollo económico—Evolución de la economía cubana—Objetivos fundamentales del plan para el año 2001 [Economic development—Evolution of the Cuban economy—Fundamental objectives of the plan for the year 2001], accessed September 12, 2001, at URL [http://www.cubagob.cu/des\\_eco/mep/objetivos\\_2001.htm](http://www.cubagob.cu/des_eco/mep/objetivos_2001.htm)).

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 (Shel, 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 Níquel 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 Níquel 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](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], Inversión extranjera en Cuba [Foreign investment in Cuba], accessed September 12, 2001, at URL [http://www.cubagob.cu/otras\\_info/cpi/inversion.htm](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](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 early 2000, WMC Ltd. of Australia withdrew from the Pinares de Mayarí nickel project (WMC Ltd., 2000, Community—Environmental report 2000, accessed July 10, 2001, at URL <http://www.wmc.com.au/sustain/cer00/contents.htm>). Through its subsidiary Westminer Holdings Ltd., the company had signed a joint-venture agreement to evaluate the development of the Pinares de Mayarí nickel deposit and to construct a nickel-cobalt plant and refinery in the Huguín Province in eastern Cuba.

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 Walzwerkstechnik was to construct a 300-t/yr long-product rolling mill near Havana for Cía Siderúrgica Acinox. A large part of the production of the plant, which was being built next to Antillana de Acero's mini-mill, was for exports. Completion of the plant was expected to take 2 years (Metal Bulletin, 2000).

Production of crude petroleum, which has been increasing significantly in recent years, reached 17.4 Mbbl in 2000. The Government has opened the petroleum sector to foreign private companies in an effort to decrease its dependence in foreign crude. Since 1996, production has increased by almost 83% (table 1). Sherritt was the largest producer with an output of 29,554 bbl/d, which was about 60% of Cuba's total production. The company had 11 production-sharing contracts with the Government in a 3.7-million-acre area (Sherritt International Corp., 2001, p. 10).

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/2000lights.html>).

## 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.devc.com/mainpages/News.htm>).

The Dominican Government researched and planned for the possible construction of a more than 3,000-meter (10,000-foot) runway international airport at Wesley that would help facilitate trade and develop its tourism industry. The needed investment of \$110 million would include \$80 million for the airport, \$20 million for road construction and \$10 million for displaced farmers. Officials in Antigua expressed support for the construction of the airport because nearly one-half of the goods produced in Dominica are sold in Antigua (Caribbean Aviation, June 1, 2001, Caribbean airports for Dominica airport, accessed August 31, 2001, at URL <http://www.caribbeanaviation.com/airports.htm#dom>).

## DOMINICAN REPUBLIC

During 2000, 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.

Mining in 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.

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 1 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. (Falconda) [a subsidiary of Falconbridge Ltd. of Canada (85.26%), the Government of the Dominican Republic (10.64%), and Redstone Resources, Inc. (4.1%)]. Falconda produced ferronickel near the town of Bonao. Production of ferronickel increased by 17.7% to 72,488 t with a 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 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 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>).

## GADELOUPE AND MARTINIQUE

Guadeloupe and Martinique were administered as Overseas Departments of France. In 2000, mining played a minor role because their economies were based on agriculture, tourism, light industry, and services. The islands depended on France for large subsidies and imports. The GDP 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, 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/ha.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 chromite, 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.











TABLE 1  
ISLANDS OF THE CARIBBEAN: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Country and commodity	1996	1997	1998	1999	2000
ARUBA e/ 3/					
Petroleum refinery products thousand 42-gallon barrels	62,436 4/	65,000	65,000	65,000	100,000
Sulfur, byproduct of petroleum	48,787 4/	50,000	50,000	50,000	77,000
BAHAMAS, THE e/ 5/					
Salt	900,000	900,000	900,000	900,000	900,000
Stone, argonite	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
BARBADOS 5/ 6/					
Cement, hydraulic	106,515	172,728	259,181	252,929 r/	267,659
Clay and shale	120,000	120,000	120,000	150,000 r/	150,000
Gas, liquefied petroleum e/ 42-gallon barrels	20,000	20,000	20,000	20,000	20,000
Gas, natural:					
Gross million cubic meters	35 e/	28	37	47 r/	38
Marketed e/ do.	15	12	15	15	15
Limestone e/	1,500,000	1,500,000	1,500,000 4/	1,500,000	1,500,000
Sand e/	200,000	200,000	200,000 4/	200,000	200,000
Petroleum:					
Crude thousand 42-gallon barrels	380	328	585	708 r/	560
Refinery products do.	2,250 e/	2,653	2,277	2,300 e/	2,300
CUBA 5/ 7/					
Asphalt	42,100	59,400	68,400	73,300	90,000 e/
Cement, hydraulic	1,437,900 r/	1,706,600 r/	1,713,400 r/	1,784,600 r/	1,632,700
Chromite	37,300	44,000	46,000 r/	52,000 r/	50,000 e/
Cobalt, mine output, Co content:					
Oxide, oxide sinter, sulfide, ammoniacal liquor precipitate 8/	2,437 r/	2,683 r/	2,987 r/	2,877 r/	3,096
Sulfide and ammoniacal liquor precipitate	2,113	2,274	2,521	2,417	2,607
Copper, mine output, Cu content	2,362 r/	2,208 r/	1,351 r/	1,090 r/	1,000
Feldspar	12,100	14,700	14,400	4,100	5,000 e/
Gas, natural, marketed thousand cubic meters	19,300 r/	37,200 r/	124,200 r/	460,000 r/	574,500
Gold e/ kilograms	250	250	1,000	1,000	1,000
Gypsum e/ thousand tons	130	130	130	130	130
Iron and steel, steel, crude	230,988	342,000	283,327 r/	302,662 r/	336,169
Kaolin	15,500	11,500	11,000	10,400	10,000 e/
Lime thousand tons	98 r/	106 r/	93 r/	92 r/	100 e/
Nickel, Ni content:					
Mine output, oxide, oxide sinter, sulfide, ammoniacal liquor precipitate	51,220 r/	58,881 r/	64,752 r/	62,627 r/	68,305
Metallurgical products: 8/					
Granular oxide, oxide sinter, powder	26,730 r/	33,571 r/	38,192 r/	37,510 r/	39,890
Sulfide	24,066 r/	24,507 r/	25,176 r/	24,999 r/	27,288
Ammoniacal liquor	425	803	1,385	1,119	1,125
Total	51,221 r/	58,881 r/	64,753 r/	63,628 r/	68,303
Nitrogen, N content of anhydrous ammonia e/ thousand tons	135	135	135	135	135
Petroleum:					
Crude 9/ thousand 42-gallon barrels	9,518 r/	9,425 r/	10,823 r/	13,777 r/	17,382
Refinery products do.	60,000	60,000	60,000	60,000	60,000
Salt	159,800 r/	163,600 r/	134,600 r/	159,100 r/	160,000
Sand cubic meters	1,828,000	1,949,100	1,861,200	1,775,700	1,800,000
Silica sand do.	110,900 r/	92,900 r/	94,500 r/	91,200 r/	100,000 e/
Stone, crushed do.	2,889,900	2,919,600	2,860,000	2,950,300	3,301,300
Sulfur, byproduct of petroleum e/	5,000	5,000	5,000	5,000	5,000
DOMINICAN REPUBLIC 10/					
Cement, hydraulic	1,641,875	1,835,017	1,884,562	2,000,000 e/	2,000,000 e/
Gold kilograms	3,659	2,349	1,424 r/	651	--
Gypsum	86,019	115,000	80,000	81,249 r/	110,044
Iron and steel:					
Ferroalloys, ferronickel	78,488	84,897	69,419	61,561 r/	70,000 e/
Steel, crude	42,261	82,479	35,874 r/	42,893 r/	35,801
Limestone thousand tons	980	1,000 e/	1,000 e/	605 r/	703
Marble cubic meters	2,117	2,126	2,687	2,700 r/	4,057
Nickel, Ni content:					
Metal, ferronickel:					
Smelter	30,376	32,588	25,220	24,449	27,829
Shipments	29,452	32,581	26,554	24,012	27,226

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	1996	1997	1998	1999	2000
DOMINICAN REPUBLIC--Continued 10/					
Nickel, Ni content--Continued:					
Mine output, laterite ore	45,168	49,152	40,311 r/	39,997 r/	39,943
Petroleum, refinery products:					
Liquefied petroleum gas thousand 42-gallon barrels	300 e/	409	480	433	450 e/
Gasoline, motor do.	2,100 e/	1,925	1,877	1,906	1,900 e/
Kerosene do.	95 e/	88	84	71	90 e/
Jet fuel do.	1,805 e/	1,741	1,763	1,788	1,800 e/
Distillate fuel oil do.	2,700 e/	2,754	2,888	2,656	2,700 e/
Residual fuel oil do.	4,600 e/	4,359	4,506	4,408	4,400 e/
Total do.	11,600 e/	11,276	11,598	11,262	11,300 e/
Salt:					
Marine e/	49,719 4/	50,000	50,000	50,000	50,000
Rock	11,330	10,479	5,672	5,436	12,200
Total	61,049	60,479	55,672	55,436	62,200
Sand and gravel thousand cubic meters	9,602	10,894	12,933	15,398	16,246
Silver kilograms	17,017	12,406	7,409	3,140	--
GUADELOUPE e/ 5/ 11/					
Cement	230,000	230,000	230,000	230,000	230,000
Lime	5,000	5,000	5,000	5,000	5,000
Pumice	210,000	210,000	210,000	210,000	210,000
Salt	48,000	48,000	48,000	50,000	49,000
HAITI e/ 12/					
Sand and gravel:					
Gravel cubic meters	400,000 r/	400,000 r/	400,000 r/	427,300 r/ 4/	450,000
Sand do.	2,000,000 r/	2,000,000 r/	2,000,000 r/	2,053,500 r/ 4/	2,000,000
Stone, marble do.	100	100	100	100	131 4/
JAMAICA					
Aluminum:					
Bauxite, dry equivalent, gross weight thousand tons	11,863	11,987	12,646	11,688	11,127
Alumina do.	3,199	3,394 r/	3,440	3,570	3,600
Cement, hydraulic	556,509	588,287	557,991	503,713	521,343
Gypsum	338,875	263,662	154,451	235,900	330,441
Lead, refined (secondary) e/	800	800	800	-- r/ 4/	-- 4/
Lime	245,000 e/	199,419	227,300	226,882 r/	267,215
Petroleum refinery products thousand 42-gallon barrels	4,742	5,255	5,142	3,607	3,600
Salt	17,866	16,498	15,606	19,090	19,068
Silica sand	15,790	12,089	6,128	9,400	6,700
Stone:					
Limestone thousand tons	3,351	3,350	3,201	3,300	3,420
Marble, cut and/or polished	2,000	1,500	750	375 r/	150
Marl and fill thousand tons	4,116	4,198	3,900	4,490	4,720
Sand and gravel do.	1,836	1,928	1,839	1,580 r/	1,600
MARTINIQUE e/ 5/ 11/					
Cement, hydraulic	220,000	220,000	220,000	220,000	220,000
Lime	5,000	5,000	5,000	5,000	5,000
Petroleum refinery products thousand 42-gallon barrels	4,800	4,800	4,800	4,800	4,800
Pumice	130,000	130,000	130,000	130,000	130,000
Salt	200,000	200,000	200,000	200,000	200,000
NETHERLANDS ANTILLES 3/					
Petroleum refinery products thousand 42-gallon barrels	70,104	76,303	78,169	80,000 e/	80,000 e/
Salt	366,265	432,225	487,373	500,000 e/	500,000 e/
Sulfur, byproduct of petroleum	23,921	28,616	30,000 e/	30,000 e/	30,000 e/
SAINT KITTS AND NEVIS					
Sand and gravel	50,389	100,000 r/ e/	200,000 r/ e/	211,849 r/	214,700
Stone, crushed	106,902	105,000 e/	105,000 e/	105,000 e/	121,266
TRINIDAD AND TOBAGO					
Asphalt, natural	18,100 13/	15,396 14/	18,735 14/	12,600 13/	9,897
Cement, hydraulic 13/	617,100	652,500	690,400	688,400	742,645
Gas, natural: 13/					
Gross million cubic meters	7,127	9,137	10,294	13,240	15,483
Marketed do.	7,049	7,379	8,651	11,917 r/	14,175

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	1996	1997	1998	1999	2000
TRINIDAD AND TOBAGO--Continued					
Iron and steel:					
Direct-reduced iron 13/	954,000 r/	1,140,000 r/	1,073,333 r/	1,379,000 r/	1,530,000
Steel, crude	695,000	736,000	781,425	728,952 r/	741,469
Semimanufactures (billets) 13/	643,600	747,000	776,900	723,900	723,000
Lead, refined (secondary) e/	1,600	1,600	1,600	1,600	1,600
Natural gas liquids thousand 42-gallon barrels	4,460 13/	4,113 14/	5,254 14/	5,753 13/	6,932 14/
Nitrogen, N content of anhydrous ammonia 15/	1,801,000	1,771,700	2,271,300	2,771,000 r/	2,686,400
Petroleum:					
Crude thousand 42-gallon barrels	47,171 13/	45,166 14/	44,759 14/	45,662 13/	43,593 14/
Refinery products do.	41,067 13/	33,525 14/	49,019 14/	53,320 13/	57,533 14/
Stone, limestone thousand tons	1,600 e/	1,219	1,100	1,100 e/	1,100 e/
Sulfur, byproduct of petroleum e/ 16/	5,000	15,000	15,000	15,000	15,000

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.

15/ Source: International Fertilizer Industry Association.

16/ Sulfur as a byproduct of natural gas may be produced, but information is inadequate for reliable output estimates.