

# THE MINERAL INDUSTRY OF

# GUYANA

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In 2000, mining remained an important component of Guyana's economy, which had a gross domestic product (GDP) of \$1.86 billion based on 1999 purchasing power parity data. The main mineral commodities, which were bauxite, diamond, and gold, ranked among the largest components (along with sugar) of the country's exports of \$574 million (U.S. Central Intelligence Agency, 2000, Guyana—Economy, World Factbook 2000, accessed August 7, 2001, at URL <http://www.odci.gov/cia/publications/factbook/geos/gy.html>). Guyana is located within the Guiana Shield, which is in the northeastern part of South America; this region is well-known for its undeveloped resources of copper, gold, iron ore, manganese, nickel, platinum, and uranium (Hinds, 2000b).

After a new Government was elected at the end of 1999, Guyana's new president sought to attract outside investment in helping to develop the country's unexploited mineral resources (Mohamed, 2000). The Guyana Geology and Mines Commission (GGMC) is responsible for managing the mining and petroleum industries according to the law and policies of the Government and promotes foreign investment and participation in mineral development in the country (Hinds, 2000a, p. 4).

Mining concessions are negotiated through mineral agreements with the following Government agencies: the Bauxite Industry Development Co. Ltd. (BIDCO) for bauxite, the GGMC for gold and diamond, and the Guyana Natural Resources Agency for oil. Since 1982, the Guyana Gold Board (GGB) has been the sole official buyer of gold. On January 10, 1997, however, 12 private sector individuals and companies were licensed to purchase, store, and export gold on a trial basis initially for 1 year. The program was extended for an unspecified period beyond 1998, which could indicate that the GGB will eventually be phased out in the near future (Hinds, 2000a). In 2000, offshore oil concessions were complicated owing to border disputes with Suriname and Venezuela.

The State uses the following fiscal measures to acquire revenues from the mining industry: royalties (1.5% of production or gross revenues from bauxite and other minerals, except sand and quarriable stones, and 5% for gold, precious metals, diamond, and precious stones); corporate income tax (35% of taxable income); withholding tax (6.25% of distributed dividends); and consumption tax on fuel (10%). Equipment and process materials, which include spare parts, used for surveys, exploration, development, and mining by licensees or their contractors, are duty free. All conditions are to be maintained for up to 15 years from the start of production or the life of the deposit, whichever is shorter; then the general rules for duties, income tax, and withholding tax will apply (Sucre, 1999; Hinds, 2000a).

Bauxite was the main mineral produced in Guyana. BIDCO

controlled Berbice Mining Enterprise Ltd. (Bermine) and Linden Mining Enterprise Ltd. (Linmine). Efforts that were initialized in 1996 to privatize Bermine and Linmine were continuing at the end of 2000. The proposed ownership could be as follows: investor (consortia), 60%; Government, 25%; employees, 10%; private (domestic), 5% (Industrial Minerals, 1998). Aroaima Bauxite Co., which was another active mining company, was a joint venture of Reynolds Metals Co. of the United States and the Guyanese Government.

In 2000, bauxite production amounted to about 2.4 million metric tons (Mt), most of which was chemical-grade bauxite produced by Aroaima. Bermine produced mainly metal- and chemical-grade bauxite and exported mainly refractory and specialist chemical bauxite to the United States. Linmine produced calcinated refractory-grade bauxite and served mainly the refractory markets of Australia, East Asia, Europe, New Zealand, North America, and South America (Industrial Minerals, 2001).

Gold production in 2000 increased slightly to 13.8 metric tons (t) from almost 13 t in 1999. The Omai Mine, which was one of the largest open pit gold mines in Latin America, was owned by Omai Gold Mines Ltd (OGML); OGML was a consortium comprising Canada-based Cambior Inc. (65%), Denver-based Golden Star Resources Ltd. (GSRL) (30%), and the Guyanese Government (5%) (Golden Star Resources Ltd., 1999). Omai's gold production increased by 8% to 10.3 t in 2000 (Cambior Inc., March 22, 2001, Cambior's 2000 year-end results impacted by weakness in gold market, accessed July 9, 2001, at URL [http://www.cambior.com/communique/2001/anglais/04\\_2001e.htm](http://www.cambior.com/communique/2001/anglais/04_2001e.htm)).

OGML accounted for about 20% of Guyana's GDP and 18% of its exports. Cambior Inc. estimated that calculated at \$300 per ounce, proven and probable ore reserves for Omai were 29.5 Mt at a grade of 1.34 grams per metric ton (g/t) gold, which represented 40.4 t (1.3 million ounces) of gold (Cambior Inc., 2001, Excerpt from 2000 annual report, accessed July 10, 2001, at URL [http://www.cambior.com/english/04\\_o&p/omai\\_gold\\_mine.htm](http://www.cambior.com/english/04_o&p/omai_gold_mine.htm)).

As a result of low gold prices, exploration programs will continue to be reduced, particularly on the Guiana Shield (northern Brazil, French Guiana, Guyana, Suriname, and southeastern Venezuela). Since the first quarter of 1999, GSRL has reduced exploration activities in Guyana except on its high-priority Eagle Mountain prospect for which the company calculated a resource of 4 Mt at a grade of 1.4 g/t gold (Mining Journal, 1999). The project could supply mill feed to the Omai mill, which is 50 kilometers southwest of the discovery.

Other participants that explored for gold and diamond in Guyana were BHP Ltd. of Australia, International Roraima Gold Corp., Placer Dome Inc., Seahawk Minerals Ltd., Toscana

Resources Ltd., and Vanessa Ventures Ltd., all of Canada, and Migrate Mining Ltd. of South Africa. BHP Ltd. was interested in finding mineral deposits similar to the Carajas iron ore mine in Brazil and low-cost gold producers similar to Peru's Pierina and Yanacocha gold mines. GSRL was interested in finding deposits similar to Omai and the Five Stars-type gold and diamond prospects in the Guiana Shield of South America.

Baracara Quarries Ltd. of Guyana and Toolsie Persaud Ltd. of Guyana produced gravel near Bartica. The Government's Teperu-Itabu Quarry reopened in response to the overwhelming demand for construction materials, and consideration was given to using waste rock from the Omai gold mine for aggregate and boulders. In April, Mazaruni Granite Products Inc. of Guyana began production from its new plant, which had the capacity to produce more than 10,000 metric tons per day of stone (Guyana Monthly Update, May 2000, Mazaruni Granite has new plant, accessed July 10, 2001, at URL [http://www.guyanaca.com/Update/may\\_2000.html](http://www.guyanaca.com/Update/may_2000.html)).

In June, CGX Energy Inc. of Canada announced plans to withdraw from an oil exploration project for which it had originally been granted concessions in 1998 owing to a border dispute between Guyana and Suriname that concerned the official border along the Corentyne River (James, 2000). ExxonMobile Corp. of the United States, Shell Exploration and Production Co. of the United Kingdom, and TotalFinaElf of France were also interested in exploring for gas and oil in the country.

Guyana has diversified the formerly bauxite-oriented mineral industry by means of its gold and diamond (in order of importance) promotion programs. Because much of Guyana has yet to be studied and explored in a systematic way, significant economic deposits of nonferrous metals and petroleum have yet to be discovered (Hinds, 2000a). Foreign participation and internationally funded exploration activity have resulted in augmented gold production, which is considered to be sustainable into the next decade. Large-scale gold operations, such as those at the Omai Mine, would significantly strengthen Guyana's economy.

## References Cited

- Golden Star Resources Ltd., 1999, Transformation from exploration to production: Golden Star Resources Ltd. Annual Report, December 31, 104 p.
- Hinds, S.A., 2000a, Guyana—Government's policy for exploration and development of minerals and petroleum resources of Guyana: Annual Investing in the Americas Conference, 9th, Miami, Florida, April 10-11, 2000, 29 p.
- 2000b, Guyana—International mines show interest through massive investments in exploration and mining: Washington Times, Special International Report, June 30, 12 p.
- Industrial Minerals, 1998, Guyana—Privatization of the bauxite industry in Guyana: Industrial Minerals, no. 375, December, p. 12.
- 2001, Bauxite in 2001: Industrial Minerals, no. 401, February, p. 27-41.
- James, Canute, 2000, Guyana's foreign oil concessions revive unneighbourly disputes: Financial Times [London], September 28, p. 5.
- Mining Journal, 1999, Gold hits 20-year low: Mining Journal, v. 332, no. 8833, May 21, p. 325.
- Mohamed, Seeta, 2000, Guyana—President Bharrat Jagdeo pursues foreign and local investment, builds confidence in private sector: Washington Times, Special International Report, June 30, 12 p.
- Sucre, B.L., 1999, Guyana—The mining fiscal regime: Annual Investing in the Americas Conference, 8th, Miami, Florida, March 29-April 1, 1999, 15 p.

## Major Sources of Information

- Bank of Guyana (Central Bank)  
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- Bauxite Industry Development Co. Ltd.  
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- Guyana Gold and Diamond Miners Association  
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## Major Publications

- Guyana Geology and Mines Commission: Mineral Resources of Guyana, 1997, 29 p.
- Industrial Minerals, 16 Lower Marsh, London SE1A7RJ, Great Britain: Metal Bulletin plc, monthly.
- International Bauxite Association: IBA Quarterly Review, quarterly.
- Mining Journal Limited, 60 Worship St., London EC2A2HD, Great Britain: Mining Journal, weekly.
- U.S. Department of Commerce, International Trade Administration: Foreign Economic Trends and Their Implications for the United States, Guyana, annual.

TABLE 1  
GUYANA: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

Commodity 3/	1996	1997	1998	1999	2000
Aluminum, bauxite, dry equivalent, gross weight thousand metric tons	2,475	2,467	2,267 r/	2,359 r/	2,404
Diamond carats	49,000	35,612	50,000	50,000	50,000 e/
Gold, refined kilograms	12,006 4/	15,033 4/	12,960 4/	13,063 4/	13,800 e/
Stone, crushed e/ metric tons	136,000	136,000	136,000	136,000	136,000

e/ Estimated. r/ Revised.

1/ Includes data available through July 2001.

2/ Estimated data are rounded to no more than three significant digits.

3/ In addition to the commodities listed, a variety of crude construction materials (clays and sand) and semiprecious stones was also produced. Available information was inadequate to make an estimate of production.

4/ Reported by Guyana Geology & Mines Commission.

Source: Bureau of Statistics & State Planning Secretariat.

TABLE 2  
GUYANA: STRUCTURE OF THE MINERAL INDUSTRY IN 2000

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
<u>Bauxite and alumina:</u>			
Bauxite	Bauxite Industry Development Co. Ltd. (BIDCO) (Government, 100%)	Kara Kara, Northeast Dorabece, and East Montgomery Mines, MacKenzie, Linden, West Demerara District	3,500
Do.	do.	Block 2 Manaka, North, South mines. Kwakwani, East Berbice District	1,500
Do.	do.	Processing plant at Linden	900
Do.	do.	Processing plant at Everton, East Berbice District	700
Do.	C.A. Dayco (private, Venezuela, 100%) (BIDCO contract)	Kwakani area	500
Do.	Green Mining Inc. (Green Construction Co., United States, 100%) (Guymine contract)	Dacouria Mine, Linden	NA
Do.	Aroaima Bauxite Co. (Government, 50%; Reynolds Metals Co., United States, 50%)	Aroaima, East Berbice District	1,500
Alumina	BIDCO	Alumina refinery at Linden (presently closed)	300
Gold kilograms	Omai Gold Mines Ltd. (Cambior Inc., Canada, 65%; Golden Star Resources Ltd., United States, 30%; Government of Guyana, 5%)	Omai Mine, Mazaruni-Potaro District	300
Gravel	Baracara Quarries (private)	Quarry near Bartica, Mazaruni-Potaro District	100
Silica sand	Minerals and Technology Ltd. (Minerals and Chemicals of Texas, United States)	Sand Hills, Demerara River, West Demerara District	300

NA Not available.