

THE MINERAL INDUSTRY OF FIJI

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The Republic of the Fiji Islands is an archipelago that comprises 322 islands, of which only about 100 are inhabited. The islands are located about 3,000 kilometers (km) northeast of Sydney, Australia, in the southwestern Pacific Ocean and consist of 18,376 square kilometers of land area (Resource Information Unit, 2002, p. 4; Bank of Hawaii, 1993¹). The archipelago is bound on the west by the Yasawas Islands, which are the closest islands of Fiji to the Melanesian islands of Vanuatu. Along the eastern boundary of Fiji lie the numerous islands of the Lau Group, which border the islands of the Kingdom of Tonga in western Polynesia. Near the center of the Yasawas and the Laus lie the four main islands of Fiji, which are the following, by size: Viti Levu, where the capital city of Suva is located, Vanua Levu, Taveuni, and Kandavu. These islands roughly straddle the dividing line between Melanesia and Polynesia (Fowler, undated[§]). The population of about 870,000 was made up of indigenous Fijians (approximately 50%), which were predominantly Melanesian with a Polynesian admixture; Indo-Fijians (45%); and Europeans, other Pacific Islanders, overseas Chinese, and others (5%) (Resource Information Unit, 2004, p. 2; U.S. Central Intelligence Agency, 2003[§]; U.S. Department of State, 2003[§]).

The economy was largely based on agriculture, fishing, forestry, garment manufacturing, mining, and tourism. Fiji's gross domestic product (GDP) based on purchasing power parity was \$4,180 million and represented a per capita income of \$5,024. The country's real GDP grew by 4.4% in 2003 (International Monetary Fund, 2004).

Fiji's mining industry in 2003 was centered on gold, which was produced only by the Sydney, Australia-based owner and operator Emperor Mines Ltd. at its Vatukoula Mine. The Vatukoula Mine, which is often referred to as the "Emperor Mine," is located on the northwestern coast of Viti Levu Island approximately 380 km by road from the port city of Suva on the southeastern coast of the island. The ores at the Vatukoula Mine also contain silver, but no production was reported for 2003.

Most industrial minerals used in Fiji were imported, although the country has significant industrial mineral resources, such as bauxite, limestone, marble, and mineral sands, which could be developed for local markets and for export. Fiji imported significant amounts of brick facing and building stone, lime, and marble, although domestic deposits (some of which had small production for local use) were known.

Fiji's metal ores included copper, gold, lead, silver, and zinc deposits. Gold was first discovered in Fiji in the Navua River in 1868, in the Nasivi River at Tavua in 1872, and at Mount Kasi in 1929. In 2003, Emperor Mines celebrated the 70th anniversary of the discovery of gold in the Vatukoula area. During its first 70 years, about 6.9 million troy ounces [110,600 kilograms (kg)]

of gold was produced at the Emperor Mine (Resource Information Unit, 2004, p. 2). The Emperor Mine, which employed more than 2,100 employees, was Fiji's second largest private employer. Unrefined gold was the country's second leading export commodity and represented 6% to 7% of Fiji's export revenues (Resource Information Unit, 2004, p. 2).

At yearend 2003, Emperor Mines was in the process of implementing its Phase 2 expansion, which was initiated in 2002 to increase gold production, lower operating costs, and help reduce the risk inherent in relying on a single high-grade ore body. The Phase 2 expansion, which was to include the purchase of new heavy vehicles and new refrigeration units, the construction of two ventilation shafts, and increased underground development, was expected to be completed by yearend 2004. As part of the project, the Cagi Vou Shaft, which was constructed for additional ventilation within the Smith Shaft production section, was commissioned in October. Work also continued on the Smith Shaft No. 2 winder replacement and associated headgear work, which was to be commissioned in early 2004. Additionally, reaming of the Sautu Vent Shaft to the full shaft diameter of 3.6 meters (m) was completed to a depth of 200 m from the surface, and the remainder was holed through to the surface at a diameter of 1 m to facilitate a conventional sink. At the end of 2003, the shaft presink had reached a distance of 12 m below the collar. Emperor Mines projected that the expansion project, once completed, would result in a 40% increase in production, from 120,000 ounces per year (3,400 kilograms per year) to 180,000 ounces per year (5,100 kilograms per year) (Emperor Mines Ltd., 2004).

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¹References that include a section mark (§) are found in the Internet References Cited section.

Major Source of Information

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TABLE 1
FIJI: PRODUCTION OF MINERAL COMMODITIES¹

Commodity ²		1999	2000	2001	2002	2003 ^e
Cement, hydraulic ^e	metric tons	95,000	95,000	95,000	100,000	100,000
Gold, mine output, Au content	kilograms	4,430 ^e	3,840 ^e	3,836 ^{r,3}	3,731 ^{r,3}	3,250
Silver, mine output, Ag content	do.	2,130 ^e	1,480 ^e	1,974 ^{r,3}	1,901 ^{r,3}	1,500

^eEstimated; estimated data are rounded to no more than three significant digits. ^rRevised.

¹Table includes data available through May 23, 2004.

²In addition to the commodities listed, crushed and dimension stone, sand and gravel, and sand for cement manufacture are produced, but data are insufficient to make reliable estimates of quantities.

³Reported figure.