

THE MINERAL INDUSTRY OF

GEORGIA

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Georgia has a diverse mineral industry, producing fuels, ferrous and nonferrous metals, ferroalloys, and industrial minerals. It is a major producer of manganese from the Chiatura deposit, although reserves of high-grade ore are almost depleted. The manganese is used in Georgia for ferroalloy production at the Zestafoni ferroalloys plant. A small amount of iron ore also is mined. At the Madneuli complex in Georgia, a copper-barite polymetallic ore deposit is exploited for copper, barite, and a range of byproduct minerals, including gold and silver. Production of lead and zinc occurs at the Kvaisi lead-zinc deposit, and arsenic is mined from the Lukhumskoje and Tsanskoye deposits. Georgia also produces a range of industrial minerals, including bentonite, diatomite, talc, zeolites, and semiprecious stones as well as coal, gas, and oil.

In 1994, Georgia's gross domestic product (GDP) reportedly decreased by 30% compared with 1993, while industrial output decreased by almost 40%. These reported economic indicators were comparable to the preceding 2 years, when declines ranged from 30% to more than 40% and were among the most severe decreases in the Commonwealth of Independent States (CIS). This reflected, in part, the havoc caused by civil warfare in the country.²

To deal with severe energy supply problems, Georgia drew up a program for energy that calls for development of a large number of small fuel and power engineering projects, including small hydroelectric powerplants, and small coal processing installations, including briquetting plants.³ Construction reportedly was commencing on an oil terminal at Poti. The terminal reportedly will handle 60,000 to 70,000 metric tons (mt) of diesel fuel, which will enable Poti to compete with the Russian Black Sea Ports of Tuapse and Novorossiysk.⁴

The Georgian Government reportedly decided to introduce a single state system to monitor the environment. The system will observe and assess the condition of the environment as well as make forecasts.⁵

In 1994, the Georgian economy and mineral industry were beset not only by the problems resulting from the breakdown in the centrally planned economic system of the former Soviet Union (FSU), but also by political and ethnic conflicts. These conflicts impeded both Georgia's economic growth and its transition to a market economy.

It is estimated that production of most mineral commodities decreased because of the political and economic turmoil and shortages in fuel and other material supplies.

Georgia was formulating plans to privatize its industrial sector. However, according to a March 1994 report, Georgia planned to maintain under state control for the near future the transportation, natural gas, and power engineering sectors.⁶

Regarding production of mineral commodities, copper is produced at the Madneuli mining and beneficiation complex, which has the estimated capacity to produce about 12,000 metric tons per year (mt/a) of copper in concentrate. In 1994, production fell to an estimated 2,000 mt/a of copper in concentrate. Georgia reportedly was shipping copper in concentrate to Russia and Switzerland in exchange for gold, presumably to build up its bullion stocks.⁷

Gold production in Georgia was estimated to have fallen from 1.9 mt/a in 1991 to less than 1 mt/a in 1994. Plans called for increasing gold output to 4 mt/a by 1997. Production occurs at the Madneuli complex, where gold is produced as a byproduct of polymetallic ores containing copper, lead, and zinc. An Australian firm, Resources Consortium, has negotiated a joint venture with Madneuli to provide technology to increase gold extraction from ore mined at Madneuli.⁸

Georgia reportedly has the capacity to produce 5.1 million metric tons per year (Mmt/a) of manganese ore at the Chiatura complex and 98,900 mt/a of ferromanganese at the Zestafoni ferroalloys plant. Georgia was engaged in studying the feasibility of producing electrolyte manganese and potassium permanganate from ore.⁹

Georgia imported all of its natural gas requirements from Turkmenistan, but had fallen behind on its payments.¹⁰ Although Georgia required between 23 and 24 million cubic meters of natural gas per day, it was obtaining less than one-half that amount. Furthermore, owing to lack of payment, Turkmenistan was curtailing its gas supply to Georgia.¹¹

According to the chairman of the Georgian Oil Department (Saknavtobi), Georgia has between 320 and 340 million metric tons (Mmt) of oil reserves. Reportedly, agreements had been reached with United States and British firms on exploitation of deposits, with Austrian partners on construction of an environmentally sound oil refinery near Samgori, and with a United States-Israeli firm on reconstruction of oil pipelines. The Georgian Oil Department Chairman stated that the country could become self-sufficient in oil in 1 or 2 years.¹²

Georgia has a diverse range of mineral resources, many of which have not yet been exploited. Mineral resources in Georgia include antimony, arsenic, barite, bentonite, copper,

diatomite, dimension stone, hard and brown coal, iron, lead, manganese, mercury, peat, petroleum, precious and semiprecious stones, talc, zeolites, and zinc. Reserve figures for most metals are still not available. For the few metals for which data have been given, Georgia reportedly has manganese reserves of 240 Mmt grading 17% to 25% Mn at the Chiatura deposit, hard coal reserves of 335 Mmt at the Tkibuli and Tkvarcheli deposits, gold reserves of 260 mt in the Madneuli and Bolnisi regions, and silver reserves of 1,500 mt.

Reserves in Georgia were assessed according to the Soviet classification system, which is not comparable to the system used in the United States. The economic criteria used in this system were designed for a centrally planned economic system that did not account for production costs in the same way as a market economy system. For a full explanation of the Soviet reserve classification system, refer to the reserve section in the chapter on Russia.

Georgia, which has its western border on the Black Sea, is bordered to the north by Russia, to the east by Azerbaijan, and to the south by Armenia and Turkey. The Caucasus Mountains form the major part of the terrain. Through its ports of Batumi, Poti, and Sukhumi on the Black Sea, Georgia is able to ship its output to world markets. The port at Batumi is a major shipment center for refinery products. As of 1990, Georgia had 1,570 kilometers (km) of railroads that is all electrified, not including industrial railroads, and 33,900 km of highways, of which 29,500-km was hard surfaced. One special means of transport employed in Georgia is aerial cables, of which there are about 100 in operation, with a number used at mineral production sites.

Georgia has significant mineral deposits, but the future of its mineral industry initially would depend on the country establishing political and economic stability to permit a more

secure investment climate. If this stability were to be established, Georgia's favorable location on the Black Sea should enable it to reach world markets at reasonable cost; it already possesses supply routes to other FSU countries. Georgia can produce manganese and ferromanganese that could be sold on world markets. However, most of Georgia's manganese reserves of high-grade oxide ores are depleted and production has declined sharply during the past decade. The expansion of this industry in the future will depend on the development of carbonate ores from which it is more difficult to obtain a commercial product. Georgia also either produces or has reserves of a number of metals and nonmetallic minerals that could possibly compete on world markets. An assessment of Georgia's mineral production and reserves in terms of production costs and available markets would be needed to determine the viability of the country's mineral industry as it makes the transition to a market economy.

¹Text prepared June 1995.

²Interfax Business Report, Denver, Colorado, Feb. 7, 1995, p. 3.

³Summary of World Broadcasts, British Broadcasting Corp., Reading England, Jan. 7, 1994, pp. WD/2, 3, Georgian Radio, Tbilisi, Dec. 31, 1993.

⁴Interfax Statistical Report, Denver, Colorado, June 3-10, 1994, p. 2.

⁵Summary of World Broadcasts, British Broadcasting Corp., Reading England, June 25, 1993, p. A/13, Tbilisi Radio, June 16, 1993.

⁶Summary of World Broadcasts, British Broadcasting Corp., Reading England, Mar. 14, 1994, p. WA/4, Ibera News Agency, Tbilisi, Mar. 14, 1994.

⁷Interfax Mining Report, Denver, Colorado, Dec. 17-31, 1993, p. 5.

⁸Work cited in footnote 6, pp. 3, 4.

⁹Interfax Mining and Metals Report, Denver, Colorado, Feb. 24-Mar. 3 1995, p. 8.

¹⁰Summary of World Broadcasts, British Broadcasting Corp., Reading England, June 25, 1993, p. A/16.

¹¹Foreign Broadcast Information Service, U.S. Government publication, Washington, DC, Jan. 26, 1994, p. 65, Tbilisi radio, Jan. 22, 1994.

¹²Summary of World Broadcasts, British Broadcasting Corp., Reading England, Feb. 4, 1994, p. WD/6, Georgian Radio, Tbilisi, Jan. 27, 1994.

TABLE 1
GEORGIA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Commodity	1992	1993	1994
Arsenic, mine output	1,500	1,000	600
Barite	40,000	30,000	20,000
Bentonite	150,000	100,000	600,000
Cement	1,000,000	700,000	400,000
Coal	181,000	150,000	100,000
Copper, Cu content of concentrate	5,000	3,000	2,000
Diatomite	75,000	50,000	30,000
Gold kilograms	1,500	1,000	600
Iron and steel:			
Steel, crude	529,000 3/	215,000 3/	116,000 3/
Pig iron	274,000 3/	88,000 3/	--
Lead, Pb content of ore	800	500	300
Manganese ore, marketable	1,200,000	1,000,000	700,000
Mn content of ore	350,000	250,000	150,000
Petroleum, crude	150,000	120,000	80,000
Zinc, Zn content of ore	2,000	1,500	1,000

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits.

2/ Table includes data and estimates based on information available through June 16, 1995.

3/ Reported figure.

TABLE 2
GEORGIA: STRUCTURE OF THE MINERAL INDUSTRY FOR 1994

(Metric tons unless otherwise specified)

Commodity	Major operating company	Location of main facilities	Annual capacity e/
Arsenic, mine output	Lukhumi deposit	Upper Racha region	2,000 (total).
	Tsana deposit	Lower Svanetiya region	
	Metallic arsenic and arsenic compounds	Racha, Tsana mining and chemical plants	Racha region Lower Svanetiya region
Barite	Chordskoye deposit	Onskiy rayon	70,000.
Bentonite	Gumbrskoye and Askanskoye deposits	Gumbra, Askana regions	200,000.
Cement	Rustavi cement plant	Rustavi	1,500,000.
Coal	Tkibuli-Shaorskoye, Tkvarchelskoye, deposits	Tkibuli, Tkvarcheli, Akhaltsikhe regions	300,000.
Copper (copper content of ore)	Madneuli complex	Madneuli region	12,000.
Diatomite	Kisatibskoye deposit	Kisatibi region	150,000.
Ferroalloys	Zestafoni plant	Zestafoni (now Zestap'oni)	100,000 (ferromanganese).
Do.	do.	do.	250,000 (silicomanganese).
Do.	do.	do.	250,000 (manganese sintor).
Gold	Madneuli complex	Madneuli region	2.
Lead-zinc	Kvaisi deposit	Kvaisi region	1,200 (lead).
Do.	do.	do.	3,000 (zinc).
Manganese, ore	Chiatura complex	Chiatura region	2,000,000.
Petroleum, crude	About 60 wells accounting for 98% of output	Mirzaani, Teleti, Supsa regions	200,000.
Steel, crude	Rustavi steel mill	Rustavi	1,500,000.

e/ Estimated. NA Not available.