



# 2020–2021 Minerals Yearbook

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**GEORGIA [ADVANCE RELEASE]**

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## U.S. Geological Survey, Reston, Virginia: 2025

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# THE MINERAL INDUSTRY OF GEORGIA

By Elena Safirova

**Note:** In this chapter, information for 2020 is followed by information for 2021.

In 2020, Georgia was the 13th-ranked producer of manganese accounting for 1% of world production. Georgia has resources of a range of mineral commodities, including arsenic, barite, bentonite, coal, copper, diatomite, gold, iron ore, lead, manganese, perlite, zeolites, zinc, and others; however, not all of these resources were currently being mined. The country's metallurgical sector produced ferroalloys and steel. In 2020, mineral production in Georgia was limited and the most notable contribution to production in the mineral sector was the mining of copper, gold, manganese, and production of ferroalloys (table 1; Schnebele, 2022).

## Minerals in the National Economy

In 2020, the real gross domestic product (GDP) of Georgia decreased by 6.8%; the nominal GDP was \$15.84 billion.<sup>1</sup> The share of industrial production in the GDP in 2020 was 20.3%; and mining and quarrying accounted for 8.9% of the GDP of industrial output. In 2020, the value of production in mining and quarrying accounted for 2.7% of the total of the country's economy, which was an increase from 1.9% in 2019. The value of manufacturing production accounted for 23.0% of the overall economy compared with 21.7% in 2019 (National Statistics Office of Georgia, 2021b, p. 107–126, 135).

In 2020, Georgia ran a substantial trade deficit—the total value of its exports (\$3.34 billion) was greatly exceeded by the total value of its imports (\$8.05 billion). The value of exports in 2020 decreased by 12.0%, or by \$455 million, compared with that of 2019; the value of imports, however, decreased even more, by \$1.467 billion, or by 15.4%. The country's major export trade partners in 2020 were, in descending order of export value, China (which received 14.3% of Georgia's exports), Azerbaijan and Russia (13.2% each), Bulgaria (9.4%), Ukraine (6.5%), Turkey (5.7%), and Armenia (5.6%). Its major import trade partners in 2020 were, in descending order of import value, Turkey (which supplied 17.5% of Georgia's imports), Russia (11.0%), China (8.8%), the United States (6.9%), Azerbaijan (6.4%), Armenia (5.2%), Germany (5.1%), and Ukraine (4.8%) (National Statistics Office of Georgia, 2021b, p. 257, 267).

Mineral commodities, especially metals, played a significant role in the country's exports. In 2020, Georgia exported about 465,500 metric tons (t) of copper ores and concentrates (a 23.1% increase compared with the amount exported in 2019) and received revenue of \$779.0 million (an 18.6% increase), although it also imported copper ores and concentrates worth \$582.4 million. The country also exported 250,700 t of ferroalloys

(an 8.8% decrease compared with the amount exported in 2019) and received revenue of \$247.3 million (an 18.5% decrease); 430,800 t of nitrogenous fertilizer (a 14.3% decrease compared with that in 2019) and received revenue of \$72.2 million (a 23.8% decrease); and 2.7 t of unwrought gold (a 3.8% decrease compared with that in 2019) and received revenue of \$97.6 million (a 34.0% increase). Copper ores and concentrates accounted for 23.3% of the country's total export value; ferroalloys, 7.4%; gold, 2.9%; and fertilizers, 2.2% (National Statistics Office of Georgia, 2021a, p. 16–17; 2021b, p. 274).

## Production

In 2020, production of bituminous coal increased by 549% owing to coal mines not being in operation for at least 9 months of 2019. Bentonite production increased by 327%; mined silver, by 176%; mined gold, by 33%; manganese, by 19%; and crude petroleum, by 12%. Perlite production decreased by 80%; that of zeolites, by 30%; silicomanganese, by 25%; limestone, by 19%; and copper concentrates (Cu content), by 16%. The decreases in production were likely related to the coronavirus disease 2019 (COVID–19) pandemic. Data on mineral production are in table 1.

## Structure of the Mineral Industry

National Agency of Mineral Resources (NAM), which was a part of the Ministry of Economy and Sustainable Development, was responsible for issuing exploration and mining licenses. Most mineral producers in Georgia were privately owned. Table 2 is a list of major mineral industry facilities.

## Commodity Review

### Metals

**Ferroalloys.**—In 2020, the Zestafoni ferroalloys plant was Georgia's only ferroalloys plant. In 2020, the plant produced 217,500 t of silicomanganese, which was a 25% decrease from that in 2019, all of which was exported. The facility was located on the banks of the Kvirila River in Imereti Region and occupied more than 130 hectares. The Zestafoni plant's location is in proximity to the Chiatura Mine, which produced manganese ore, and the Vartsikhe hydroelectric powerplant, which supplied power to both the Chiatura manganese mine and the Zestafoni ferroalloys plant. The plant was owned by Georgian American Alloys, Inc. (GAA), a Miami, Florida-based company. GAA also owned the Chiatura Mine, the Vartsikhe hydroelectric powerplant, and Felman Trading, Inc.—a trading company with an extensive international distribution network for manganese and silicon ferroalloys (table 1).

<sup>1</sup>Where necessary, Georgian laris (GEL) were converted to U.S. dollars (US\$) at the annual average exchange rates of 3.11GEL=US\$1.00 for 2020 and 3.22GEL=US\$1.00 for 2021.

In March 2020, the Zestafoni plant opened its 22.5-megawatt (MW) electric arc furnace after a \$3 million renovation that lasted 6 months. As a result of the renovation, the plant's capacity would increase by 70 metric tons per day, or by about 10%. Also, the new furnace would have a closed production cycle to reduce its environmental impact. Overall, the Zestafoni plant had 12 electric arc furnaces, an agglomeration plant, and a manganese briquet plant (Fixygen.ua, 2020).

**Gold.**—In 2020, Georgia produced 5,401 kilograms of gold. The leading gold producer in the country was RMG Gold of Russia, which operated the Madneuli gold mine in Kvemo Kartli Region in eastern Georgia. Other active gold-producing companies were Kavkasiis Samto Djgupi, RMG Auramine, and RMG Copper. In addition, 11 more companies held gold production licenses but did not produce any gold in 2020 (tables 1, 2; Spres.ge, 2021).

**Perlite.**—In 2020, ParavanPerlite Ltd. was the primary producer of perlite in Georgia. The company had a license to mine the Paravan perlite deposit located 130 kilometers (km) from Tbilisi near Paravani Lake. The deposit is situated 2,300 meters above sea level; however, the company had access to a railway line located within 1 km from the open pit. ParavanPerlite owned a processing plant that produced perlite products for agriculture, construction, filtering, and other applications. Most of ParavanPerlite's products were exported to Azerbaijan, Kazakhstan, Russia, and Ukraine (ParavanPerlite Ltd., 2022).

### *Mineral Fuels*

**Natural Gas and Petroleum.**—In 2020, Georgia produced 8.9 million cubic meters of natural gas, which was a 7.3% decrease compared with production in 2019. Production of crude petroleum, however, increased by 11.6% to 259,000 barrels. The leading national producer of hydrocarbons in Georgia was AO Georgian Oil and Gas Corp. (GOGC), which was engaged in exploration for and production of petroleum and natural gas, and their transit as well as the construction and operation of hydrocarbon pipelines (tables 1, 2).

In April 2020, the International Arbitration Tribunal issued its decision on the dispute between, on the one hand, the State Agency of Oil and Gas (SAOG) of Georgia and GOGC and, on the other hand, Frontera Resources Georgia Corp (FRGC) and Frontera US LLC. The Arbitration Tribunal ruled that FRGC had breached its contractual obligations of production sharing agreement. According to the decision, FRGC was to pay the mineral usage tax that had been waived as well as legal fees related to the arbitration proceedings, in the amount of about \$6 million. Also, following the Arbitration Tribunal's decision, the SAOG issued a contract termination notice to FRGC to take effect in July 2020 (Georgian Oil & Gas Company, 2020; Dumbadze, 2021).

In January 2020, the State Agency for Oil and Gas announced a new international tender for hydrocarbon resources located in the sea shelf of the Black Sea. Investors were offered two sections of the sea shelf; one had an area of 5,300 square kilometers (km<sup>2</sup>), and another, 3,500 km<sup>2</sup>—the so called II and III Licensing Blocks. According to the tender rules, participants had to demonstrate at least 5 years of experience in exploration for and (or) production of hydrocarbons. Applications were to

be accepted through April 2020. In June 2020, the Government announced that OMV Petrom SA of Austria, which was a subsidiary of Oesterreichische Mineraloelverwaltung Aktiengesellschaft, had won the tender (Alifirova, 2020; Regnum.ru, 2020).

In February 2020, Phasis Oil LLC, which was a legal successor of SOCAR Georgia Investments Co., announced plans to build an oil refinery in Georgia. Plant construction was expected to begin in 2021 and be completed in 2024. The plant would produce automotive gasolines and diesel fuel compliant with Euro-5 and Euro-6 environmental standards. The products would be sold domestically and therefore potentially lead to a between 15% and 20% reduction in Georgia's imports of refined petroleum products. According to the feasibility study, the plant would have the capacity to process 4 million metric tons per year, or about 29.2 million barrels per year, of crude petroleum. The total project cost was estimated at 1 billion laris (about \$322 million) and would include construction of a gas reservoir and a 2-MW powerplant. The plant would be located in the city of Kulebi, next to the SOCAR petroleum terminal. When operating at full capacity, the refinery would contribute between \$50 million and \$60 million in taxes to the Georgia Government budget. The project was the third refinery project to be proposed in Georgia in about 10 years. The previous two projects had failed to be implemented, however (Oilcapital.ru, 2020; Rupec.ru, 2020).

### **MINERAL INDUSTRY HIGHLIGHTS IN 2021**

In 2021, production of perlite doubled; that of zeolites increased by 156%; that of natural gas, by 67%; bituminous coal, by 49%; silicomanganese, by 48%; crude petroleum, by 26%; steel rebar, by 24%; refined petroleum, by 16%; and silver, by 13%. Production of bentonite decreased by 37%; that of mined gold, by 35%; and gypsum, by 28%. These and other production data are in table 1.

In July 2021, the Ministry of Economy issued two 10-year exploration and mining licenses in northern Racha-Lechkhumi Region. The licenses were issued to the companies Technology 2021 and Mn Norty for a total area of more than 1.5 km<sup>2</sup> near the village of Shkmeri for the purpose of developing manganese deposits. In November, residents of Shkmeri held protests demanding that the licenses be revoked. The residents were concerned that manganese production at the site would lead to climate change, excessive development of infrastructure in the region, increased pollution, and damage to existing buildings in the village. Moreover, local residents claimed that the licenses were obtained illegally and therefore were invalid. As of yearend, it was not known whether or how the Government had responded to the demands of the Shkmeri residents (Agenda.ge, 2021; Civil.ge, 2021; Shoshiashvili, 2021).

In April, Manganese Industry Co. announced that it planned to build a new ferroalloys plant in Terjola municipality in Imereti Region. The plant would include two silicomanganese production lines that would have total capacity of 16,000 metric tons per year, combined. The total investment was expected to amount to 2.8 million laris (about \$870,000), and the plant would provide jobs for 100 local residents. The company promised to build the plant within 2 years and to invest at least

1.7 million laris (about \$528,000) in the project. The plant to be built was a part of the “Produce in Georgia” program, which was a Government project aimed at stimulating domestic production in the country. As a part of the program, the company was able to acquire about 61,500 square meters of nonagricultural land for a symbolic price of 1 lari (31 U.S. cents) (Newsgeorgia.ge, 2021).

In March 2021, OMV Petrom SA and the Government signed a contract for exploration and production of hydrocarbon resources in the shelf of the Black Sea. The contract allowed OVM Petrom to conduct collection, processing, and reinterpretation of geophysical data and subsequent production of natural gas and crude petroleum for a period of 25 years from II Licensing Block located in the continental shelf of Black Sea. The company planned to conduct two-dimensional and three-dimensional seismic exploration and then drilling. OMV Petrom was the second-ranked crude petroleum and natural gas company in Austria and tenth-ranked hydrocarbon company in Europe. Previously, the company discovered a crude petroleum deposit on Romania’s continental shelf valued at \$1.5 billion (EkhoKavkaza.com, 2021).

## Outlook

In the past 10 years, the Government has significantly improved the business climate in the country and, in 2020 (the latest year for which the data were available), was ranked 7th according to the World Bank’s “Doing Business” project (World Bank, The, 2020, p. 4). The mineral sector, however, has been unable to take full advantage of those changes. Unlike other economic sectors, the mining and metallurgical sectors did not have an increase in the number of companies working in the country. In the next 3 to 5 years, the mineral industry of Georgia is expected to have moderate but stable growth. Copper, ferroalloys, manganese, nitrogen fertilizers, and steel are likely to remain the dominant mineral commodities in the short and medium terms. Overall, Georgia is likely to play a moderate role in mineral production in the region of Europe and Central Eurasia.

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TABLE 1  
GEORGIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

Commodity <sup>2</sup>	2017	2018	2019	2020	2021
<b>METALS</b>					
Copper, mine, concentrates, Cu content	9,500 <sup>e</sup>	9,200 <sup>e</sup>	9,547 <sup>r</sup>	8,031	8,147
Ferroalloys, silicomanganese	289,800	335,000	291,600 <sup>r</sup>	217,500	322,800
Gold, mine, Au content kilograms	3,000	2,900 <sup>e</sup>	4,052 <sup>r</sup>	5,401	3,513
Iron and steel, products, rebar	301,100	273,500	285,000 <sup>r</sup>	268,300	333,500
Manganese, mine, concentrate:					
Gross weight	463,000 <sup>r</sup>	569,000 <sup>r</sup>	461,000 <sup>r</sup>	547,000	589,000
Mn content	186,000 <sup>r</sup>	216,000 <sup>r</sup>	175,000 <sup>r</sup>	208,000	224,000
Silver, mine, Ag content kilograms	3,000 <sup>r, e</sup>	3,000 <sup>r, e</sup>	4,052 <sup>r</sup>	11,172	12,674
<b>INDUSTRIAL MINERALS</b>					
Cement, hydraulic	2,057,800	1,980,500	2,681,200 <sup>r</sup>	2,446,300	2,682,500
Clay, bentonite	100,000 <sup>r, e</sup>	64,000 <sup>r, e</sup>	27,872 <sup>r</sup>	118,983	75,310
Gypsum, mine	85,500	81,200	137,700 <sup>r</sup>	127,700	92,500
Nitrogen, ammonia, N content	170,000	190,000 <sup>r</sup>	200,000 <sup>r</sup>	200,000 <sup>e</sup>	200,000 <sup>e</sup>
Perlite	50,000	50,000	49,884	10,000	20,000
Stone, crushed, limestone	934,200	1,086,700	482,800 <sup>r</sup>	392,500	429,600
Zeolites	100,000 <sup>e</sup>	100,000 <sup>e</sup>	95,708	67,061	171,343
<b>MINERAL FUELS AND RELATED MATERIALS</b>					
Coal, bituminous	268,100	137,900	15,300 <sup>r</sup>	99,300	148,000
Natural gas thousand cubic meters	8,500	10,000	9,600 <sup>r</sup>	8,900	14,900
Petroleum:					
Crude 42-gallon barrels	243,300	229,200	232,000 <sup>r</sup>	259,000	326,000
Refinery do.	200,000	242,000	301,000	298,000	345,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto.

<sup>1</sup>Table includes data available through September 7, 2022. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

<sup>2</sup>In addition to the commodities listed, arsenic, barite, diatomite, iron ore, lead, and zinc may have been produced, but available information was inadequate to make reliable estimates of output.



TABLE 2  
GEORGIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2021

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners <sup>1</sup>		Location or deposit names <sup>1</sup>	Annual capacity <sup>e</sup>
Barite-zinc ore		NA		Kvaisi Mine <sup>2</sup>	NA
Cement		HeidelbergCement AG (LLC HeidelbergCement Georgia, 50%, and Hunnewell Partnert LLP, 50%)		2 plants in Rustavi	1,500,000
Do.		do.		Plant in Kaspi, Shida Kartli Region	1,500,000
Clay, bentonite		Includes: Askana LLC (Silver & Baryte Ores Mining Co., 97.7%) NA		Of which: Askanskoye Mine, Ozurget'i, Guria Region Gumbrskoye Mine, Gumbra, Imereti Region	200,000 <sup>3</sup>
Coal		Saqnakhshiri Ltd.		Akhaltzikhe Mine, Akhalts'ikhis Raioni, Samskhe-Javakheti Region; Tkibuli Mine, Tkibuli District, Imereti Region; and Tkvarcheli Mine, Tqvarch'eli District, Abkhazia Autonomous Republic	400,000 <sup>3</sup>
Copper concentrate, Cu content		RMG Copper (Rich Metals Group, 100%)		Sakdrisi Mine, Bolnisi, Kvemo Kartli Region	10,000
Ferroalloys:					
Ferromanganese		Georgian American Alloys Inc. (GAA)		Zestafoni ferroalloys plant, Zestap'onis Raioni, Imereti Region	400,000 <sup>4</sup>
Silicomanganese		do.		do.	290,000
Gold, mine, Au content		kilograms	RMG Gold (Rich Metals Group, 100%)	Madneuli Mine, Kvemo Kartli Region	3,500
Do.			RMG Auramine (Rich Metals Group, 100%)	Kvemo Kartli Region	NA
Do.			RMG Copper (Rich Metals Group, 100%)	do.	NA
Do.			Kavkasiis Samto Djgupi	NA	NA
Iron and steel, steel, rebar			Geosteel (JSW Steel Ltd., 51%, and Georgian Steel Holding Group, 49%)	Steel plant in Rustavi	175,000
Do.			Kutaisi Metallurgical Plant (Euroasian Steels LLC, 100%)	Plant in Kutaisi	100,000
Do.			Moulds and Metals Georgia Ltd.	Metallurgical Plant in Poti	NA
Do.			Rustavi Metallurgical Plant (Georgian Steel Holding Group, 100%)	Plant in Rustavi	125,000
Manganese, ore			Chiatura Manganese Co. [Georgian American Alloys Inc. (GAA), 100%]	Chiatura Mine, Imereti Region	500,000
Natural gas			AO Georgian Oil and Gas Corp. (GOGC) (Government, 100%)	NA	NA
Do.			Frontera Resources Corp.	South Kakheti Gas Complex, Kakheti Region	NA
Nitrogen, ammonia, N content			OOO Rustavi Azot complex	Rustavi	330,000
Perlite			ParavanPerlite Ltd.	Paravani Lake, Samtskhe-Javakheti Region	NA
Petroleum, crude		42-gallon barrels	Canagro Ltd.	Sagarejo, eastern Georgia, onshore	NA
Do.		do.	Saknavtobi Oil and Gas Co. and most Georgian petroleum companies in joint ventures with Anadarko Petroleum Corp., Frontera Resources Corp., GeoGeroil, Georgian-British Oil Co. (GBOC), Ioris Valley Oil & Gas Ltd., and Ninotsminda Oil Co. Ltd.	About 60 onshore wells that accounted for 98% of output in Mirzaani Village, Kakheti Region; Sup'sa, Guria Region; and Zemo T'eleťi, Kvemo Kartli Region.	NA

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.

<sup>1</sup>Many location names have changed since the breakup of the Soviet Union. Many enterprises, however, are still named or commonly referred to based on the former location name, which accounts for discrepancies in the names of enterprises and the names of locations.

<sup>2</sup>The status of operations was unknown.

<sup>3</sup>Capacity estimate is the total for all enterprises that could produce the commodity.

<sup>4</sup>Production of ferromanganese stopped in 2012.