



2012 Minerals Yearbook

GEORGIA

THE MINERAL INDUSTRY OF GEORGIA

By Elena Safirova

Prior to the proclamation of Georgian independence in 1991, a range of mineral commodities were mined in Georgia, including arsenic, barite, bentonite, coal, copper, diatomite, lead, manganese, zeolites, zinc, and others. The country's metallurgical sector produced ferroalloys and steel. Production of many of these mineral commodities ceased or had been significantly reduced since 1991 because many supply-demand chains were lost after the disintegration of the Soviet Union.

After the Rose Revolution of 2003, the new Georgian Government set out to reorient the economy toward privatization and free markets. The Government enacted a sweeping tax reform by reducing the types of taxes from 26 in 2003 to 6 in 2008, significantly cut the number of Ministries and state agencies, and dramatically reduced corruption. According to The World Bank, Georgia was one of the world's fastest reforming economies, and, in 2011, it ranked as the world's ninth-easiest country in which to do business (World Bank, The, 2013). During the past decade, the Government was also focused on attracting foreign capital, primarily in the form of foreign direct investment (FDI). The mineral industry, however, did not benefit from the steady economic growth of the past 8 years as much as did other sectors, such as the financial services and manufacturing sectors.

In the fall of 2012, after the Georgian "Dream Party" won the parliamentary elections, work in the mining industry was frequently interrupted by worker strikes. On October 15, employees of Georgian Manganese Holding, LLC in the city of Chiatura started a labor strike; the workers' demands included a 10% wage increase and improvement in working conditions. Later, workers at other Georgian Manganese plants joined with the miners at Chiatura. At the height of the strike, work at the company's five mines and three processing plants was halted, a total of 3,700 workers were participating in the strike, and worker demands were raised to a 100% wage increase. At the time, the average wage of the Chiatura miners was between 250 and 300 laris per month (between \$150 and \$180),¹ which was about one-third less than the average wages in Georgia. The strike continued for several weeks and the workers demanded to form a parliamentary committee to evaluate the working conditions of miners. In November, 1,600 workers at the Dzidziguri and the Mindeli coal mines in the city of Tkibuli started a preventive labor strike because the administration of the Saqnakhshiri, Ltd. was planning to reduce wages and lay off some workers. The Tkibuli strike continued for more than a week. As a result of the strikes, some of the workers' demands were met, but tensions between the workers and the companies remained (Minerjob.ru, 2012a, c, d; NewsGeorgia.ru, 2012).

In December, workers of the petroleum terminal in the seaport Kulevi, which was owned by the State Oil Company

of Azerbaijan Republic (SOCAR), also struck, demanding wage increases and improvement in working conditions. The strike lasted for 4 days, and the workers union and the port administration were able to find a compromise. Also in December, 300 workers at the Rustavi metallurgical plant began a strike and demanded a wage increase, improvements in sanitary conditions at the plant, and provision of social services for workers. The administration partially satisfied workers' demands but threatened the strike participants with layoffs. Although strikes also took place in other industries during the period of October through December, it appeared that mineral production had, on average, lower wages and worse working conditions than other sectors of the Georgian economy and therefore the mineral sector had relatively more strikes (Metaltorg.ru, 2012).

Minerals in the National Economy

In 2012, the nominal gross domestic product (GDP) of Georgia increased by 9.6% compared with that of 2011, to \$15.8 billion. The country's real GDP increased by 6.1% in 2012 compared with that of 2011. The share of industrial production in the GDP in 2012 was 17.2%. Mining and quarrying accounted for 5.0% of the value of industrial production. In 2012, the real value of production in mining and quarrying increased by 2.0% whereas the real value of manufacturing production increased by 16.4%, indicating that the Georgian economy was growing following the economic reforms of the previous decade, but that the mining sector was lagging behind other sectors of the economy (National Statistics Office of Georgia, 2013c; U.S. Central Intelligence Agency, 2013).

In 2012, foreign direct investment (FDI) decreased by 23% to \$865 million from \$1,117 million in 2011, and a total of 66 countries invested in the Georgian economy. Japan was the leading investor in Georgia (provided 20% of the total FDI received by Georgia in 2012), followed by Azerbaijan (17%), the Netherlands (15%), the United Kingdom (8%), China (6%), and the Czech Republic (5%). The FDI in mining was \$12.7 million, or 0.5% of the total FDI in the country; this was a 68.5% increase compared with the FDI in 2011 (Bizzone.info, 2013; National Statistics Office of Georgia, 2013b).

Mineral Trade

In 2012, Georgia ran a substantial trade deficit—the total value of its exports (\$2.38 billion) was greatly exceeded by the total value of its imports (\$7.84 billion). The country's major export trade partners were, in order of value, Azerbaijan (which received 26.4% of Georgia's exports), Armenia (11.0%), the United States (9.5%), Ukraine (7.0%), Turkey (6.0%), Canada (4.4%), Bulgaria (2.9%), Kazakhstan (2.6%), Belgium (2.5%), and Italy (2.2%). Its major import trade partners were, in order of value, Turkey (which supplied 17.8% of Georgia's

¹Where necessary, values have been converted from Georgian laris (GEL) to U.S. dollars (US\$) at an annual average exchange rate of GEL1.651=US\$1.00 for 2012 and GEL1.687=US\$1.00 for 2011.

imports), Azerbaijan (8.1%), Ukraine (7.6%), China (7.2%), Germany (6.9%), Russia (6.0%), Japan (4.0%), Bulgaria and Italy (3.5% each), and Romania (3.3%). Mineral commodities, especially metals, played a significant role in the country's exports. Ferroalloys accounted for 11.0% of the country's total export value; nitrogenous mineral or chemical fertilizers, 5.8%; unwrought gold, 5.0%; and copper ores and concentrates, 2.3%. Among the country's imports, the largest category was petroleum and petroleum oils, which made up 12.1% of the total. Petroleum gases contributed another 3.2% (National Statistics Office of Georgia, 2013a).

Ferroalloys were the most valuable mineral product exported from Georgia. In 2012, Georgia exported 227,700 metric tons (t) of ferroalloys and received for them \$260.5 million. This was an increase of 14.2% in terms of export volume but only 2.2% in terms of export value compared with the volume and value of ferroalloys exports in 2011, respectively. Out of the 227,700 t of ferroalloys exported in 2012, 115,700 t (50.1%) was shipped to the United States; 19,400 t (8.5%), to Ukraine; 16,500 t (7.3%), to Egypt; 15,700 t (6.9%), to Turkey; and 15,500 t (6.8%), to Canada (National Statistics Office of Georgia, 2013a).

Petroleum and petroleum oils were the most valuable import category. In 2012, Georgia imported 915,700 t of petroleum and petroleum oils valued at \$951 million, which was a 0.8% increase in terms of volume and a 4.4% increase in terms of cost compared with those in 2011. Of the 915,700 t of petroleum and petroleum oils imported, 341,000 t (37.3%) was shipped from Azerbaijan; 219,000 (24.0%), from Romania; 187,000 (20.5%), from Bulgaria; 67,000 (7.3%), from Russia; and 30,000 (3.3%), from Italy. Georgia also imported 1.4 million metric tons (Mt) of petroleum gases and other gaseous hydrocarbons valued at \$252.7 million, which was an 11.2% increase in terms of volume and a 6.8% increase in terms of cost compared with those in 2011. The major supplier of petroleum gases to Georgia was Azerbaijan, which supplied 88.7%; Russia, which supplied 1.1% of Georgia's petroleum gas imports, was a distant second (National Statistics Office of Georgia, 2013a).

Government Policies and Programs

In November, the Ministry of Economy and Sustainable Development announced that the taxes on the use of mineral resources would be reviewed and could be revised as a result of the review. As of 2012, the taxes payable to the Government for mining natural resources were set at 0.9 lari (\$0.55) per gram of gold, 136 lari (\$82.4) per metric ton of copper, 0.012 lari (\$0.007) per ton of manganese ore (assuming 1% grade), and 3 lari (\$1.8) per cubic meter of mineral water. The Ministry stated that the tax rates for copper, gold, manganese, mineral water, and timber may be changed. At the same time, the Ministry underscored that Georgia was to adhere to its international obligations and treaties and to protect the rights of all businesses in the country (Kirtskhalia, 2012; MinerJob.ru, 2012b).

Production

Most of the data in table 1 were estimated because 2012 production data for most mineral commodities were not

available. Production of mined copper increased by an estimated 17.5%; that of gold, by an estimated 15%; and silver, by an estimated 8.3%. Output of silicomanganese and mined zinc increased by an estimated 6.7% each. At the same time, production of manganese decreased by an estimated 5.2%, and that of coal, by an estimated 4%. Other production data are in table 1.

Commodity Review

Metals

Copper and Gold.—The Madneuli polymetallic deposit is situated in the Bolnisi region in southern Georgia about 80 kilometers (km) south of Tbilisi near the borders with Armenia and Azerbaijan. The Madneuli Mine was established in 1975 and had a long history as a precious metals producer in the region. The main ore types at Madneuli are barite-polymetallic ore, copper-barite ore, copper-zinc ore, gold-copper ore, and quartzite ore. The Madneuli complex included an open pit mine, a crushing facility, and a processing plant that used flotation to produce copper concentrate. The main pit had a total depth of 350 meters.

Since 2005, the Madneuli Mine was mostly (99.16%) owned by GeoProMining, Ltd. (GPM); the remaining shares were held by the former and current employees of the Madneuli Mine. GPM's mining license for the Madneuli Mine was valid through April 2014. In October 2011 and February 2012, however, the Ministry of Energy and Natural Resources conducted auctions for exploration licenses for deposits of barite, copper, and gold in the Bolnisi, the Dmanisi, the Marneuli, the Tetrtskaro, and the Tsalk regions and for a mining license in the Kvemo Kartli region. The exploration and mining licenses were obtained by the Mining Investment Co. of Russia, which was a part of the Capital Group. The GPM did not obtain licenses for the new deposits and felt that its growth opportunities in Georgia were highly limited, so it decided to sell its assets in Georgia and to focus on operations in the other two countries where it had assets—Armenia and Russia. In June, it was announced that GPM had sold two of its Georgian holdings—JSC Madneuli and Quartzite Ltd.—to RMG Rich Metals Group for a total of \$120 million (Apsny.ge, 2012a; Civil.ge, 2012). The new owner renamed the two companies JSC RMG Copper (formerly JSC Madneuli) and RMG Gold (formerly Quartzite Ltd.). According to the companies' Web sites, both RMG Copper and RMG Gold were in the process of reorganization at yearend 2012. RMG Rich Metals announced that it had invested \$10 million in infrastructure and modernization efforts and stressed the importance of environmental protection and social programs at its enterprises. According to some sources, RMG Rich Metals is also a part of the Capital Group (Apsny.ge, 2012c; Gvimradze, 2012).

Manganese.—For more than a century, Georgia had mined manganese ore from the Chiatura deposit. A portion of the ore was used to produce manganese ferroalloys (ferromanganese and silicomanganese) at the Zestafoni ferroalloys plant, which was located 28 km from the Chiatura deposit. Chiatura Manganese included four mines and three open pit quarries; the

enterprise's annual production capacity was about 400,000 t/yr (Felman Trading Inc., 2012).

Since 2006, both the Chiatura Manganese Mine and the Zestafoni plant had been a part of Georgian Manganese Holding, LLC. In October 2012, Georgian American Alloys, Inc. of the United States acquired 100% ownership interest in the Chiatura Manganese Mine, the Zestafoni ferroalloys plant, and the Vartsikhe hydroelectric facility, which powered the Chiatura Mine and the Zestafoni plant. Felman Trading, Inc. was expected to continue to serve as the primary distributor of silicomanganese produced by Georgian Manganese (Georgian American Alloys, Inc., 2013; JSC RMG Copper, 2013).

In February, the Georgian Government announced a repeat auction for the mining rights for manganese at a section of the Schkmer deposit located in the Racha region in northern Georgia. The auction was to take place in March. The starting price of a 20-year license was set at 1 million laris (about \$600,000) with a deposit of 200,000 laris (about \$120,000). The Government announced that the main criteria for selecting the winner of the tender were the offered price and a package of environmental measures the companies would undertake. The Schkmer deposit is the country's second largest manganese deposit after the Chiatura deposit. The resources of the section to be licensed were estimated to contain more than 1 Mt of manganese. The Government had previously tried to auction the Schkmer deposit in 2008 and 2011 but was unable to find a buyer (Apsny.ge, 2012b; Infogeo.ru, 2012).

Industrial Minerals

Nitrogen.—In September, construction of a new carbamide (urea) plant started in the village of Kulevi, which is located in western Georgia on the shore of the Black Sea. The plant would be built within the Poti Free Industrial Zone (Poti FIZ) and would provide jobs for the residents of Kulevi, Poti, and Supsa. The plant was expected to provide jobs for a total of 1,500 people, 300 of which would be physically located at the plant. The carbamide plant was planned to be built on a 24-hectare (59.3-acre) area. SOCAR Georgia Investment of Azerbaijan agreed to invest \$100 million in the new construction; the total cost of the plant was expected to be \$700 million. The plant was planned to have a capacity of 660,000 metric tons per year (t/yr) of carbamide and to start operations in 2016 (Bizzzone.info, 2012a; Interfax.az, 2012).

Mineral Fuels

Oil and Natural Gas.—In 2012, foreign companies invested \$68 million in exploration for petroleum and natural gas in Georgia and planned to invest at least an additional \$150 million in 2013. In 2012, Georgia produced an estimated 50,000 t of petroleum and exported all of it, because the country did not have an operational oil refinery. The leading investors were Blake Oil and Gas Ltd. of the United Kingdom, which operated mostly in the Kakheti region in the eastern part of the country, and Jindal Petroleum Ltd. of India. According to Jindal Petroleum, each oil well would require between \$5 million and \$20 million in investment, and the company was planning to drill 10 wells (Apsny.ge, 2013).

Although Georgia did not produce natural gas on its own territory and produced only a limited volume of oil, the country spent the past decade trying to achieve the country's energy independence by diversifying its imports and building energy infrastructure. In 2006, the Baku-Tbilisi-Ceyhan oil pipeline opened; it was built to transport Caspian oil to the Turkish city of Ceyhan, which is located on the Mediterranean Sea. It was the first pipeline that would transport Azeri oil to the world market outside of the Russian pipeline network. The pipeline was 1,768 km in length, and 248 km of the pipeline was located in Georgia. BTC Pipeline Co., which operated the pipeline is owned by BP p.l.c. of the United Kingdom (30.1%), SOCAR (25%), Chevron Corp. of the United States (8.9%), Statoil ASA of Norway (8.71%), Türkiye Petrolleri Anonim Ortaklığı (TPAO) (6.53%), ENI S.p.A. of Italy and Total S.A. of France (5% each), Itochu Corp. of Japan (3.4%), ConocoPhillips Co. of the United States and Inpex Corp of Japan (2.5% each), and Hess Corp. of the United States (2.36%) (Jorbenadze, 2012; Rustambekov, 2012).

Another pipeline through Georgia, the Baku-Tbilisi-Erzurum gas pipeline, which opened in 2007, was to connect the Shah-Deniz oil and gas field in Azerbaijan to the Turkish city of Erzurum and eventually to transport natural gas from Azerbaijan to Europe using the Nabucco pipeline. The natural gas and crude oil pipelines were constructed in parallel, and some segments of the pipelines were put in place simultaneously, which helped to minimize the costs and environmental impact. The initial capacity of the pipeline was 12.5 billion cubic meters per year of natural gas. The BTE Pipeline was owned by BP and Statoil (25.5% each), Gazexport and the State Oil Corp. of the Republic of Azerbaijan (GNKAR), Naftiran Intertrade Co. (NICO) of Iran, Lukoil of Russia and Total (10% each), and TPAO (9%). In December 2012, Azerbaijan and Georgia started a project to expand the pipeline capacity to 25 billion cubic meters per year by 2017 and eventually to 45 billion cubic meters per year (NewsAzerbaijan.ru, 2012).

In June, representatives of SOCAR and Oil and Gas Corporation of Georgia signed an agreement to build a 29-km section of the future Kutaisi-Senaki gas pipeline in western Georgia. The section would connect the villages of Abasha and Senaki in western Georgia and was a part of the country's program on energy security. This section of the pipeline was expected to be completed within 9 months. The project was being financed by the U.S. Agency for International Development (Bizzzone.info, 2012b).

Outlook

In the past decade, the Government of Georgia significantly improved the business climate in the country and attracted significant levels of FDI (World Bank, The, 2013). The mineral sector, however, was unable to fully take advantage of those changes. In the next 3 to 5 years, the mineral industry of Georgia is expected to have moderate but stable growth. Copper, ferroalloys, manganese, and steel are likely to remain the dominant mineral commodities in the short and medium terms. At the same time, a potential increase in domestic energy production could serve as a catalyst for faster future growth.

References Cited

- Apsny.ge, 2012a, GeoProMaining prodal gruzinskie aktivy za 120 millionov dollarov [GeoProMining has sold its Georgian assets for \$120 million]: Apsny.ge, June 19. (Accessed August 1, 2013, at <http://www.apsny.ge/2012/eco/1340151201.php>.)
- Apsny.ge, 2012b, Gruzija povtorno popytaetsya nayti zhelayushikh zanyat'sya margantsem [Georgia will try again to find people who want to start a manganese business]: Apsny.ge, March 3. (Accessed August 1, 2013, at <http://www.apsny.ge/2012/eco/1330819309.php>.)
- Apsny.ge, 2012c, Novyy vladelets "Madneuli" i "Kvartsita" prodolzit sotsial'nye i ekologicheskie programmy [The new owner of Madneuli and Quarzite will continue social and environmental programs]: Apsny.ge, July 27. (Accessed August 1, 2013, at <http://www.apsny.ge/2012/eco/1343424126.php>.)
- Apsny.ge, 2013, V 2012 godu v razbedku gaza i nefiti v Gruzii bylo investirovano 68 millionov dollarov [In 2012, \$68 million was invested in oil and gas exploration in Georgia]: Apsny.ge, March 28. (Accessed August 1, 2013, at <http://www.apsny.ge/2013/eco/1364495720.php>.)
- Bizzone.info, 2012a, SOCAR postroit gazoprovod v Gruzii [SOCAR will build a pipeline in Georgia]: Bizzone.info, May 19. (Accessed August 1, 2013, at <http://bizzone.info/energy/2012/1337455438.php>.)
- Bizzone.info, 2012b, V Kulevi zalozheno stroitel'stvo karbamidnogo zavoda [Construction of a carbamide plant started in Kulevi]: Bizzone.info, September 18. (Accessed August 1, 2013, at <http://bizzone.info/industry/2012/1348010356.php>.)
- Bizzone.info, 2013, V 2012 godu pryamye inistrannye investitsii v Gruzii osushestvleny iz 66 stran [In 2012, foreign direct investment in Georgia was made from 66 countries]: Bizzone.info, March 15. (Accessed August 1, 2013, at <http://bizzone.info/stats/EFyFFFupul.php>.)
- Civil.ge, 2012, Litsenzia na dobychu poleznykh iskopaemykh prodana za 110,5 mln. lari [The license for mining resources is sold for 110.5 million laris]: Civil.ge, March 2. (Accessed August 1, 2013, at <http://www.civil.ge/rus/article.php?id=23128>.)
- Felman Trading, Inc., 2012, Georgian Manganese: Felman Trading, Inc. (Accessed August 1, 2013, at <http://felmantrading.com/en/producers/6/>.)
- Georgian American Alloys, Inc., 2013, Georgian American Alloys, Inc. acquires Georgian Manganese, LLC., Yahoo.com press release: April 22. (Accessed August 1, 2013, at <http://finance.yahoo.com/news/georgian-american-alloys-inc-acquires-130000893.html>.)
- Gvimradze, Kote, 2012, Novyy vladelets [New owner]: AiF.ru, June 27. (Accessed August 1, 2013, at http://gazeta.aif.ru/online/tbilisi/510/14_02?print.)
- Infogeo.ru, 2012, Gruzija ob'yavila povtorny auktсион po Shkmerkomu mestorozhdeniyu margantsa [Georgia announced a repeat auction on Shkmer manganese deposit]: Infogeo.ru, February 29. (Accessed August 1, 2013, at <http://www.infogeo.ru/metalls/news/?act=show&news=37957>.)
- Interfax.az, 2012, SOCAR vvedet k 2017 godu v stroy karbamidnyi zavod v Gruzii [By 2017, SOCAR will put a carbamide plant in Georgia in operation]: Interfax.az, September 19. (Accessed August 1, 2013, at <http://interfax.az/view/552716>.)
- Jorbenadze, Irina, 2012, Gruzija: put' v obhod Rossii [Georgia—Path around Russia]: Rosbalt.ru, June 25. (Accessed August 1, 2013, at <http://www.rosbalt.ru/exussr/2012/06/25/996372.html>.)
- JSC RMG Copper, 2013, Latest news: JSC RMG Copper. (Accessed August 1, 2013, at <http://www.madneuli.ge/news-4-139.html>.)
- Kirtskhalia, N., 2012, Gruzija mozhet uvelichit' sbory za dobychu prirodnykh resursov [Georgia could increase taxes on mining mineral resources]: Trend.az, November 2. (Accessed August 1, 2013, at www.trend.az/print/2083510.html.)
- Metaltorg.ru, 2012, Metallurgi Rustavi nachali zabastovku [Metallurgists at Rustavi started a strike]: Metaltorg.ru, December 26. (Accessed August 1, 2013, at http://www.metaltorg.ru/news/market_index.php?id=10079086&date=1356499260.)
- MinerJob.ru, 2012a, Rabotniki krupneyshey v Gruzii ugol'noy Shakhty ob'yavili zabastovku [Workers at Georgia's largest coal mine started a strike]: MinerJob.ru, November 9. (Accessed August 1, 2013, at <http://www.minerjob.ru/viewnew.php?id=22391>.)
- Minerjob.ru, 2012b, Sbor za pol'zovaniye pripodnymi resursami v Gruzii mozhet byt' peresmotren [The tax on use of mineral resources in Georgia may be changed]: Minerjob.ru, November 2. (Accessed August 1, 2013, at <http://www.minerjob.ru/viewnew.php?id=22302>.)
- MinerJob.ru, 2012c, Schet bastuyushim v zapadnoy Gruzii poshel na tysyachi [People on strike in western Georgia are now counted by thousands]: MinerJob.ru, October 17. (Accessed August 1, 2013, at <http://www.minerjob.ru/viewnew.php?id=22149>.)
- MinerJob.ru, 2012d, Tsyachi rabochikh i gornyakov bastuyut v Zapadnoy Gruzii [Thousands of workers and miners are on strike in western Georgia]: MinerJob.ru, October 19. (Accessed August 1, 2013, at <http://www.minerjob.ru/viewnew.php?id=22128>.)
- National Statistics Office of Georgia [Geostat], 2013a, External trade of Georgia in 2012: National Statistics Office of Georgia, 139 p. (Accessed August 1, 2013, at http://geostat.ge/cms/site_images/_files/georgian/bop/Georgian External Trade 2012.pdf.)
- National Statistics Office of Georgia [Geostat], 2013b, Foreign direct investments in 2012: National Statistics Office of Georgia. (Accessed December 10, 2012, at http://www.geostat.ge/index.php?action=page&p_id=140&lang=eng.)
- National Statistics Office of Georgia [Geostat], 2013c, Gross domestic product of Georgia in 2012: National Statistics Office of Georgia. (Accessed August 1, 2013, at <http://geostat.ge/index.php?action=wnews&lang=eng&npid=215>.)
- NewsAzerbaijan.ru, 2012, Baku i Tbilisi uvelichat moshnost' gazoprovoda Baku-Tbilisi-Erzerum [Baku and Tbilisi will increase capacity of Baku-Tbilisi-Erzerum pipeline]: NewsAzerbaijan, December 27. (Accessed August 1, 2013, at <http://www.newsazerbaijan.ru/economic/20121227/298302239.html>.)
- NewsGeorgia.ru, 2012, V Tkibuli shakhtery dostigli konsensusa s administratsiey, no zabastobku ne prekratili [In Tkibuli, the miners reached a consensus with the administration but did not stop the strike]: NewsGeorgia.ru, November 15. (Accessed August 1, 2013, at <http://www.newsgeorgia.ru/society/20121115/215339669.html>.)
- Rustambekov, Bakhram, 2012, Azerbaidzhan sokratil eksport nefiti po truboprovodu Baku-Tbilisi-Dzheykhan [Azerbaijan reduced petroleum export by the Baku-Tbilisi-Ceyhan pipeline]: 1news.az, July 6. (Accessed August 1, 2013, at http://1news.az/economy/oil_n_gas/20120706093814125.html.)
- U.S. Central Intelligence Agency, 2013, Georgia, *in* The world factbook: U.S. Central Intelligence Agency, May 3. (Accessed July 10, 2012, at <https://www.cia.gov/library/publications/the-world-factbook/geos/gg.html>.)
- World Bank, The, 2013, Ease of doing business index: The World Bank. (Accessed August 1, 2013, at <http://data.worldbank.org/indicator/IC.BUS.EASE.XQ>.)

TABLE 1
GEORGIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2008	2009	2010	2011 ^c	2012 ^c
METALS					
Copper, mine output, Cu content of concentrate	11,000	9,800	6,700	6,300	7,400
Gold kilograms	2,000	2,000	2,000	2,000	2,300
Iron and steel:					
Ferroalloys, electric furnace:					
Ferromanganese	11,342 ^r	1,838 ^r	824 ^r	195 ^{r,3}	--
Silicomanganese	120,000	112,016	203,464	242,746 ^{r,3}	257,421 ³
Total	131,342 ^r	113,854 ^r	204,288 ^r	242,941 ^{r,3}	257,421 ³
Steel, rebar	NA	70,000	84,000	88,000	90,000
Manganese ore: ^c					
Gross weight	400,000	400,000	400,000	400,000	380,000
Mn content	116,000	116,000	116,000	116,000	110,000
Silver kilograms	1,360	1,200	1,200	1,200	1,300
Zinc	NA ^r	NA ^r	NA ^r	NA ^r	NA
INDUSTRIAL MINERALS					
Cement ^c	450,000	870,368 ³	856,880 ³	860,000	870,000
Clays, bentonite ^c	5,000	5,000	5,000	4,800 ^r	4,900
Gypsum ^c	125	100	120	125 ^r	130
Nitrogen, N content of ammonia	150,000	150,000	150,000	145,000	150,000
Salt	30,000	30,000	30,000	28,000	29,000
MINERAL FUELS AND RELATED MATERIALS					
Coal, bituminous ^c	11,000	168,451 ³	240,628 ³	250,000	240,000
Natural gas thousand cubic meters	7,910	12,200	7,900	7,900	8,000
Petroleum:					
Crude: ^c					
In gravimetric units	63,500	53,942 ³	51,050 ³	50,000	50,000
In volumetric units 42-gallon barrels	462,000	392,000	371,000	364,000 ^r	364,000
Refinery products:					
In gravimetric units	NA ^r	NA	NA	NA ^r	NA
In volumetric units 42-gallon barrels	NA ^r	NA	NA	NA ^r	NA

^cEstimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. NA Not available. -- Zero.

¹Table includes data available through May 6, 2013.

²In addition to the commodities listed, Georgia may have produced arsenic, barite, diatomite, iron ore, lead, perlite, and zeolites, but available information is inadequate to make reliable estimates of output.

³Reported figure.

TABLE 2
GEORGIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners ¹	Location or deposit names ¹	Annual capacity ^c
Arsenic:	Includes:	Location:	2,000 ²
As content of ore	Racha mining and chemical plant	Lukhumi Mine, Ambrolauri region	
Metal and compounds	Tsana mining and chemical plant	Tsana Mine, Lentekhi region	
	Racha mining and chemical plant	Racha region	
	Tsana mining and chemical plant	Ts'ana region	
Barite	NA	Chordskoye deposit, Onis Raioni	70,000
Do.	RMG Copper (Rich Metals Group)	Madneuli Mine	NA
Barite-zinc ore	NA	Kvaisi Mine	NA
Bentonite	Includes:	Location:	200,000 ²
	Askana LLC (Silver & Baryte Ores Mining Co., 97.7%)	Askanskoye Mine, Ozurget'i	
	NA	Gumbrskoye Mine, Gumbra region	
Cement	LLC Kartuli Cementi (LLC HeidelbergCement Caucasus Shared Services, 70%)	Kaspi and Rustavi	1,100,000
Do.	LLC SaqCementi (LLC HeidelbergCement Caucasus Shared Services, 75%)	Rustavi	500,000
Coal	Saqnakshiri Ltd.	Akhaltshikhe, Tkibuli-Shaorskoye, and Tkvarchelskoye deposits in Akhaltshikhe Raioni, Tkibuli, and Tqvarch'eli regions	300,000 ²
Copper-gold ore	RMG Copper (Rich Metals Group)	Sakdrisi deposit, Bolnisi Region	12,000
Diatomite	NA	Kisatibskoye deposit, K'isat'ibi region	150,000
Ferrous alloys:			
Ferromanganese	RMG Copper (Rich Metals Group)	Zestafoni ferrous alloys plant, Zestap'onis Raioni	400,000
Silicomanganese	do.	do.	250,000
Manganese sinter	do.	do.	250,000
Gold	RMG Gold (Rich Metals Group)	Madneuli Mine	NA
Iron and steel, steel, rebar	Kutaisi metallurgical plant (OOO Eurasian Steel)	Kutaisi	100,000
Do.	Rustavi metallurgical plant (Georgian Steel Holding Group, 100%)	Rustavi	125,000
Do.	Geosteel (JSW Steel Ltd., 51%, and Georgian Steel Holding Group, 49%)	do.	180,000
Manganese ore	Chiaturamanganumi enterprise of Georgian Manganese Holding Limited LLC (Georgian American Alloys, Inc.)	Chiatura Mine	500,000
Nitrogen	JSC Azoti chemical plant	Rustavi	NA
Petroleum:			
Crude	Saknavtobi Oil and Gas Co. and most Georgian petroleum companies in joint ventures with Frontera Resources, Ioris Valley Oil & Gas Ltd., Ninotsminda Oil Co. Ltd., Georgian-British Oil Co. (GBOC), Anadarko Petroleum Corp., and GeoGeroil	About 60 wells that account for 98% of output in Mirzaani, Sup'sa, and Zemo T'lelet'i regions	200,000 ²
Do.	Canagro Ltd.	Sagarejo, eastern Georgia	NA

^cEstimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.

¹Many 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 that of locations.

²Capacity estimate is the total for all enterprises that could produce that commodity.