



2016 Minerals Yearbook

AZERBAIJAN

THE MINERAL INDUSTRY OF AZERBAIJAN

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Azerbaijan produced a wide range of metals and industrial minerals, including aluminum, copper, gold, iodine, iron ore, limestone, silver, and steel. The Government was making concerted efforts to use proceeds from hydrocarbon exports to develop its ferrous metallurgy industry, the chemical sector, and production of petrochemicals. Azerbaijan's importance as a world mineral producer, however, was based on its crude petroleum industry and, more recently, its natural gas industry. Oilfield and gasfield development was concentrated in two projects—the Azeri-Chirag-Guneshli (ACG) offshore oilfield complex and the Shah-Deniz offshore gasfield (U.S. Energy Information Administration, 2016).

Minerals in the National Economy

In 2016, the real gross domestic product (GDP) of Azerbaijan increased by 1.1%. The nominal GDP amounted to \$37.84 billion,¹ and industrial production contributed 37.2% to the total GDP. Mining and quarrying accounted for 65.3% of the country's industrial output, whereas the rest of the industrial output was produced by manufacturing (28.3%) and electricity, heating, and water production and distribution (6.4%). In 2016, industrial production decreased by 0.5% compared with that of 2015 and production by the mineral extraction sector decreased by 0.7%. In 2016, Azerbaijan exported about \$9.14 billion worth of goods and services and imported \$8.53 billion (State Statistical Committee of the Republic of Azerbaijan, 2017, p. 210–221, 264).

Production

In 2016, Azerbaijan's production of silver, copper, and steel pipe increased by 141%, 101%, and 81%, respectively. Lime production increased by 66%; limestone, by 60%; raw steel, by 14%; and steel rebar, by 5.2%. Iron ore production decreased by 80%. Output of construction sand and aluminum metal decreased by 51% and 31%, respectively. Gypsum and gold production decreased by 15% each; cement, by 14%; bentonite, by 8.6%; and refinery products, by 7.72%. These and other data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Gold, Silver, and Copper.—In 2016, Azerbaijan produced 1,895 kilograms (kg) of gold; 320 kg of silver; and 1,947 metric

tons (t) of copper. Compared with production in 2015, silver and copper output increased significantly owing to the continuing rampup of production at the Gosha Mine, but gold production decreased. Most gold, silver, and copper in Azerbaijan was produced by Anglo Asian Mining PLC (Anglo Asian) of the United Kingdom. In 2009, Anglo Asian began gold production at the Gedabek gold, silver, and copper mine, which is located about 55 kilometers (km) from the city of Ganja. At the end of 2013, the Gosha Mine, which is located less than 50 km from Gedabek, started production, and in the summer of 2015, the Gadir underground gold mine started industrial production. In October, Anglo Asian announced that it had discovered a new deposit in the immediate proximity of the Gedabek deposit; this new deposit contained predominantly gold and was named Ugur. Tests showed that gold is located at depth of about 360 meters. The company planned to extend exploration at Ugur southward for about 1.5 km (Novosti.az, 2016; Biznesinfo.az, 2017).

In February 2015, the President of Azerbaijan issued a decree regarding the creation of a state company, ZAO AzerGold, that would engage in prospecting, exploration, development, and management of deposits of nonferrous and precious metals. According to the Government report, AzerGold was operating and, in 2016, planned to produce about 1,300 kg of gold and 2,000 kg of silver at the Chovdar Mine, which is located to the west of Ganja. In the future, the company planned to begin production at other deposits, including the Filizchai and the Mazymchai deposits located in the Balaken region, and at the Gekdag area located in the Nakhchivan Autonomous Republic. The production schedule had not yet been disclosed (Sputnik.az, 2017).

Ferroalloys.—In February, Baku Nonferrous Metals and Ferroalloys Co. announced that it was planning to build a new ferroalloys plant at the chemical industrial park in the city of Sumqayit. The construction began in March and was expected to take about 8 months to complete; installation of equipment would take an additional 5 months. The total cost of the project was estimated to be about \$30 million, of which between \$7 million and \$8 million would be spent on construction. The project was to be financed by the Eximbank of Turkey through a 7-year loan. The plant would have the capacity to produce 20,000 metric tons per year (t/yr) of ferrosilicon and 36,000 t/yr of ferrosilicomanganese. Later, the plant would start producing ferrochromium, ferroboration, and, in the longer term, ferromolybdenum. The plant would employ 150 people and its products would be consumed domestically by the OOO Baku Steel Co. (Baku Steel). Additionally, ferroalloys would be exported to Georgia and Turkey. Originally, the plant was expected to open in the first half of 2017; however, the opening date for the plant was moved to the first half of 2018 (Abbasova, 2016b, 2017; BlackSeaNews.net, 2016; Salayeva, 2016).

Iron and Steel.—Baku Steel was the leading steel producer in the country. In 2016, it produced 345,340 t of raw steel,

¹Where necessary, Azerbaijani manats (AZN) and euro area euros (EUR) were converted to U.S. dollars (US\$) at annual average exchange rates of 1.77AZN=US\$1.00 and EUR0.940=US\$1.00 for 2016.

which was a 14% increase compared with production in 2015. In March, the company announced that it had commissioned a new \$71 million steel mill plant with capacity to produce 250,000 t/yr of steel. As of 2016, Baku Steel had a total capacity of 1.1 million metric tons per year of steel (Minprom.ua, 2016).

In December, Baku Steel announced a new mega project, which was to include construction of a metallurgical complex in the city of Sumqayit. The complex would include five plants, and the total cost was estimated to be 1,225 million euros (EUR) (about \$1.3 billion). The central plant of the complex would produce rolled steel and have the capacity to produce between 500,000 and 700,000 t/yr. Construction of the complex would employ 4,000 construction workers and was expected to take about 38 months to complete. Once in operation, the complex would employ about 1,200 people. About 50% of the metallurgical complex's output would be used domestically, and the other 50% would be exported, primarily to Iran and Turkey (Metalindex.ru, 2016; Worldbuild.az, 2016).

Iron Ore.—In July, the President of Azerbaijan signed a decree regarding privatization of the OAO Dashkesan Filizsaflashdirma complex. Earlier, in 2013, the complex was included as a part of the Azerbaijan Steel Production Complex (ASPC). Following the President's decree, the Dashkesan complex was excluded from the ASPC structure and given to the State Committee on Property Issues. The Dashkesan complex is located 40 km south of the city of Ganja. The resources of the deposit were estimated to be 270 million metric tons of ore with ore content varying between 35% and 40% iron; the currently mined ore contains 48% iron. The mining and beneficiation complex produced iron ore concentrate with iron content of about 60%. The plant's capacity was about 360,000 t/yr of ore, but in 2016 it produced only 25,500 t (Abbasova, 2016a; Isazade, 2016).

In November, the State Committee on Property Issues announced an investment tender for 99.22% of shares of the OAO Dashkesan Filizsaflashdirma complex. Tender participants were expected to propose an investment program that would create a production cluster from mining to finished product. The proposals were to be for a 3-year investment program and a total investment of at least \$600 million. The program would need to include annual production amounts, modernization of existing plants and infrastructure, and construction of new plants with the ultimate goal of producing competitive export-oriented products. Both domestic and foreign investors were allowed to participate, and applications were accepted until December 19, 2016. At yearend, the results of the tender were not yet known (Mamedov, 2016).

Outlook

In 2016, Azerbaijan continued to focus its attention on oil and gas production, but also made efforts to reinvest the proceeds from exporting hydrocarbons in other economic sectors, such as products of ferrous and nonferrous metallurgy. In the next few years, it is likely that petroleum production will decrease as current oil reserves in Azerbaijan are limited. Gold, copper, and steel production would likely increase when the Gedabek

and the Gosha Mines reach their full production capacities and perhaps some other polymetallic deposits enter the production stage and ferrous metal production capacity is expanded.

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TABLE 1
AZERBAIJAN: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

Commodity	2012	2013	2014	2015	2016
METALS					
Aluminum:					
Alumina	101,800	--	--	--	--
Metal, primary	54,890	53,290	50,357	53,303	36,811
Copper, mine production, Cu content	502	329	675	969	1,947
Gold, mine production, Au content kilograms	1,563	1,619	1,873	2,229	1,895
Iron and steel:					
Raw steel	267,700	222,800	324,100 ^r	302,015 ^r	345,340
Products:					
Pipe	61,773	60,785	35,883	29,787 ^r	53,772
Rebar	244,800 ^r	233,400 ^r	251,500 ^r	223,413	235,033
Iron ore, mine production:					
Gross weight	207,300	141,400	91,400	127,600	25,500
Fe content, 48% Fe	99,500	67,700	43,800	61,200	12,200
Silver, mine production, Ag content kilograms	626	630	239 ^r	133 ^r	320
INDUSTRIAL MINERALS					
Cement, hydraulic	1,966,000	2,296,100	2,941,000 ^r	2,683,000 ^r	2,310,000
Clay and shale, bentonite	36,700 ^r	97,700 ^r	81,900 ^r	53,958 ^r	49,328
Gypsum	149,984	170,001	145,457	130,284	110,501
Iodine	240	249	221	210	208
Lime, construction	16,894	10,662	14,100 ^r	16,500 ^r	27,448
Salt, marketable	5,345	4,855	5,173	4,743	4,690
Sodium compounds, caustic soda	300	--	--	--	--
Stone, sand, and gravel:					
Sand and gravel, construction, sand	2,211,200	2,138,600	1,420,158	752,659 ^r	367,821
Stone, crushed, limestone	1,696,977	1,013,531	694,996	345,092 ^r	553,138
Sulfur compounds, sulfuric acid	4,300	200	--	--	--
MINERAL FUELS AND RELATED MATERIALS					
Natural gas ² million cubic meters	17,242	17,895	18,827	19,236	18,718
Petroleum:					
Crude ^{3,4} thousand 42-gallon barrels	312,479	313,700	304,600	302,210	298,060
Refinery production ⁵ do.	40,992	43,500	45,600	47,900	44,200

^rRevised. -- Zero.

¹Table includes data available through November 28, 2017. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²Only gas sold as a commodity; includes associated gas.

³Only marketable; includes gas condensate.

⁴Production reported in metric tons as follows: 2012—42,982,000; 2013—43,163,000; 2014—41,953,400; 2015—41,569,500; 2016—40,999,100.

⁵Production reported in metric tons as follows: 2012—4,800,000; 2013—5,088,000; 2014—5,330,000; 2015—5,450,000; 2016—5,170,000.

TABLE 2
AZERBAIJAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2016¹

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Locations or deposit names	Annual capacity ^e
Alumina		Ganja refinery ²	Ganja	450,000
Aluminum		OJSC Azerbaijan Aluminum ² [Azeraluminum (Azeral)] (Det. AL Aluminum)	Sumqayit	60,000
Do.		do.	Ganja smelter	50,000
Alunite ore		Zaglik alunite mining directorate	Zaylik, Dashkasan region	600,000
Cement		Norm sement (Norm LLC)	Gyzyldash, Karadagly region	5,600,000 ³
Do.		Qazax sement (Akkord Corp.)	Dash Slahli villaga, Gazakh region	NA
Do.		Holcim (Azerbaijan) OJSC (HolcimLafarge)	Baku	NA
Clays, bentonite		NA	Dash-Salakhinskoye deposit	100,000
Copper ore		Anglo Asian Mining PLC [R.V. Investment Group Services, 49%, and Government, 51%]	Gedabek, Gosha, and Gadir deposits	NA
Gold	kilograms	do.	do.	2,000
Do.		ZAO AzerGold	Chovdar deposit, near Ganja	NA
Iodine		OOO Azer-Yod	Plant in Neftchala	NA
Iron ore, marketable, Fe content		OAo Dashkesan Filizsaflashdirma complex	Dashkasan region	70,000
Lime		AAC Co.	Plant in Baku region	65,000
Natural gas, processing		NA	Plant in Karadagly region	NA
Petroleum and natural gas:				
Crude petroleum and gas condensate		Azerbaijan International Operating Co., (AIOC) in conjunction with BP p.l.c., Chevron Corp., State Oil Company of Azerbaijan Republic (SOCAR), Total S.A., Inpex Corp., Statoil ASA, Exxon Mobil Corp., Türkiye Petrolleri A.O. (TPAO), Itochu Corp., Devon Energy Corp., and Delta Hess (joint venture of Delta Oil and Hess Corp.)	Azeri-Chirag-Guneshli (ACG) offshore oilfields in the Caspian Sea	55,000,000
Natural gas	billion cubic meters	International consortium consisting of BP p.l.c., Statoil ASA, OAO Lukoil, Oil Industries' Engineering and Construction (OIEC), State Oil Company of Azerbaijan Republic (SOCAR), Total S.A., and Türkiye Petrolleri A.O. (TPAO)	Shah-Deniz gas condensate field	NA
Refined petroleum		State Oil Company of Azerbaijan Republic (SOCAR)	Heydar Aliyev Baku refinery	6,000,000 ⁴
Rock salt		NA	Hehram and Pusyan deposits, Naxcivan region	NA
Steel:				
Raw		OOO Baku Steel Co.	Baku steel mill	1,100,000
Pipe, tubes		do.	Sumqayit pipe plant	150,000
Ingots		Baku Steel Casting	Baku	NA

^eEstimated. 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.

²The operation has been inactive since 2013.

³Capacity estimates are totals for all enterprises that produce cement.

⁴Capacity for crude petroleum distillation.