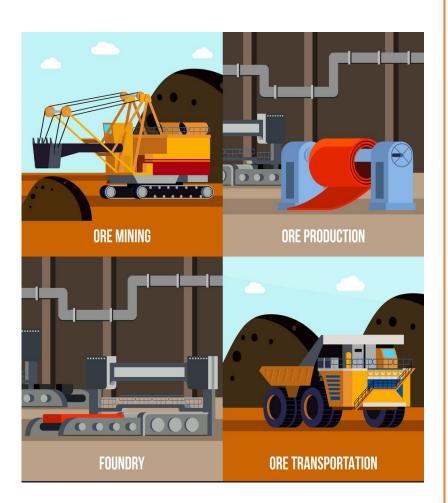


Co-funded by the European Union

**Central Baltic Programme** 

# LEF network Azerbaijan





Mining, heavy industry and metallurgy in Azerbaijan

01/01/2023



# LEF network Azerbaijan

This market research has been made as a part of the LEF network Azerbaijan project.

The project LEF network Azerbaijan's vision is to increase innovations and the bio-economy of the region by exporting services, know-how and goods to Azerbaijan. As a result, the Central Baltic region will be more sustainable and competitive. The joint challenge is that Azerbaijan is specific due to market needs, language and business culture. For enterprises market entry individually is much harder than cooperating jointly with other enterprises and business support organisations. As a result export to the 3rd countries will be achieved faster and more effectively.

**The project LEF network Azerbaijan aims to achieve 10 sales agreements** during 36 months between Finland's, Estonia's and Latvia's mature SMEs and Azerbaijan. Based on small research matching demand and offers are the ICT sector, Green technologies, education - higher and lifelong, interior design as a service and interior design products.

Project period: 01.03.2023. - 28.02.2026.

## **Project partners:**

- Latvian Chamber of Commerce and Industry (Latvia)
- Estonian Chamber of Commerce and Industry (Estonia)
- Satakunta University of Applied Science (Finland)
- Caspian Energy Club (Azerbaijan)

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This market research does not present any official EU opinion.



# CONTENT

- 1. Mining industry of Azerbaijan
- 2. Metallurgy in Azerbaijan
- 3. Key statistics: mining, heavy industry and metallurgy in Azerbaijan
- 4. Metallurgy industry
- 5. Azerbaijan International Mining Company (AIMC)



# 1. Mining industry of Azerbaijan

The main natural resources of the Republic of Azerbaijan are natural gas, oil, non-ferrous metals, bauxite and iron ore. Ore and non-metallic minerals are mainly concentrated in the Lesser and Greater Caucasus Mountains, and foothill fuels are concentrated in the South Caspian Basin. In 2010, a number of minerals and metals were mined in Azerbaijan, and significant production and export activities were carried out in the oil sector.

Although the country is a crude oil producer, since 1991 it has focused on developing marine resources. In 2010, the main projects were the Shah Deniz gas-condensate field and the "Azeri-Chirag-Guneshli" offshore oil platform.

In 2013, 33.7 billion manat worth of products and services were produced in the industry, 74 percent of the total output was in the mining industry. In the same year, 66.2% of all investments in fixed assets in industry came from mining.

In 2014, copper ore production increased by 135%. Lime production is estimated to have increased by 88%. Crude steel and cement production increased by 29% and 24% respectively. The production of aluminium oxide, caustic soda and sulphuric acid was discontinued. Iron ore production fell by 35%. Gypsum production decreased by 33%; bentonite - by 17%; and iodine - by 11%.

<ol><li>The number of acting industrial enterprises, unit</li></ol>						
Göstəricilər	2019	2020	2021	2022	Indicators	
Bütün sənaye	3169	3389	3689	4095	All industry	
Mədənçıxarma sənayesi	331	337	351	367	Mining and quarrying	
Xam neft və təbii qaz hasilatı	31	32	33	35	Extraction of crude petroleum and natural gas	
Metal filizlərinin hasilatı	6	8	8	8	Mining of metal ores	
Mədənçıxarma sənayesinin digər sahələri Mədənçıxarma sənayesi	164	164	175	181	Other mining and quarrying	
sahəsinə xidmətlərin göstərilməsi	130	133	135	143	Mining support service activities	
Emal sənayesi	2330	2515	2777	3130	Manufacturing	



#### Metals

Anglo Asian Mining PLC started gold mining in Azerbaijan in 2009. Gold was mined in the gold and copper mines of Gadabay. In total, the company produced 1.9 Mt of gold in 2010. In the same year, Anglo Asian Mining PLC received a license for gold mining in Azerbaijan. 2500 tons of silver, 1.5 Mt of copper and 400 tons of gold were mined in these gold deposits. Thanks to this production volume, the government managed to increase gold production until 2014. In 2016, Anglo Asian Mining PLC reported total production of 65,394 ounces of gold, 1,941 tons of copper and 165,131 ounces of silver.

#### **Fuel minerals**

Gas fuel sources in Azerbaijan are represented by oil, gas, shale, peat, etc. The oil industry plays an important role in the local economy. Oil is obtained both from the mainland and from offshore fields.

Azerbaijan also produces hydrocarbon gases. Over the past 35-50 years, many gas condensate deposits have been found and developed.

In 2010, Azerbaijan increased natural gas production by 2.1% compared to 2009. By 2011, the country's natural gas reserves reached about 30 trillion cubic feet.

In 2010, the oil produced in the Azeri-Chirag-Guneshli field was processed at two oil refineries in Baku: Baku Heydar Aliyev Oil Refinery and New Oil Refinery. Together, these refineries produce 400 billion barrels of oil per day.

# 2. Metallurgy in Azerbaijan

#### **Black metallurgy**

Ferrous metallurgy includes cast iron, steel production, iron ore mining and processing. Baku, Sumgait and Dashkasan cities are centers of large metallurgy. Since 1954, an ore processing plant has been operating in Dashkasan along with iron ore deposits. Pipes and rolling products are produced at Sumgayit pipe-rolling plant. The volume of rolling and pipe production is 700 thousand tons per year and 540 thousand tons per year respectively.

There are also metal processing plants in Absheron. Bentonite and clay produced in Dash Salahli village of Gazakh region is used to make steel molds.

Baku Steel Company, the largest metallurgical enterprise in Azerbaijan, was opened in 2001 on the initiative of Heydar Aliyev. Baku Steel Company is engaged in the production of construction fittings, square stumps and others. The annual volume of steel production is 1 million tons.

In January-September 2023, products worth 800.8 million manats were produced in the fields of metallurgical industry and production of finished metal products. According to the State Statistics Committee, the production of finished metal products increased by 13.7 percent, and the production of metallurgical products decreased by 28.9 percent.

Also during this period, the production of other metal products in the field of production of finished metal products increased by 47.2 percent, the production of steel castings in the metallurgical industry decreased by 19.5 percent, and the production of fittings-by 29.8 percent.

		2021			2022		
Göstəricilər	Mikro <i>Micro</i>	Kiçik Small	Orta və iri Medium and large	Mikro Micro	Kiçik Small	Orta və iri Medium and large	Indicators
Bütün sənaye	2042	783	864	2324	890	881	All industry
Mədənçıxarma sənayesi	191	78	82	203	81	83	Mining and quarrying
Xam neft və təbii qaz hasilatı	7	5	21	8	5	22	Extraction of crude petroleum and natural gas
Metal filizlərinin hasilatı	1	3	4	3	2	3	Mining of metal ores
Mədənçıxarma sənayesinin digər sahələri Mədən qıyarma sənayəsi	125	42	8	132	42	7	Other mining and quarrying
Mədənçıxarma sənayesi sahəsinə xidmətlərin göstərilməsi Emal sənayesi	58 1693	28 600		60 1934	32 699		Mining support service activities Manufacturing

#### 7. Grouping of acting industrial enterprises by kind of activity and size, unit

#### Non-ferrous metallurgy

Azerbaijan has electricity, alunite, molybdenum, and mercury resources for the development of non-ferrous metallurgy. Non-ferrous metallurgy is most developed in the regions of Ganja - Gazakh and Nakhchivan, as well as on the Absheron peninsula. Non-ferrous metal processing centers: Sumgayit and Ganja aluminium plants, Baku and Ganja non-ferrous metal processing plants, Sumgayit aluminium rolling plant. Sumgayit plant was the first non-ferrous metallurgy enterprise in Azerbaijan SSR. Its construction began in 1949, and the first metal was obtained in 1955.

Ganja plant produces sulphuric acid, aluminium oxide, potassium fertilizer thanks to the Zayam deposit in Dashkesan. Aluminum is also produced in Sumgayit. There is a plant in Baku that produces metal products.

According to Ilham Aliyev's decree No. 1047 dated February 11, 2015, AzerGold Closed Joint Stock Company operates. The aim of the company is research, exploration, production, processing and sale of precious and non-ferrous metals and application of new technologies in this area.



In 2017, the volume of precious metals exported by this company amounted to  $\$  77340 million.

		2.2 Main indicators of mining of me					
Göstəricilər	2019	2020	2021	2022	Indicators		
Fəaliyyət göstərən müəssisələrin					Number of acting enterprises,		
sayı	6	8	8	8	unit		
dövlət	3	3	4	3	state		
qeyri-dövlət	3	5	4	5	non-state		
Sənaye fəaliyyəti ilə məşğul					The number of individual		
olmaq üçün qeydə alınmış fərdi					entrepreneur registered for		
sahibkarların sayı, nəfər	41	79	76	74	acting in industry, person		
Sənaye məhsulunun (işlərin,							
xidmətlərin) dəyəri, müvafiq					Volume of industrial products		
illərin cari qiymətləri ilə, milyon					(works, services), at factual		
manat	314,1	391,1	387,5	361,4	prices, million manat		
Sənaye istehsalı indeksi, əvvəlki					Industrial production index		
ilə nisbətən, faizlə (sabit					relative to previous year, at		
qiymətlərlə)	108.3	94.9	94.9	96.2	percentage		
(lymonom)	100,5	,,,,	5 1,5	, <b>-</b>	percentage		
Ölkədə istehsal olunmuş sənaye					Share of field in total volume in		
məhsulunun ümumi dəyərində					industrial products produced in		
sahənin payı, faizlə	0,6	1,1	0,7	0.4	the country, at percentage		
suitelini puji, iulio	0,0	-,-	0,7	•,•	ine country, at per contage		
Ölkə sənayesinin qeyri-dövlət					Share of field non-state sector in		
sektorunda sahənin qeyri-dövlət					non-state sector of the country		
sektorunun payı, faizlə	0.4	0.7	0,4	0.2	industry, in percentage		
Əsas məhsul növlərinin natura	•,•	•,.	•,•	•,2	Manufacture of main types of		
ifadəsində istehsalı					products in natural value		
Qızıl, kiloqram	3711,5	3570.8	3351.1	3174.7	Gold, kilogram		
Gümüş, kiloqram	3819,7	4310,1	4857,7		Silver, kilogram		
Mis konsentratı, ton	2212,9	2717,5	2681.7		Copper concentrates, ton		



# 3. Key statistics: mining, heavy industry and metallurgy in Azerbaijan

Göstənicilər	2019	2020	2021	2022	Indicators
Bütün sənaye	100.0	100,0			All industry
Mədənçıxarma sənayesi	78,5	70,7	76,3		Mining and quarrying
Xam neft və təbii qaz hasilatı	73,9	63,8	71,6	81,0	Extraction of crude petroleum and natural gas
Metal filizlərinin hasilatı	0,4	0,7	0,4	0,2	Mining of metal ores
Mədənçıxarma sənayesinin digər sahələri	0,2	0,3	0,2	0,2	Other mining and quarrying
Mədənçıxarma sənayesi sahəsinə xidmətlərin göstərilməsi	4,0	5,9	4,1	2,4	Mining support service activities
Emal sənayesi	21,0	28,8	23,2	15,8	Manufacturing

11. The structure of non-state sector of industry by kinds of economic activity, in perscentage

17. Sənaye məhsullarının ən mühüm növlərinin natura ifadəsində istehsalı

17. Manufacture of the most important types of industrial products in kind						
Məhsulun adı	2019	2020	2021	2022 Products		
Neft hasilatı (qaz kondensatı daxil olmaqla), min ton o cümlədən əmtəəlik	37501,2 37452,3	34531,9 34465,0	34580,3 34513,3	Oil extraction, including gas 32646,4 condensate, thsd. tons 32569,6 of which commodity		
Qaz hasilatı, milyon kub metr o cümlədən əmtəəlik	35610,3 24514,3	37139,6 26487,3	43867,3 32578,3	46737,1 Gas extraction, mln. cubic meter 34955,5 of which commodity		
Qızıl, kq	3711,5	3570,8	3351,1	3174,7 Gold, kg		
Gümüş, kq	3819,7	4310,1	4857,7	7779,6 Silver, kg		
Mis konsentratı, ton	2212,9	2717,5	2681,7	2519,8 Copper concentrates, ton		
Bentonit, min ton	222,5	155,1	174,2	175,9 Bentonsite, thsd. tons		
Tikinti qumu, min ton	1088,3	1229,3	1822,3	1432,1 Masons sand, thsd. tons		
Çınqıl, qırmadaş, xırda çay daşı və çaxmaq daşı, min ton	1193,8	1808,7	3566,9	Gravel, peble, flint and crashed 3093,4 stonse, thsd. tons		
İnşaat üçün əhəng daşı, min ton	358,3	382,5	406,0	Calcareous building stonse, thsd. 347,6 tons		
Duz, ton	77115,9	76401,3	71495,3	77454,9 Salt, ton		
Gips və anhidrit, ton	314224,3	297594,4	417892,2	369908,0 Gypsum and anchedrite, ton		

### **Gold mining**

Gold mining started for the first time in Gadabay in 2009. Gold mining began in the fields Gosha in 2013, in Gadir in 2015 and in Ughur in 2017. Azer Gold CJSC started gold mining in Chovdar

field in 2016. In 2017, 6390.8 kg of gold was produced. This exceeded the production volume in 2016 by 3.4 times. In January-May 2018, gold production amounted to 2081.7 kg, which is 19.5% more than the indicators of the previous year. In 2017, Azerbaijan exported gold worth 139 million dollars. In the first quarter of 2018, exports amounted to 30 million dollars. British Anglo Asian Mining company produced 16,479 thousand ounces of gold in the first quarter of 2018, a 49% increase over the same quarter of 2017. In 2019, production was about 20 million dollars.

# 4. Metallurgy industry

## Metallurgical enterprises in Azerbaijan are the following:

- Sumgayit Aluminum Plant
- Ganja Aluminum Plant
- Baku Steel Casting
- Bakusteelcompany
- Sumgayit pipe-rolling plant
- AzerGold
- "Global Construction" CJSC
- "Atahan Demir Sanaye" CJSC
- Dashkasan Ore Refinery
- "Azerpipe"
- "Azergold"

## "Baku Steel Company"

The largest Metallurgy plants in the private sector in Azerbaijan are "Baku Steel Company" and "Baku Steel Casting" JSC. In 2007, annual production capacities of "Baku Steel Company" and "Baku Steel Casting" have been 286456 t and 70770 t respectively. Currently, 1722 and 450 employees work in these enterprises respectively.

The mentioned enterprises and the others generally use metal scraps as raw material.

The following enterprises manufacture various metallurgical products and mainly products from black metal in small production capacity. "Global Construction" LLC, "Atakhan Iron Industry" LLC – each of these enterprises produces up to 1000-2000 tons and has 40-80 employees. Besides, several companies ("Azad NM" LLC) with 10-100 tons of annual production capacity operate in Baku. The products manufactured mainly meet domestic demand and same portion of products are sent to neighboring countries (Iran, Russia, Turkey, etc). The raw material is provided by local resources.



#### "Azerpipe" JSC.

The construction of "Azerpipe" JSC began after World War II and the first steel pipe in Azerbaijan was manufactured on December 31, 1952. After the 1960s, two pipe-rolling units, 6 steel-melting Martin stoves were put into operation.

In Azerbaijan, Azeraluminum JSC, "Gandja Alumina production area" (PA), "Sumgait Aluminum" (PA), Dashkesen "Zeylik Alunite" (PA), and small enterprises with low capacity are engaged in aluminum production. "Gandja Alumina" (Pa) produces AL203 (alumina).

#### "Dashkesen Ore Refining" JSC

"Dashkesen Ore Refining" JSC has been operating since 1957. Initially, the extracted ore was refined in Rustavi, Georgia. After a long break, "Dashkesen Ore Refining" JSC has been leased to Great Britain's DET.AL.Limited Company on the basis of 25 year contract since 2006.

### Sumgait "Aluminum" Production area of "Azeraluminum" LLC

Sumgait "Aluminum" plant was the first and the largest plant of non-ferrous metallurgical began in 1949, the first non-ferrous ingot-primary aluminum was produced on April 8, 1955. Since April 2000, the plant is called Sumgait "Aluminum" production area of "Azeraluminum" LLC. Currently, there are four workshops producing primary aluminum in the enterprise.



Göstəricilər	2019	2020	2021	2022	Indicators
Bütün sənaye	9258,0	9065,3	7507,3	7172,1	All industry
xarici investisiyalar	4411,3	3845,6	3169,1	2891,3	foreign investments
daxili investisiyalar	4846,7	5219,7	4338,2	4280,8	domestic investments
Mədənçıxarma sənayesi	5670,5	5613,8	4817,1	4983,8	Mining and quarrying
xarici investisiyalar	3443,8	3684,6	3085,0	2833,6	foreign investments
daxili investisiyalar	2226,7	1929,2	1732,1	2150,2	domestic investments
					Extraction of crude petroleum
Xam neft və təbii qaz hasilatı	5640,1	5522,1	4727,4	4518,2	and natural gas
xarici investisiyalar	3443,8	3684,6	3081,5	2827,3	foreign investments
daxili investisiyalar	2196,3	1837,5	1645,9	1690,9	domestic investments
Metal filizlərinin hasilatı	10,0	50,1	46,2	41,9	Mining of metal ores
daxili investisiyalar	10,0	50,1	46,2	41,9	domestic investments
Mədənçıxarma sənayesinin					
digər sahələri	20,3	40,0	39,3	34,1	Other mining and quarrying
daxili investisiyalar	20,3	40,0	39,3	34,1	domestic investments
Mədənçıxarma sənayesi					
sahəsinə xidmətlərin					Mining support service
göstərilməsi	0,1	1,6	4,2	389,6	activities
xarici investisiyalar	-	-	3,5	6,3	foreign investments
daxili investisiyalar	0,1	1,6	0,7	383,3	domestic investments

18.Investments directed to main capital of industry (in acting factual prices), million manat

# 5. Azerbaijan International Mining Company (AIMC)



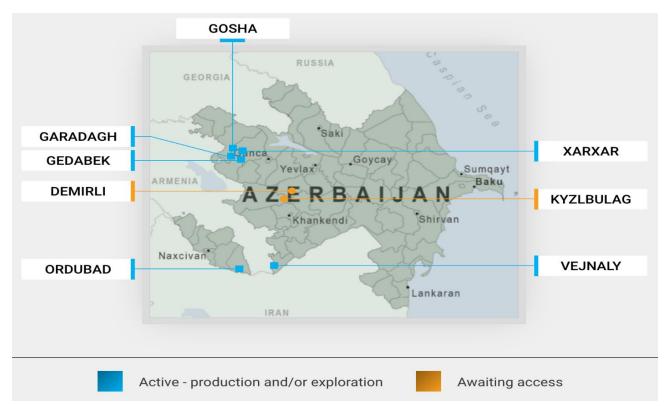
Azerbaijan International Mining Company (AIMC) is the biggest gold, copper, and silver production company in Azerbaijan, with eight operation contract areas covering over 2,400 square kilometers. AIMC is the first company to build an underground mine in Azerbaijan follow the discovery of metal ores by its inhouse exploration department. The company operates both open

pit and underground mines, and processes ores through five methods depending on ore type and grade to produce gold dore or copper concentrate. AIMC has many "firsts" in Azerbaijan relating to technical investigation of geology, extractive mining methods and mineral processing. Due to these activities, AIMC contributes significantly to the development and growth of the mineral sector of Azerbaijan.

Recent history of AIMC included the award of three new contract areas where the company has identified copper mineralisation. Given the experience of AIMC with the production of copper concentrate at its Gedabek projects and the copper project investment into <u>Libero</u> by the parent company, Anglo Asian Mining PLC, the company looks forward to developing its copper resources in Azerbaijan. Copper is an essential resource for future global development.

01/01/2023





### Gedabek

300 square kilometer contract area comprising an open pit and an underground gold, copper and silver mine. The area also hosts significant exploration potential and a number of known mineral occurrences that are being evaluated.



## GOSHA

300 square kilometer contract area with high-grade underground mine,50 kilometers north-west of Gedabek. The area hosts and underground gold mine and extensive exploration potential.

#### ORDUBAD

462 square kilometer contract area with exploration program underway.

# **KYZLBULAG & DEMIRLI**

Kyzlbulag is 300 square kilometer contract area and Demirli is a 76.8 square kilometer contract area both in the Karabakh region of Azerbaijan containing the Demirli deposit and exploration copper potential.



### VEJNALY

280 square kilometer contract area in the mineral-rich Zangilan district and hosts the Vejnaly underground gold mine.



### GARADAGH

343 square kilometer contract area hosting the Garadagh porphyry copper deposit and significant exploration potential.

#### XARXAR

466 square kilometer contract area hosting the Xar-xar copper deposit and exploration potential.

Azerbaijan International Mining Company Limited Representative Office in the Republic of Azerbaijan ("AIMC") is a gold and copper producer in Azerbaijan. AIMC was founded in 1998 in accordance with the Production Sharing Agreement (PSA) signed in 1997 between RV Investment Group Services and the Government of Azerbaijan Republic, to explore, develop, and produce at the prospective gold mining areas: Gedabek, Gosha, Ordubad Group (Piazbashi, Agyurt, Shakardara, Kiliyaki), Soutely, Kyzlbulag and Vejnali deposits. While the Company is already producing gold in the Gedabek Contract Area, the exploration goes on in the Gosha and Ordubad Contract Areas. On 5 July 2022, the Government of Azerbaijan approved amendments to the Production Sharing Agreement and the Company acquired three new contract areas with a combined area of 882 square kilometers, namely Garadagh, Xar-xar and Demirli. Two of the new concessions (Garadagh and Xar-xar) border the existing Gedabek and Gosha Contract Areas. The Demirli area borders the Kyzlbulag area, both of which are located in the Karabakh Economic Region of Azerbaijan, that is currently under Russian peacekeeper supervision. The company is awaiting access to these areas. The Gedabek Contract Area covers 300 sq.km contains the Gedabek and Gadir mines and the Gosha Contract Area, another 300 sq.km of property contains the Gosha mine. The 462 sq.km Ordubad Contract Area is located in the Nakhchivan region. The Contract Areas total 2,544 sq.km of portfolio of production and exploration assets in Azerbaijan. AIMC is a subsidiary of Anglo Asian Mining PLC and as an operator of the PSA was set up primarily to explore, develop and produce in prospective gold and copper deposits in Azerbaijan, which had been identified in the Soviet-era. After the PSA was signed, the Company has undertaken various development and exploration activities focused on proving up existing data, delineating new ore bodies, generating JORC compliant resources and reserve. The Management of the AIMC, which has a close working relationship with the Azerbaijani Government that enabled the rapid development of the Gedabek mine, aims to build a mid-tier gold and base metal production company.