

## THE MINERAL INDUSTRY OF

# AZERBAIJAN

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Azerbaijan, since Czarist-times, has been an oil and gas producer and has had a petroleum refining industry. Azerbaijan is also a producer of iron ore, alunite, alumina and aluminum, copper and molybdenum ore, lead and zinc ore, and industrial minerals including iodine and bromine, clays, gypsum, limestone, marble, decorative building stone, sand and gravel, and precious and semi-precious stones.

The country's most significant reserves in terms of value are its oil reserves; a number of foreign firms are involved in negotiations and projects to develop these reserves. Azerbaijan also has numerous other mineral resources, including such metals as alunite, arsenic, cobalt, copper, chromite, iron ore, lead and zinc, manganese, mercury, molybdenum, and tungsten; industrial minerals and nonmetallic minerals, such as barite, clays, refractory-grade dolomite, gypsum, kaolin, limestone, pyrite, salt, and zeolites; and semiprecious stones, including amethyst, andalusite, and garnet, as well as a range of building materials.

In 1995, gross domestic product (GDP) decreased by 17.2% and industrial production by 21.4% compared with 1994, continuing the decline which has lowered the GDP in 1995 by 62% compared with that of 1990. Especially hard hit have been the metals and chemical sectors as iron and steel output is only 4% of its 1990 level, nonferrous metals output 8%, and chemical and petrochemical output 20%. Fuel output fell the least which in 1995 was 61% of the 1990 level. Azerbaijan reached its 1995 production target for its main mineral product, crude oil, with output of 9,161,300 metric ton (t). Natural gas production reportedly was 6,643,900 cubic meters. Oil production, however, was 6.2% less and gas production 4.2% less compared with 1994.

Azerbaijan produced alumina from native alunite ore mined from open pits. It normally required about 6 t of alunite ore to produce 1 t of alumina, and alunite processing is very energy-intensive compared with processing bauxite. Alunite processing was started under the former Soviet system that made mineral production a priority irrespective of production costs. Nevertheless, the 450,000-metric-ton-per-year (t/yr) capacity Gyandzha refinery in Azerbaijan, originally built to process alunite, was expanded in the late 1970's to process imported bauxite rather than alunite. Presently, only one section at Gyandzha, with a capacity to produce 100,000 t/yr of alumina, processes alunite. The alumina from Gyandzha was shipped to the Sumgait aluminum smelter in Azerbaijan and to the Tajik aluminum smelter in Tajikistan. The United Kingdom's Trans World Metals, which is one of the major foreign firms involved in

the production and sales of Russian aluminum, was planning to acquire the Gyandzha alumina refinery. The refinery in 1995 reportedly produced only 27,000 t of alumina. Azerbaijan also has an aluminum smelter at Sumgait with capacity to produce about 60,000 t/yr of aluminum.

In 1994, Azerbaijan signed an agreement with representatives of a consortium of foreign oil companies to develop the Azeri, Chirag, and Gyuneshli offshore oilfields. Issues regarding the transport route for oil produced from these fields had been a major unresolved issue. The apparent solution reached was that first oil produced from these fields would be transported for export via two routes, one north through Russia to the Russian port of Novorossiysk and one via Georgia to the port of Supsa. An agreement was also reached in 1995 that an additional pipeline would be constructed that would run from Azerbaijan through Georgia to Turkey. In 1995 exports of petroleum products reportedly increased by 250,000 t compared with 1994 to 1.4 million metric tons (Mt), with most petroleum product exports going to Iran.

In 1995, Azerbaijan's state oil company, SOCAR, signed an agreement to develop the Karabakh oilfield in the Caspian Sea with Russia's LUKoil company, Italy's Agip S.P.A., and the United States Pennzoil Co. About 100 Mt of crude oil reportedly will be produced from Karabakh over a 30-year period.

It appears that solutions to a number of the country's oil transport problems have been reached; Azerbaijan is now poised to gain significant revenue through the development of its hydrocarbon resources. Development of Azerbaijan's other metallic and industrial mineral industries now will have to be scrutinized in terms of market economic factors.

### OTHER SOURCES OF INFORMATION

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TABLE 1  
AZERBAIJAN: STRUCTURE OF THE MINERAL INDUSTRY FOR 1995

(Metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity e/
Aluminum	Sumgait smelter	Sumgait	60,000.
Alumina	Gyandzha refinery	Gyandzha	450,000.
Alunite ore	Zaglik alunite mining directorate	Zaglik	600,000.
Cement	Karadag cement plant	Karadag	1,000,000 (total for both plants).
Do.	Tauz	Tauz	
Iodine and bromine	Baku, Karadag, Neftechala plants	Process oil well brines at plants in Baky, Karadag, and Neftechala	30,000 bromine, 100 iodine.
Iron ore, marketable	Dashkesan Mining Directorate	Dashkesan region	1,000,000.
Petroleum	million tons Produced at 40 deposits on land and 12 offshore deposits in Caspian Sea	Land deposits on Ashperon Peninsula, in the Nizhnekurin Valley and at the Muradkhanly and Zagly-Zegva deposits	12.
Natural gas	billion cubic meters do.	do.	10.

e/ Estimated.