

THE MINERAL INDUSTRY OF UZBEKISTAN

By Richard M. Levine

Uzbekistan was the third most populous state created from the former Soviet Union (FSU) and the fourth largest in land area. Well endowed with mineral wealth, it was among the world's largest producers of gold, which was a significant source of foreign currency earnings. Along with gold, Uzbekistan produced steel and a number of other nonferrous metals important to its economy, which included copper, lead, molybdenum, silver, tungsten, and zinc. Uzbekistan also produced such industrial minerals as feldspar and fluorspar and such mineral fuels as coal, natural gas, crude petroleum, and uranium.

Hydrocarbon deposits were estimated to be under more than 60% of the country's territory, with the majority of deposits containing natural gas. The country ranked among the 15 largest countries in the world in terms of gas reserves. Uzbekistan had become self-sufficient in mineral fuels. The country had adequate coal and natural gas production to supply domestic needs and, since achieving independence, had increased crude oil production to the level where it was no longer import dependent. Most of the country's natural gas output required processing because of its high sulfur content; the country had one of the FSU's largest gas-processing facilities at Muborak (formerly Mubarek). Lack of adequate pipeline routes hindered the exporting of gas and oil to world markets. Uzbekistan also had large uranium reserves and was a large uranium producer and exporter. The country ranked seventh in the world in uranium reserves and in 1998 was the world's fifth largest uranium producer (U.S. Energy Information Administration, March 2000, Uzbekistan—Country analysis briefs, accessed December 12, 2000, at URL <http://www.eia.doe.gov/emeu/cabs/uzbek.html>).

In 1999, Uzbekistan's gross domestic product (GDP) measured in constant prices increased by 4.4% in comparison with that of 1998, and industrial output increased by 6.1% (Interfax Statistical Report, 2000a,b). Given Uzbekistan's large gold production, as well as its self-sufficiency in mineral fuels, the mineral sector remained one of the chief contributors to the country's economic development. From January to March 1999, the fuel industry produced 16% of the value of industrial output; the nonferrous metallurgy sector, 8.4%; the chemical and petrochemical industry, 5.1%; the building materials sector, 3.8%; and the ferrous metallurgy sector, 0.6% (Ministry of Macroeconomic and Statistics of the Republic of Uzbekistan, 1999, p. 41).

The country was initially successful in attracting foreign investment to its gold mining sector with the creation of the Zeravshan-Newmont joint venture. This joint venture between the Newmont Mining Corp. of the United States and the State Committee for Geology and Mineral Resources and the Navoi Mining and Metallurgical Combinat, which were two Uzbekistan Government entities, recovered gold from tailings from the Muruntau open pit. It was the only one of several joint ventures negotiated with foreign companies for gold

development that was actually in operation. All other joint ventures for gold development were either delayed or canceled mainly owing to the decline in the world price for gold (Interfax Mining and Metals Report, 2000d).

In 1999, the Zarafshan-Newmont joint venture increased gold production by about 5 metric tons (t); it recovered 16.7 t of gold compared with 11.724 t in 1998 (Interfax Mining and Metals Report, 2000f). Most of Uzbekistan's gold production came from the Muruntau open pit, which was 330 meters (m) deep in 1999. Production from Muruntau increased in 1999 by 1.338 t compared with that of 1998. The maximum projected depth at the Muruntau open pit was 700 m (Interfax Mining and Metals Report, 2000b, c). More than 50 t of gold was estimated to have been produced from the Muruntau open pit in 1999.

In 1999, at the Almalyk mining and metallurgical complex, which was Uzbekistan's major nonferrous metals producing enterprise, copper production decreased by almost 20% in comparison with that of 1998. Almalyk produced 91% of its refined copper from its own mine output in comparison with 1998 when it produced 79% from its own mine production with the remainder produced from imported raw materials and that provided by tolling agreements (Interfax Mining and Metals Report, 2000e).

Zinc metal production at Almalyk decreased to 27,000 t in 1999 compared with 52,000 t in 1998. Owing to Almalyk's decreasing resource base, only 3,600 t of zinc metal was produced from Almalyk's own mine production in 1999. In March, Almalyk transferred control of the Altyn-Topkan lead-zinc mine to Tajikistan. The Altyn-Topkan deposit, which had been mined since 1954, was Almalyk's main source of lead and zinc; it was on the border just inside of Tajikistan. Almalyk still controlled the Uchkulach lead-zinc deposit, which had the potential for further development (Interfax Mining and Metals Report, 2000a, e).

About 90% of Almalyk's refined copper output and about 33% of its zinc metal output were exported. A major domestic consumer of copper was the Uztekhprom enterprise, which produced copper cable (Interfax Mining and Metals Report, 2000a).

In 1999, Almalyk increased silver production by 21.1% in comparison with that of 1998, producing 55 t of silver. Almalyk also produced 13 t of gold, which was a 0.9% increase in comparison with that of 1998 (Interfax Mining and Metals Report, 2000a).

Uzbekistan's mineral sectors were in need of investment. Their future would depend on assessing whether these mineral industries could produce profitably for domestic and/or foreign markets and the degree to which Uzbekistan could finance their development through domestic or foreign investment. The country had been seeking investment to develop the mineral industry sector, which included the Almalyk mining and metallurgical complex, the Bekabad steel mill, the Uzbek refractory and hard metals plant, and uranium deposits. The

country had succeeded in forming joint ventures with German firms to process and market kaolin from the Angren coal deposit (Mining Journal, 2000). On the basis of agreements with the Government of Uzbekistan, the Oxus Resources Corp. of the United Kingdom had been engaged for several years in exploration and conducting prefeasibility studies for developing the Khandiza nonferrous metals deposit, which was one of the country's largest; the Uzbek State Committee for Geology and Mineral Resources reported that it had proven reserves that contained 1.54 million metric tons of zinc, 180,000 t of copper, 700,000 t of lead, and 2,300 t of silver, as well as byproduct cadmium, gold, and selenium. In 1999, Oxus was conducting a feasibility study regarding developing an underground mine at the deposit with the capacity to produce 45,000 metric tons per year (t/yr) of zinc, 20,000 t/yr of lead, 6,000 t/yr of copper, and 40 t/yr of silver (Interfax Mining and Metals Report, 1999).

Having been the first FSU country to attract large-scale foreign investment into its mineral sector for gold production, Uzbekistan for a time enjoyed a reputation for providing a business climate amenable to large-scale mineral industry investment. Despite Uzbekistan's initial success, however, the country still has not undergone a number of aspects of economic reform that would facilitate investment in the mineral industry, which includes allowing investors full convertibility of the Soum into foreign currency. It appears that investment would proceed more rapidly if necessary financial frameworks were established to permit enterprises to operate more in accordance with market practices (Bisnis, April 2000, Uzbekistan—Economy and trade relations, accessed January 2, 2001, at URL <http://www.bisnis.doc.gov/bisnis/country/uzbekistan/htm>).

For more extensive coverage of the mineral industry of Uzbekistan, see the 1997 Minerals Yearbook, volume III, Mineral Industries of Europe and Central Eurasia.

References Cited

- Interfax Mining and Metals Report, 1999, Uzbekistan to sign concession with U.S. mining co: Interfax Mining and Metals Report, v. 8, issue 45, October 29–November 5, p. 18.
- 2000a, Almalyk combine aims to produce 75,000 tonnes of copper: Interfax Mining and Metals Report, v. 9, issue 16, April 14–20, p. 10.
- 2000b, Navoi plant stalls Muruntau makeover for two years: Interfax Mining and Metals Report, v. 9, issue 6, February 4–10, p. 4–5.
- 2000c, Navoi plant to start building gold complex in 2001: Interfax Mining and Metals Report, v. 9, issue 6, February 4–10, p. 3–4.
- 2000d, Newmont puts Uzbekistan gold project on hold: Interfax Mining and Metals Report, v. 9, issue 7, February 11–17, p. 6.
- 2000e, Uzbek copper producer cuts output in 1999: Interfax Mining and Metals Report, v. 9, issue 9, February 25–March 2, p. 11.
- 2000f, Zerafshan–Newmont raises gold production 5 tonnes in 1999: Interfax Mining and Metals Report, v. 9, issue 6, February 4–10, p. 5.
- Interfax Statistical Report, 2000a, GDP in CIS nations in 1992–1999: Interfax Statistical Report, v. 9, issue 18, April 28–May 4, p. 9–10.
- 2000b, Uzbekistan announces macroeconomic figures for 1999: Interfax Statistical Report, v. 9, issue 7, February 11–17, p. 16–17.
- Mining Journal, 2000, Uzbekistan: Mining Journal, Annual Review, London, CD-ROM.
- Ministry of Macroeconomic and Statistics of the Republic of Uzbekistan, 1999, The basic indicators of social and economic development of the Republic of Uzbekistan in January–March 1999: Toshkent, The State Department of Statistics, 183 p.

Major Sources of Information

American-Uzbekistan Chamber of Commerce (AUCC)
1800 Massachusetts Ave.
Suite 600

Washington, DC 20036
Telephone: (202) 828-4317
Fax: (202) 659-7010
American Chamber of Commerce in Uzbekistan
41 Buyuk Turon St.
4th Floor
Tashkent 700000
Uzbekistan
Telephone: 998-71-120-60-77
Fax: 998-71-120-70-77
E-mail: office@amcham.com.uz
Central Asian–American Enterprise Fund
U.S. office:
1634 Eye St., NW, Suite 200
Washington, DC 20006
Telephone: (202) 737-7000
Fax: (202) 737-7077
Email: US@caaef.com
Internet site: <http://www.caaef.com>
Uzbekistan office:
39-41 Zarkainar St.
Tashkent 724011
Uzbekistan
Telephone: 998-71-120-6134
Fax: 998-71-120-6138
Email: caaefas@sovam.com
Ministry of Foreign Economic Relations
75 Buyuk Ipak Yuli
Tashkent
Uzbekistan
Telephone: 998-71-689-256
State Committee on Science and Technology
29 Suleimanova St.
Tashkent
Uzbekistan
Telephone: 998-71-139-1247
Ministry of Macroeconomics and Statistics
45 a Uzbekiston Ave.
Tashkent
Uzbekistan
Telephone: 998-71-139-8216
State Committee on Geology and Mineral Resources
(Goskomgeologiya)
11 Shevchenko St.
Tashkent
Uzbekistan
Telephone: 998-71-133-7206
Department of Foreign Investments
5 Mustaqilik Sq.
Tashkent
Uzbekistan
Telephone: 998-71-139-82-92
Fax: 998-71-139-82-22
Foreign Investment Agency
16a Navoi St.
Tashkent
Uzbekistan
Telephone: 998-712-415-541 or 415-752
Fax: 998-71-120-1201 or 998-71-144-2603

TABLE 1
UZBEKISTAN: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Commodity	1995	1996	1997	1998	1999 e/
METALS					
Aluminium, secondary e/	2,500	2,500	2,700 3/	3,000	3,000
Bismuth e/	-- r/	-- r/	-- r/	-- r/	--
Copper:					
Mine output, Cu content	40,000	65,000 e/	73,000	71,000 r/	66,000
Metal: e/					
Blister	75,000	80,000	85,000	94,930 r/ 3/	77,000
Refined	95,000	100,000	115,696 3/	89,936 3/	72,000 3/
Gold e/ kilograms	65,000	72,000	82,000	80,000	85,000
Lead, mine output, Pb content	10,000 e/	10,000 e/	-- 4/	-- 4/	-- 4/
Molybdenum, mine output, Mo content e/	400	500	500	500	500
Silver, mine output e/ kilograms	65,000	70,000	70,000 r/	70,000 r/	75,000
Steel:					
Crude	352,000	444,000	371,400	344,000	344,400 3/
Rolled	320,000	390,000	350,000	322,000	324,600 3/
Tungsten, mine output, W content e/	300	300	250	200	200
Uranium, mine output, U content	1,800 r/	1,459 r/	1,764 r/	2,000 e/	2,000
Zinc:					
Mine output, Zn content	15,000	12,000	-- 4/	-- 4/	-- 4/
Metal, smelter	70,000	45,000 r/	53,000 r/	52,000 r/	27,000 3/
INDUSTRIAL MINERALS					
Cement	3,400,000	3,300,000	3,300,000	3,400,000	3,300,000 3/
Feldspar e/	70,000	70,000	70,000	70,000	70,000
Fluorspar e/	90,000	90,000	90,000	80,000	80,000
Graphite e/	60	60	60	60	60
Kaolin e/	5,500,000	5,500,000	5,500,000	5,500,000 r/	5,500,000
Mineral fertilizers	900,000	1,000,000	955,000 r/	976,000 r/	900,000 3/
Nitrogen, N content of ammonia e/	906,000	950,000	950,000	875,000	790,000
Sulfur, byproduct:					
Metallurgy	150,000	145,000	165,000 e/	170,000	175,000
Natural gas and petroleum	320,000	250,000	250,000 e/	275,000	280,000
Total	470,000	395,000	415,000 e/	445,000 r/	455,000
MINERAL FUELS AND RELATED MATERIALS					
Coal	3,100,000	2,844,000	3,130,000	2,950,000	3,000,000 3/
Natural gas billion cubic meters	49	49	51	55	56 3/
Petroleum and gas condensate	7,600,000	7,624,000	7,891,000	8,100,000	8,100,000 3/

e/ Estimated. r/ Revised. -- Zero.

1/ Table includes data available through December 2000.

2/ Estimated data are rounded to no more than three significant digits; may not add to totals shown.

3/ Reported figure.

4/ Mining operations appear to have sharply curtailed or to have ceased.

TABLE 2
 UZBEKISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 1999

(Metric tons unless otherwise specified)

Commodity	Major deposits/ facilities	Location	Annual capacity e/
Bismuth	Ustarasay deposit (depleted)	Chotqol (Chatkalo)-Kuraminskiy region	NA.
Coal	Central Asian Coal Association (mining)		
	Angren brown coal deposit	Angren region	6,000,000.
Do.	Baysunskoye deposit	Surkhondaryo (Sukhandar'inskaya) region	1,000,000.
Do.	Shargunskoye deposit	do.	NA.
Copper:			
Mine output, Cu content	Almalyk mining-metallurgical complex mining Kalmakyr, Sarycheku deposits	Toshkent Wiloyati (Tashkent oblast)	100,000.
Metal	Almalyk refinery	Olmalik (Almalyk) 1/	130,000.
Feldspar	Karichasayskoye and other deposits	Deposits in Samarqand (Samarkand) and Toshkent (Tashkent) regions and Karakalpakstan (Karakalpakskaya ASSR)	120,000.
Fertilizers	Ammophos production association	Omaliq (Almalyk)	NA.
Do.	Azot production association	Farghona (Fergana)	NA.
Do.	Elektrokhimprom production association	Chirchiq (Chirchik)	NA.
Do.	Kokand superphosphate plant	Quqon (Kokand)	NA.
Do.	Navoiyazot production association	Nawoiy (Navoi)	NA.
Do.	Samarkand chemicals plant	Samarqand (Samarkand)	NA.
Fluorspar	Agata-Chibargata, Aurakhmat, Kengutan, Kyzylbaur, Naugarzan, Nugisken deposits	East of Toshkent (Tashkent)	150,000.
Gold	Muruntau deposit	Nawoiy (Navoi) region	85.
Kaolin	Angren deposit	Angren region	8,000,000.
Lead-zinc:			
Mine output, metal content	Almalyk mining and metallurgical complex mining Altyn-Topkan and Uchkulach deposits	Uchkulach deposit in Toshkent Wiloyati (Tashkent oblast) Altyn-Topkan deposit in Kurama mountain range in Tajikistan (in March 1999 Altyn-Topkan transferred to control of Tajikistan)	40,000 (lead), 80,000 (zinc).
Zinc, metal	Almalyk refinery	Olmalik (Almalyk)	120,000.
Molybdenum, mine output, Mo content	Almalyk mining and metallurgical complex mining Kalmakyr, Sarycheku deposits	Toshkent Wiloyati (Tashkent oblast)	900.
Molybdenum, metal	Uzbek refractory and hard metals plant	Chirchiq (Chirchik)	NA.
Natural gas liquids	Mubarek gas processing plant	Mubarak (Mubarek)	1,200,000.
Petroleum and natural gas	More than 160 oil and gas deposits in country with 92 under exploitation: Major gas deposits: Gazli, Kandym, Kokdumalak, and Shurtan Major oil deposits: Kokdumalak and Mingbulak	Oil and gas deposits are concentrated in the Bukhoro-Khiwa (Bukhara-Khiva), Sukhondaryo (Sukhandarin'skaya), southwest Gissarskiy, and Ustyurtskiy regions and the Farghona (Fergana) Valley	50 billion cubic meters (natural gas), 9,000,000 (crude petroleum).
Petroleum refined, refinery products	Fergana oil refinery	Farghona (Fergana) region	8,800,000.
Do.	Bukhara oil refinery	Bukhoro (Bukhara)	2,500,000.
Do.	Altyaryk refinery (merged with Fergana refinery)	Oltiariq (Altyaryk)	NA.
Steel, crude	Bekabad steel mill	Bekabad	1,100,000.
Tungsten, mine output, W content	Koytash deposit Ingichka deposit Ugat deposit	Northeastern Uzbekistan Zirabulakskie Mountains northern Uzbekistan	1,200.
Tungsten, metal	Uzbek refractory and hard metals plant	Chirchiq (Chirchik)	NA.
Sulfur	Mubarek gas processing plant complex	Mubarek	2,000,000.
Uranium, U content	Navoi mining and metallurgical complex	Nawoiy (Navoi) region	3,000.

e/ Estimated. NA Not available.

1/ New names and spellings for locations are used whenever available; old names appear in parentheses.