

Article

Specific Features of the Development of the Mining Industry in Uzbekistan

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Abstract: This article examines the current state and specific features of the development of the mining industry in the Republic of Uzbekistan. The main aspects of the industry's modern transformation are analyzed, including institutional reforms, improvements in the regulatory framework, and partial privatization aimed at attracting domestic and foreign investors. Particular attention is paid to state regulation of subsoil use, transparency of geological data, and investment activity in the mining sector.

Keywords: Mining Industry, Non-Ferrous Metals, Subsoil, Licensing, Regulation, Extraction, Investors, Producers

1. Introduction

The mining industry of Uzbekistan is one of the most important and strategically significant sectors of the national economy. Uzbekistan ranks among the world's leading producers of gold (10th place globally) and uranium (5th place). In addition, the country extracts copper, silver, coal, phosphates, molybdenum, potassium, tungsten, lead, zinc, and other mineral resources [1].

Mining activities in Uzbekistan are primarily regulated by the Law on Subsoil, as well as other relevant legislative acts, including the Law on Licensing, Permitting and Notification Procedures and the Tax Code.

According to Article 10 of the Law on Subsoil, the state authorities responsible for implementing public policy in the field of subsoil use and protection include the Cabinet of Ministers of the Republic of Uzbekistan; the Ministry of Mining Industry and Geology; the Ministry of Energy; the Ministry of Ecology, Environmental Protection and Climate Change; the Inspectorate for Control in the Field of Mining Industry and Geology under the Ministry of Mining Industry and Geology; and the State Institution "Subsoil Use Center" under the Ministry of Mining Industry and Geology [2], [3].

2. Methods

The study employed a dialectical and systemic approach to the analysis of economic systems and relationships. Systemic and comparative analysis, statistical methods, and grouping techniques were also used to examine the development trends of the mining industry. A review of the literature on Uzbekistan's mining industry published by Uzbek scholars in 2025 indicates a strong focus on investment attraction, legal regulation,

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digitalization, and environmental safety. Particular attention is given to the role of key institutions, such as the Ministry of Mining Industry and Geology, as well as the analysis of international practices, the implementation of global standards, and the modernization of the sector.

The literature also includes studies on the historical contributions of Abu Rayhan al-Biruni and Avicenna to geology, as well as research related to the introduction of new standards and the development of the mining industry in the context of the global market. Notable works include studies by S.S. Khabibullaev and Sh.A. Umarov on modern production requirements (“Experience and Analysis of the Application of International Standards in Oil and Gas Geology of Uzbekistan”), analytical materials by the legal firm “GRATA International,” academic works by Academician Fayzulla Asadullaevich Usmanov, and the research by V.R. Rakhimov and S.R. Alimkhodjaev titled “Problems and Prospects for the Development of the Mining Industry and Higher Mining Education in Uzbekistan.”

3. Results

Significant changes in the regulatory framework were introduced with the adoption of the new, improved Law on Subsoil on October 31, 2024, which entered into force on February 2, 2025.

Information and data necessary for investors and entities interested in geological exploration and various types of mining activities are publicly available on the Open Data Portal (data.egov.uz).

First, the Subsoil Use Center ensures public access to key information in accordance with Article 26 of the Law on Subsoil [5], [6]. This includes data on the issuance of permits for subsoil use, as well as information on the transfer, re-registration, suspension, termination, and revocation of such permits. In addition, information is disclosed on measures taken to eliminate the consequences of subsoil use, including the form and amount of financial guarantees, their validity period, and the authority that issued the permit [7], [8].

Furthermore, the State Subsoil Fund, maintained by the Subsoil Use Center, serves as a centralized repository of geological data. It includes both utilized and unused subsoil plots, as well as technogenic mineral formations. Accounting is carried out in the form of the state subsoil cadastre, state monitoring, and statistical reporting in accordance with Article 20 of the Law on Subsoil. This fund is an integral part of the unified information system for subsoil use and protection across the entire territory of the country [9].

The “Subsoil Cadastre” database (<https://davreestr.uz/en>) consolidates geological, geophysical, geochemical, hydrogeological, and other relevant data on potential, active, and suspended mining sites. This registry includes geological data on both natural and artificial environments and is supplemented with information provided by holders of geological data in accordance with Article 22 of the Law on Subsoil [10].

In addition, pursuant to Clause 9 of Resolution No. 133 dated March 25, 2022, “On Measures to Further Improve the Procedure for Issuing Permits for the Right to Use Subsoil Plots,” standard terms for subsoil use are published on the official website of the Subsoil Use Center — the Uzbekistan Geoportal (www.geoportal-uz.org) [11].

Over the past 40 years, Uzbekistan has developed a powerful mining industry due to its rich uranium and gold deposits [12]. According to the National Statistics Committee, in January–September 2025 the volume of investments in fixed capital in the mining industry from all sources of financing reached 165.3 trillion UZS. As of November 2025, the largest share of these investments was directed to natural gas extraction, accounting for 10.7%.

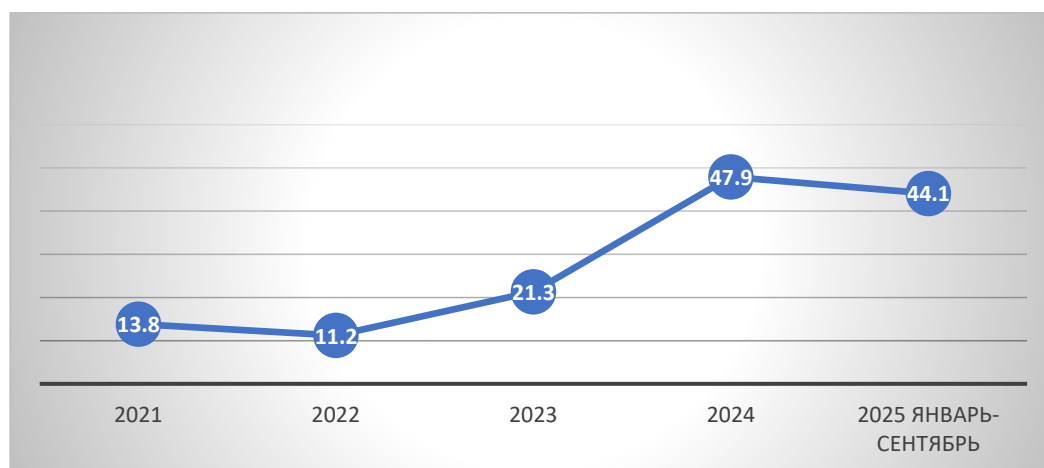


Figure 1. Dynamics of Mineral Extraction in the Mining Industry of Uzbekistan, 2021–2025 (January–September)

Figure 1 illustrates the growth trend in mineral extraction in Uzbekistan’s mining industry from 2021 to 2025. The decline observed in 2025 is due to the fact that the data cover only the period from January to September.

Most subsoil deposits are developed by two major state-owned mining companies or joint ventures established with their participation: JSC “Navoi Mining and Metallurgical Combine” (NMMC) and JSC “Almalyk Mining and Metallurgical Combine” (AMMC). In practice, priority in granting mining rights for large deposits of strategically important minerals such as gold, silver, copper, and uranium is given to these companies [13]

However, according to the annual report of the Ministry of Mining Industry and Geology of the Republic of Uzbekistan, major contributors to subsoil development by region and production volume include the following enterprises:

1. Navoi Region – JSC “Navoi Mining and Metallurgical Combine”

In 2023, the company produced goods worth 67 trillion UZS (USD 5.5 billion), with a growth rate of 103.8%. Production included 91.3 tons of gold and 20.4 tons of silver. In 2024, output reached 93.9 trillion UZS, representing a 105.3% increase compared to 2023. In the first half of 2025, production amounted to 60.8 trillion UZS (101.4% compared to the first half of 2024) [14]. By the first nine months of 2025, output increased to 95.3 trillion UZS, or 102% compared to the same period in 2024, indicating steady fulfillment of production plans and growth during 2023–2025.

2. State Enterprise “Navoiuran”

The enterprise develops 18 uranium deposits through three uranium-mining divisions located in the Navoi, Samarkand, and Bukhara regions of Uzbekistan.

The implementation of planned indicators will allow the company to achieve the strategic objectives set out in Resolution No. PP-319 “On Measures to Increase Uranium Extraction and Processing Volumes and Transform the State Enterprise ‘Navoiuran’ for 2022–2030,” including the formation of a medium-term raw material base by 2030, subject to the expected confirmation of reserves.

- Increase verified reserves from 15 to approximately 80 thousand tonnes;
- An additional approximately 20 thousand tonnes of unverified (inferred) reserves are projected;
- Total reserves are expected to reach approximately 100 thousand tonnes by 2030;
- If only 50% of the planned volumes are confirmed, verified reserves will remain at the level of 15–20 thousand tonnes [15].

Natural uranium mining in the Central Kyzylkum region was first initiated in 1958 at the Uchkuduk deposit. Initially, mineral extraction was carried out using conventional

underground mining methods. With the further development of the industry, mining activities expanded to hydrogenic sandstone deposits, where the in-situ leaching (ISL) method was subsequently introduced.

The diversity of hydrogeological conditions and the material composition of ores at the developed deposits enabled the company to accumulate extensive experience in selecting effective uranium leaching methods and technologies. This factor has allowed the enterprise to maintain a stable position in the global uranium mining and export industry for many years.

3. Tashkent Region — JSC “Almalyk Mining and Metallurgical Combine”

In the Tashkent region, JSC “Almalyk Mining and Metallurgical Combine” (AMMC) produced industrial output worth 31 trillion UZS (USD 2.5 billion). Production volumes included 148.5 thousand tonnes of copper, 17.4 tonnes of associated gold, 161 thousand tonnes of silver, and 785 tonnes of molybdenum.

Since 2019, AMMC has been cooperating with one of the world’s most authoritative consulting companies in the mining sector, SRK Consulting (United Kingdom). Within this cooperation, three major projects have been implemented: “Almalyk,” “Angren,” and “Khandiza.” The “Almalyk” project involved a reassessment of reserves at the “Oliy Ziyoy” deposit.

AMMC is actively expanding copper and gold production, aiming to increase output to 500 thousand tonnes of copper and 50 tonnes of gold by 2031. A significant increase is planned by 2026 (25 tonnes of gold and 300 thousand tonnes of copper), primarily due to the development of the “Yoshlik-I” deposit. In 2023, gold production amounted to 16.9 tonnes, while in 2024 Uzbekistan as a whole produced 129 tonnes of gold, ranking 10th globally.

One of the largest investment projects in Uzbekistan’s non-ferrous metallurgy sector —the construction of Copper Concentrator Plant No. 3 (CCP-3) at the Almalyk Mining and Metallurgical Combine as part of the development of the “Yoshlik-I” deposit —has entered its final stage. Commissioning and start-up operations for the phased launch of the main production lines began in June 2025.

CCP-3 is the largest processing facility of its kind in the history of Uzbekistan. Its designed capacity is 60 million tonnes of copper ore per year, making it one of the largest concentration complexes in the post-Soviet region. Production processes are managed from a centralized control center, while key equipment has been supplied by global technology leaders Metso Outotec (Finland) and Thyssenkrupp (Germany).

4. Tashkent Region — JSC “Uzmetkombinat”

JSC “Uzmetkombinat” produced industrial output totaling 9.2 trillion UZS. The company manufactured 780.1 thousand tonnes of rolled steel products, including 248 thousand tonnes of steel grinding balls.

During this period, extensive work was carried out to convert mineral reserves in accordance with the international JORC Code classification and to increase reserve volumes at the relevant deposits. Since 2019, more than 470 new boreholes have been drilled, totaling over 206 thousand linear meters, and approximately 114 thousand samples have been collected. Analytical results were obtained from independent international laboratories meeting modern global standards. The drilling program demonstrated positive and successful outcomes.

In 2023–2025, JSC “Uzmetkombinat” has focused on modernization and capacity expansion, planning to commission a new casting and rolling complex by 2025. At the same time, in 2023 the company experienced a decline in net profit compared to 2022, while in 2024 profits decreased due to exchange rate differences. Nevertheless, sales of rolled steel products showed growth, although revenue levels fluctuated during this period.

Table 1. Rolled Metal Production at JSC “Uzmetkombinat” in 2023–2025

Year	Production, million tonnes	Net profit, million USD
2023	1,100	51,4
2024	0,8	47,0
2025 (January–September)	1, 150	767

Additionally, the establishment of technoparks is planned in the Tashkent and Samarkand regions, which are rich in molybdenum and tungsten resources.

At the same time, the government continues to actively attract foreign investors by utilizing innovative technologies and best international practices. Successful cooperation with major Western and Asian companies, including B2Gold, Orano Mining, JOGMEC, MTA, and Calik Holding, serves as a notable example.

Japan’s ITOCHU Corporation has acquired a minority stake in Nurlikum Mining, a joint venture between the state-owned Navoiuran and France’s Orano, engaged in uranium mining at the South Djengeldi deposit in Uzbekistan. The deposit is expected to remain in production for more than ten years, with peak annual output reaching up to 700 tonnes of uranium. Further geological exploration is planned, which is expected to double the company’s resource base.

Moreover, the newly adopted Law on Environmental Expertise, dated August 25, 2025, expands and clarifies regulatory provisions by introducing additional mechanisms for environmental impact assessment (EIA) and strategic environmental assessment (SEA). The law integrates environmental expertise, EIA, and SEA procedures in line with international standards and best practices. It also strengthens public participation mechanisms, including mandatory public hearings, publication of hearing results, and consideration of public opinion in decision-making processes.

Over recent years, the government has actively promoted foreign investment in the mining sector, and it is expected that the presence of foreign mining companies in Uzbekistan’s market will increase significantly in the coming years.

In 2023, the forecasted production of rolled metal amounted to 1,100 thousand tonnes. However, the actual net profit reached 513.66 billion UZS (against a planned level of 1,185 billion UZS), which was lower than the 2022 result.

In 2024, production of long steel products decreased to 0.8 million tonnes, while profit amounted to USD 47 million and net profit reached USD 56.4 million, accompanied by an increase in long steel production (+4.9%). Despite the decline in production volumes in 2024 compared to 2023, the company achieved stronger financial performance.

In 2025, rolled metal production reached 1.15 million tonnes, and net profit increased significantly to USD 767 million (Table 1).

A key strategic priority for the company is the commissioning of a new Casting and Rolling Complex Construction Project aimed at expanding production capacity. The project parameters include a capacity of 1.04 million tonnes of flat rolled products, a total investment cost of EUR 774 million, and a primary objective of import substitution. Foreign partners involved in the project include Danieli (Italy) and Renaissance Eurasia (Türkiye). The project is expected to create 1,295 new jobs, with an implementation period spanning 2020–2025.

The second major initiative involves the construction of a new grinding ball production workshop with a capacity of 500 thousand tonnes per year. The project focuses on the production of grinding balls with diameters ranging from 40 to 120 mm, corresponding to hardness groups III, IV, and V. The implementation period for this project is 2023–2025.

Based on a Presidential Decree of the Republic of Uzbekistan, it was determined that starting from 2020, the implementation of international standards for reporting geological exploration results and approving mineral reserves in accordance with the JORC Code, as well as the training and certification of qualified specialists of the Ministry of Mining Industry and Geology of the Republic of Uzbekistan, would be carried out with the involvement of leading foreign consulting companies and experts.

In this regard, pursuant to Article 6 of the Law on Subsoil, subsoil and all mineral resources naturally occurring within it are the state property of the Republic of Uzbekistan, subject to rational use and state protection. This ownership right applies regardless of any rights or property interests of individuals in land or water. Subsoil plots may not be sold, donated, inherited, contributed as capital, pledged, or otherwise alienated. The state retains the exclusive right to issue permits for the use of subsoil plots, including for geological exploration, geological studies, and mineral extraction.

In 2024, Uzbekistan's largest mining enterprises and the Ministry of Mining Industry and Geology attracted USD 3.58 billion in investments, according to official press releases. The largest share of investments was attracted by the Almalyk Mining and Metallurgical Combine (AMMC), which implemented projects totaling more than USD 1.94 billion. Within this framework, the expansion of the "Yoshlik" mine continues, with total planned investments amounting to USD 4.6 billion.

The Navoi Mining and Metallurgical Combine (NMMC) ranked second in terms of investment volume, attracting USD 789.6 million. In 2024, the enterprise increased production volumes by 39% compared to 2023. The Ministry of Mining Industry and Geology attracted USD 572 million in investments, while Uzmetkombinat attracted USD 151 million and Navoiuran attracted USD 126 million (Figure 2).

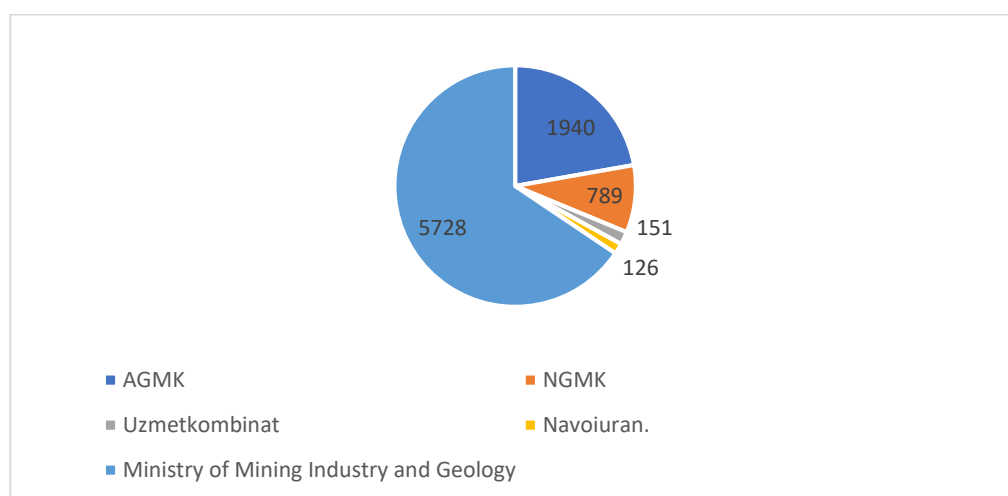


Figure 2. Investments Attracted by Major Mining Enterprises and the Ministry of Mining Industry and Geology of Uzbekistan

Overall, during the year the ministry and leading enterprises of the sector implemented 60 investment projects and attracted USD 3.2 billion in foreign direct investment.

4. Conclusion

In conclusion, Uzbekistan plans to implement 76 rare metal mining and processing projects worth \$2.6 billion over the next three years. There are also plans to create technology parks in the Tashkent and Samarkand regions, which are rich in molybdenum and tungsten.

At the same time, the government continues to attract foreign investors using innovative technologies and best practices, exemplified by successful cooperation with major Western and Asian companies, including B2Gold, Orano Mining, JOGMEC, MTA, and Calik Holding. Japan's ITOCHU has acquired a minority stake in Nurlikum Mining, a joint venture between state-owned Navoiyuran and France's Orano, to mine uranium at the South Dzhengeldy deposit in Uzbekistan. The deposit is expected to produce uranium for over ten years, with peak annual production of up to 700 tonnes. Geological exploration is also planned, which will double the company's resource base. Moreover, the new Law "On Environmental Expertise," adopted on August 25, 2025, expands and clarifies provisions, introducing additional mechanisms for environmental impact assessment and strategic environmental assessment. It includes not only environmental expertise but also environmental impact assessment (EIA) and strategic environmental assessment (SEA), which is consistent with international standards and practices.

It expands public participation mechanisms, including mandatory public hearings, publication of hearing results, and consideration of citizen input in decision-making. Over the past few years, the government has been actively attracting foreign investment in the mining sector, and the presence of foreign mining companies in the Uzbek market is expected to increase significantly in the coming years.

REFERENCES

- [1] Tax Code of the Republic of Uzbekistan, Dec. 30, 2019.
- [2] Law of the Republic of Uzbekistan "On Subsoil" No. ZRU-987, Oct. 31, 2024.
- [3] Law of the Republic of Uzbekistan "On Environmental Expertise, Environmental Impact Assessment and Strategic Environmental Assessment" No. ZRU-1036, Feb. 24, 2025.
- [4] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On Measures to Further Improve the Procedure for Issuing Permits for the Right to Use Subsoil Plots" No. 133, Mar. 25, 2022.
- [5] S. S. Khabibullaev and Sh. A. Umarov, "Experience and Analysis of the Application of International Standards in Oil and Gas Geology of Uzbekistan," Available at: <https://cyberleninka.ru>
- [6] GRATA International, "GILS Analysis of the Mining Industry Strategy: Uzbekistan," Available at: <https://gratanet.com>
- [7] R. R. Rustamzhanov and B. Z. Rakhimov, "Global Trends and Prospects for the Use of Talc Raw Materials," Available at: <https://uzresearch1.uz>
- [8] J. A. Smith and A. B. Jones, *Mining Law and Environmental Protection: A Global Perspective*. London, UK: Routledge, 2023.
- [9] D. M. Jacobs and L. C. Green, *Environmental Law and Policy in Mining*. New York, NY, USA: Springer, 2022.
- [10] A. K. Prentice and M. L. Wilson, "A study of the impact of mining operations on the environment," *Environmental Science & Technology*, vol. 42, no. 3, pp. 120–132, 2021.
- [11] K. R. Taylor, *Sustainable Development in Mining: Challenges and Opportunities*. Oxford, UK: Oxford University Press, 2021.
- [12] A. L. Young, "Reforming mining regulations for environmental protection: Global strategies and local considerations," *Journal of Environmental Policy*, vol. 30, no. 2, pp. 55–67, 2023.
- [13] International Finance Corporation, *Mining and Sustainable Development: Financial Instruments for Responsible Investment*. Washington, DC, USA: IFC, 2022.
- [14] World Bank, *Environmental Management in the Mining Sector: A Guide to Best Practices*. Washington, DC, USA: World Bank, 2020.
- [15] United Nations Environment Programme, *Global Trends in Mining and Environmental Sustainability*. Paris, France: UNEP, 2021.