

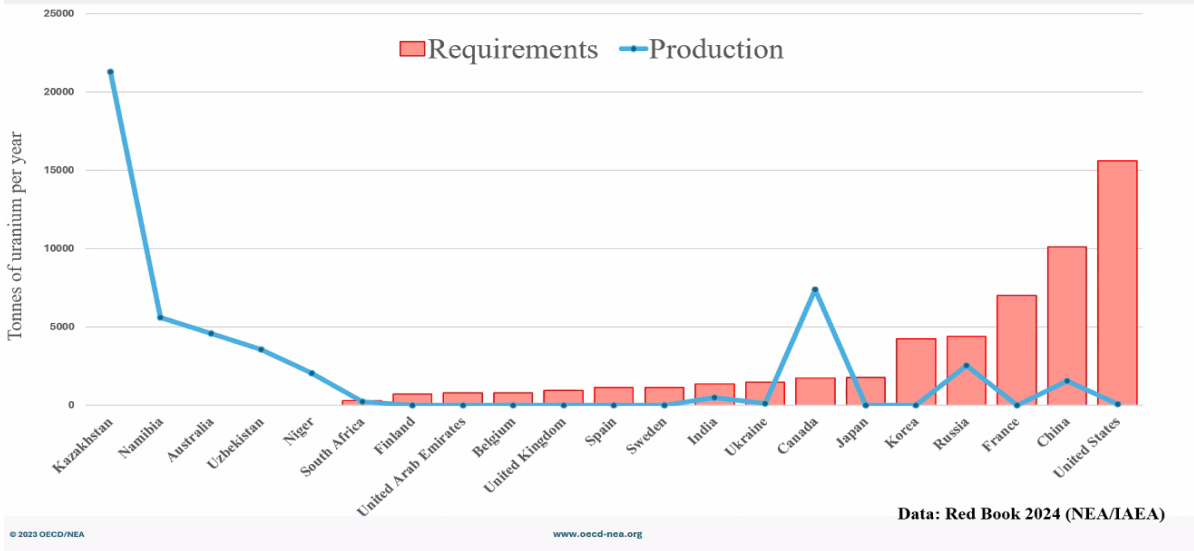
Kazakhstan Capacity Building in European Financing Application

1. France-Kazakhstan, a growing mutual contribution in Nuclear & Mines

Kazakhstan is the worldwide leader (43%) of uranium production, with 21,000 tonnes produced annually, followed by Uzbekistan, Mongolia, Kyrgyzstan. France sources 50% of its uranium from Kazakhstan and Uzbekistan. These Central Asia uranium-producing countries do not yet operate **nuclear power plants but all have projects** at various stages of development.

France is one of the few countries worldwide that masters the **entire nuclear value chain**. EDF operates 58 reactors in France and 15 in UK. More than 120 reactors worldwide operate using French technology. The **French nuclear industry** comprises 32,000 companies ie 220,000 people, providing services to 300 reactors worldwide, including reactors built using non-French technologies and is ready to contribute to the **first nuclear power station in Kazakhstan**, even based in non-French technologies.

Uranium producing and consuming countries



Uranium extraction in Kazakhstan KATCO JV Orano & Kazatomprom. Extraction is conducted using a complex in-situ leaching system developed over ten years of R&D in collaboration with **Mines Paris**. KATCO technicians contributed to this development, and a team of specialists has been trained to support Orano’s future operations in Uzbekistan and Mongolia. The creation of a Trans-Caspian corridor has been developed the transport of processed ore (yellow cake).



Critical raw materials, are widely present in Kazakhstan. Europe already contributes through the Critical Raw Materials Act by the financing of the development at the Sarytogan mine. In order to differentiate the French involvement in Kazakhstan, the European Commission (Euractiv) recommends to “Expand local value creation, Improve the efficiency, Integrate new technologies in geology automation & reducing carbon footprint, Facilitate the movement of talent and participate to European R&D networks”

Special attention must be paid to CSR and its standards (especially IRMA, considered the most Responsible framework). In addition, priority should be given to local job creation and technology transfer. Orano’s example in uranium should be extended to other mines, **building then a team of experts covering the national as well as the regional (in Central Asia) mines .**

Mine Sarytogan EU Critical Raw Act



Description of project

The Sarytogan Graphite Project, promoted by the company Sarytogan Graphite Limited, located in Central Kazakhstan’s Karaganda Region and focuses on the extraction of the strategic raw material graphite. Graphite is crucial for advanced battery applications in electric vehicles, renewable energy storage systems. The mined ore is planned to be processed on-site, while parts of the production to be further processed to high purified graphite suitable for advanced battery application.

Benefit for EU and Kazakhstan

The project presents an opportunity for both Kazakhstan and the European Union (EU) by tapping into one of the largest known high grade graphite deposit globally. The project plans to extract 50,000 tonnes of natural graphite per year. In connection with the planned processing plant 18,500 tonnes of battery grade graphite (purity 99,99%) annually the project is well-placed to contribute significantly the security of the EU’s supply of battery grade graphite. Additionally, the project strengthens various stages of Kazakhstan’s raw materials value chain, promoting both economic and social benefits, thus supporting regional development.



Project Name:
Sarytogan Graphite Project

Project Type:
Extraction

Strategic Raw Material:
Graphite (Battery grade)

Project Promoter:
Sarytogan Graphite Limited

Project Country:
Kazakhstan

Estimated Starting Date of Production:
2027

UNFC Classification:
E2, F2.1, G2

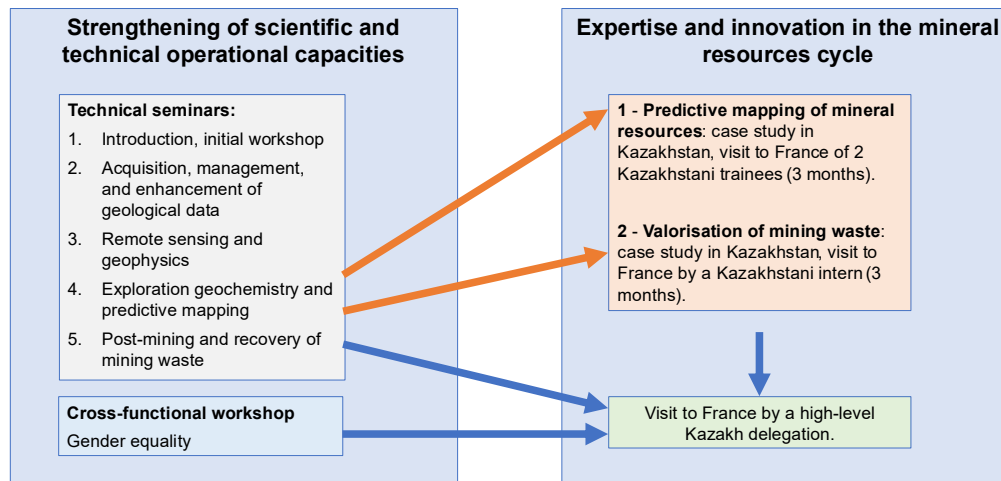
Website of the Strategic Project:
<https://www.sarytogangraphite.com>



June 2024, Visit of N. Nourjigitov at BRGM premises

Long-standing ties, strengthened over the last 3 years

- **2022-2024:** a project of 10 on-the-job training sessions in the field of water resources, which helped to identify all the desired areas of cooperation.
- **2024:** Experts visit to the National Geological Service (NGS) to identify areas of shared interest for collaboration in the fields of geology and mineral resources
- **Balkhash watershed multi-disciplinary project supported by the French Agency for Development:** the BRGM coordinates a consortium of French public and private establishments which will shed light on the understanding of the situation and draw up prospective scenarios based on water uses.
- **December 2025:** Kick-off in Astana of the project to develop the partnership in the field of mineral resources between BRGM and NGS



2. ACP Energies proposal to further develop Kazakhstan-France mutual contribution

BRGM will soon start the Partnership program on minerals resources with NGS. ACP Energies suggests to extend BRGM scope with the inclusion of NGS Capacity Building in European Financing Application. The European file for “Strategic Project” grant should cover, following topics : Geology, Mineral Reserve Estimate, Mining Methods Statement, Project Design & Operation, Waste valorization, Environmental & Social Impact, IRMA implementation process

The Case study for “Predictive mapping” of mineral resources” in France (3 months of 2 Kazakhstani trainees) should be then extended accordingly. The ACP Energies experts will be ready to give their support as necessary for these elements. This should be done within a limited number of working days, partially spent in BRGM Orléans.

This extended project will prepare NGS to apply to the European “Strategic Project” grant for the Case study site and later for other sites local or regional. This will facilitate “the movement of talent and the participation of Kazakhstani experts to the European R&D network”.

JL Gaillard, VP www.acp-energies.org with his pride for actual/future contribution. Rueil 1/3/2026