Badrakh Energy LLC

Zuuvch Ovoo Project,
uranium mining for sustainable future

badrakhenergy

Key figures

Registered resources in sand:
87,660 tU
(Zuuvch-Ovoo, Dulaan Uul/Umnut)

U grade estimate:
230 ppm

Nominal production capacity:
2,500 tU/year

Lifetime:
more than
30 years

Total investment:
1.6 bn USD
over the lifetime of a project

Direct benefits (tax, dividends and royalties) over the life of the project:
4-5 bn USD
with a market price range from 70$ to 80$/lbs

Contribution to regional development projects:
1 million USD/year

Jobs estimate:
1,600 direct and indirect

Zuuvch Ovoo,
the most advanced uranium project in Mongolia



1997
Beginning of the exploration activities by COGEGOBI (Orano Mining subsidiary)

2006
Discovery of the Dulaan Uul deposit.

2010
Discovery of the Zuuvch-Ovoo deposit

2013
- Resources classification of the Zuuvch-Ovoo deposit
- Signature of Shareholder Agreement of AREVA Mines LLC

2015
Appproval of the Zuuvch-Ovoo Project Feasibility Study

2016
AREVA Mines LLC granted 3 mining licenses

2017
Mon-Atom takes 34% share of capital

2018
- AREVA Mines LLC becomes Badrakh Energy LLC
- Zuuvch-Ovoo pilot test site constructed

2021-2023
Operations of the Zuuvch-Ovoo pilot to prove feasibility

2022-2024
Investment agreement negotiations

2024
Update of the Feasibility Study

2025-2026
Signature of the Investment Agreement and Update of the Detailed Environmental Impact Assessment

+3-4 years
Construction of facilities and infrastructure

DURING
+ Approx. 30 years: Mine Operations

AFTER
+ Approx. 10 years: Remediation & Redevelopment long-term environmental monitoring

Uranium, an essential resource to fight climate change

Nuclear energy - a source of low - carbon electricity

With the population of the world growing, the switch to electric cars and the ongoing economic development of emerging countries, **by 2050, the world will need twice as much electricity** as today. At the same time, to avoid irreversible climate change, the world needs to cut CO_2 emissions by half.

Decarbonization of electricity production, a major source of CO_2 emissions via the burning of fossil fuels (coal and gas), is needed to drastically reduce green house gas emissions,

Nuclear power, for which uranium is the raw material, is a reliable source of carbon-free energy, alongside renewables.

Climate change

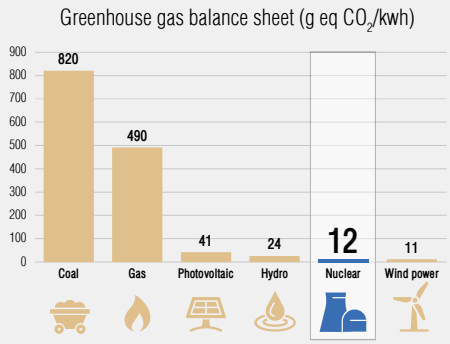
The conclusion of the 6th IPCC report published in 2021 is alarmist: global warming is on the march, in the world, irreversibly and extremely rapidly. **The temperature of our planet is expected to rise by 1.5°C by 2030, ten years earlier than the previous forecast.**

The global average temperature has warmed by 0.86°C over the past 100 years but Mongolia's average temperature has increased by 2.25°C over the past 80 years.

Natural and climatic disasters, such as forest fires, have doubled over the past 20 years in the country.

Owing to its geographical location and climatic factors, Mongolia is one of the most impacted countries by climate change.

Nuclear ranks among low carbon energies, with emissions comparable to wind power



Source: IPCC literature review 2015

100 gram of Uranium produce as much energy as 1 ton of oil or 1.5 ton of coal*

Promising perspectives for nuclear production

At the COP28 (Climate Change Conference of the Parties) 22 countries including Mongolia signed a declaration supporting **tripling nuclear energy capacity by 2050 compared to 2020.**

The world nuclear fleet is growing:

- **445 nuclear reactors in operation** (10% of world electricity) and **54 nuclear reactors under construction.**
- **Some 30 countries are considering, planning, or starting nuclear power programmes** with development of new technologies such as SMRs (Small Modular Reactors).
- **Global demand could reach up to 100,000 t/year** by 2040 according to Red Book 2020, up 67% from 60,000 t/year today.

China is investing significantly in nuclear power to fulfil its carbon neutrality plan by 2060. It could become the leading market for uranium in the coming decades: at the start of 2021, 16 of the 54 reactors under construction globally were in China.

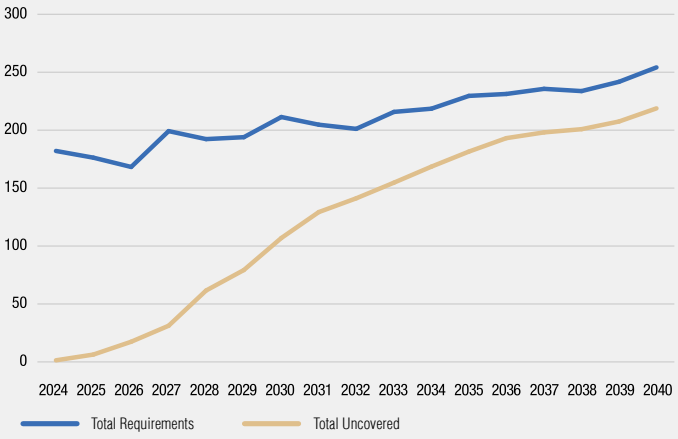
** Source: SFEN - French Society for Nuclear Energy*

Uranium as an Opportunity for Mongolia

- A shortage of uranium to meet the new market demand will become a reality starting 2030. 2030 is the window to enter into the market for a new producer on long term and sustainable contracts.
- **More than 30 uranium mining projects** are under development worldwide in Australia, Canada, Mongolia, Niger, Namibia, USA, Mauritania, Melawi, Uzbekistan to benefit from the market opportunities.
- **Bringing the Zuuvch Ovoo project to the market around 2030 will secure Mongolia a sustainable place on this market with 2 - 4% of world production.**

Uncovered Uranium requirements volume estimate, 2024- 2040

(million pounds U308)



Source UxC

DID YOU KNOW?

According to international regulations (IAEA), countries which have uranium mines are **under no obligation to deal with the spent fuel.** The used fuel resulting from the work of nuclear power plant belongs to the nuclear electricity companies and is under their full responsibility. It is illegal to ship it back to the country where it is mined.

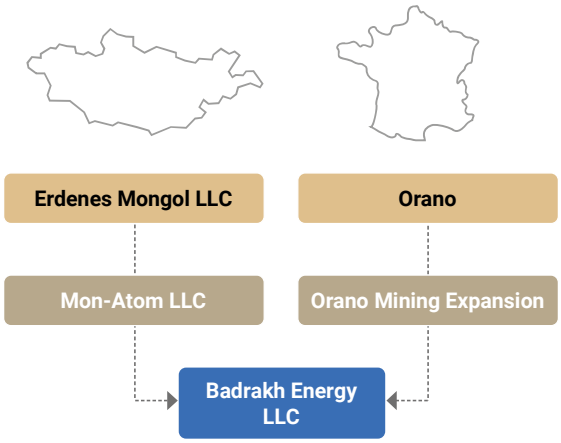
A joint
Mongolian - French project

The Zuuvch Ovoo project is being developed by Badrakh Energy LLC, a joint venture between two state-owned companies committed to the development of this world-class uranium deposit and of the uranium mining industry in Mongolia.

Badrakh Energy LLC is a responsible company and adheres to best-practice standards, with an excellent record on the environment, health and safety as well as community integration and dialogue.

According to the updated shareholders' agreement dated January 2026, the shareholders of Badrakh Energy LLC are:

- Orano with a participating interest of 90%.
- Mon-Atom LLC, on behalf of the Government of Mongolia, with a participating interest of 10%.



Mon-Atom LLC was established by the Mongolian Government resolution no. 45 in 2009 as a 100-percent state-owned limited liability company with the primary function of participating alone or jointly with other legal entities in the geological exploration and mining of uranium and other types of radioactive minerals and implementing the state representation according to the relevant legislation.

Mon-Atom LLC is currently representing the state according to the relevant law in the radioactive mineral geological exploration and mining projects with the French Republic, Czech Republic, People's Republic of China and the Russian Federation.

Orano Mining - among the top 3 uranium mining companies

Orano Mining's mission is to reliably supply natural uranium to its customers, who produce carbon-free electricity. By doing so, Orano Mining contributes to the effort against global warming.

Orano brings its expertise and know-how to Mongolia, working alongside Mongolian experts and professionals:

- **70 years of experience** in uranium mining across the globe.
- **In-situ recovery (ISR) mining technology expert,** operating one of the largest ISR uranium mines in the world in Kazakhstan.
- **Long-term partnerships** in Canada and Kazakhstan
- **Project development** in Mongolia, Uzbekistan and Canada.

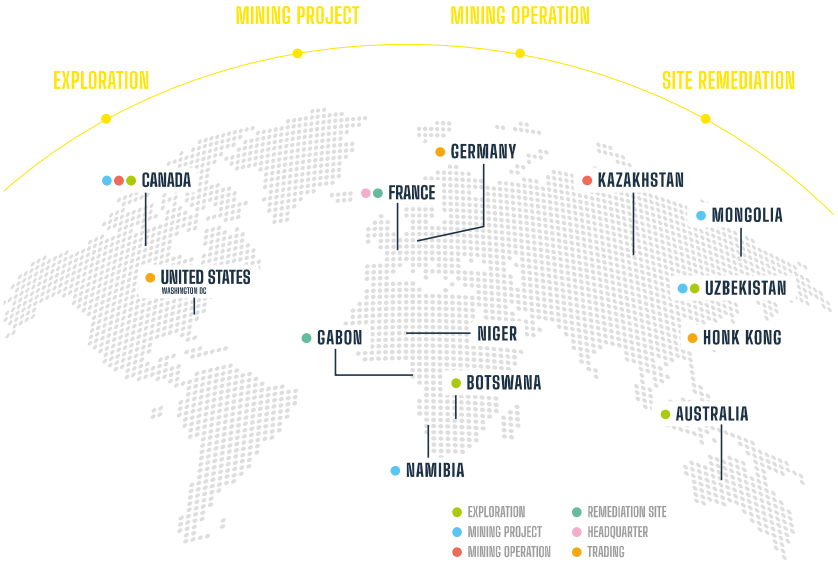
Orano Mining - committed to responsible mining

Since 2011, Orano has been a member of the **International Council of Mining and Metals,** an international association aiming to improve extractive companies' operating practices.

As part of its responsible commitments' roadmap 2030, Orano Mining is committed to:

- **Reducing the CO2-equivalent carbon emissions** of its activities in operation and support electricity decarbonization in the countries where it operates.
- Maintaining **a high level of local recruitment** and the local purchase rate.
- Maintaining **ISO 14001 and 18000 certification** of all its operational sites and certifying its development projects.
- **Developing the skills** of its employees and local people through partnerships with schools.
- **Involving representatives of the public and the authorities in the mining project** from the start of its activity and maintaining a dialogue and consultation throughout the project via specifically set up mechanisms.
- **Listening to local populations,** defining priorities with them in terms of societal programs while favoring projects linked to improving local access to water, energy, health, and education and overall local economic development.

ORANO'S MINING SITES



TRANSPARENCY - ONE OF ORANO MINING'S FUNDAMENTAL VALUES

Orano has supported the Extractive Industries Transparency Initiative (EITI) since its creation in 2003. Today, Orano publishes its earnings and its contracts on its website in accordance with the EITI standard whenever authorized by the countries concerned.

Investment Agreement
for mutual benefit

The purpose of an Investment Agreement is to set up a stable economic and operational environment that will allow the project to be developed in accordance with the legislation, and to be respectful of the environment and for the mutual benefit of Mongolia and the investor Orano Mining.

Signature of the Investment Agreement for Zuuvch Ovoo project, January 17, 2025

Reciprocally advantageous Investment Agreement

The Zuuvch Ovoo project is strategic for both Mongolia and France:

A solid and long-term partnership between our two nations

The best industrial standards in the mining sector including environment protection

Economic benefits for Mongolia well **beyond existing benchmarks**

- Majority of direct benefits* (> 51%) go to the State of Mongolia without any financial contribution from the State
- Initial investment (500 million USD) entirely financed by Orano Mining as the Investor

** direct benefits = taxes, royalties, dividends*

Stable legal and tax environment to secure long-term prosperity of the project and jobs

The Zuuvch Ovoo project will enable Mongolia to **diversify its mining industry,** become a new uranium producing and exporting country and Orano to get access to uranium resources from a **new geographical location.**

French President Emmanuel Macron on a State visit to Mongolia, May 21, 2023

Investment Agreement addressing the Mongolia's expectations

A new type of Investment Agreement developed in close coordination with Mongolia.

Secure and stable level of revenue for Mongolia from the beginning of the project:

- No investor loan to be reimbursed by the project

Protected from financial and industrial risk

- Secured and stable royalties are prioritized over unpredictable and fluctuating dividends

Local jobs and expertise development

- More than 90% of employees are Mongolian nationals.

INVESTMENT AGREEMENT DISCUSSIONS TIMELINE

February 2023
Submission of the Investment Agreement project to the Mongolian Government

June 2023
Mongolian inter-ministerial working group established to jointly prepare a final investment agreement project to be presented to the Mongolian Parliament.

June/August 2023
Visits of the representatives of the working group to the Zuuvch Ovoo pilot and Orano's site in Kazakhstan

October 2023
Signature of the Protocol of Agreement on October 12, in Paris

October 2023 - December 2024
Detailed discussions to prepare the Investment Agreement for submission to the Parliament

January 2025
Validation of the Investment Agreement by the Parliament

Signature of the Investment Agreement (17.01.2025)

ISR, a non-destructive mining technology for Mongolia

The Zuuvch-Ovoo deposit meets the conditions necessary to be exploited by ISR technology, the most popular method for low-grade uranium deposits.

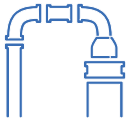
The In-Situ Recovery (ISR) method is a mining process used by many countries around the world (Australia, USA, Russia, Kazakhstan, China, Uzbekistan...) to recover minerals such as copper, lithium, potash etc. More than 60% of the world's uranium is mined using ISR.

It is the most environmentally respectful method of mining low-grade sedimentary uranium deposits, with no digging, shafts, pits, dust emissions, or heavy traffic.

ORANO'S EXPERTISE

Orano Mining, operator of one of the biggest uranium ISR mines in the world via its Kazakhstan JV KATCO, is developing its ISR techniques:

- **Real time digital production control:** the Orano Mining subsidiary in Kazakhstan uses software to monitor ISR production in real time.
- **Dynamic 3D modelling** software is integrated into the processes of planning and production optimization. The software is also used to predict the environmental impact before and after mining.



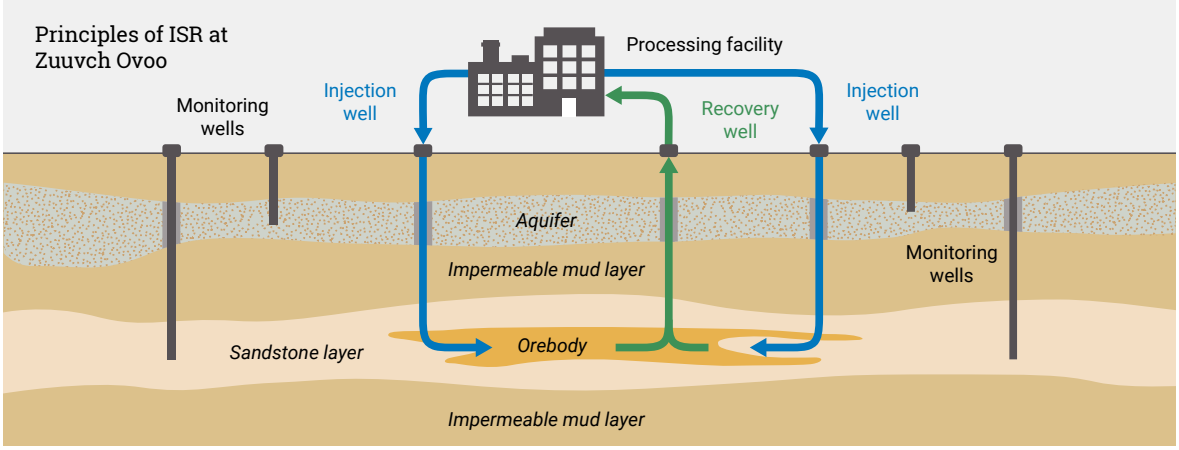
HOW DOES ISR WORK

ISR technology requires a geological configuration with a deposit contained between two impermeable clay layers. It consists of injecting a leaching solution (1% sulfuric acid and 99% orebody groundwater) into the orebody to dissolve the uranium.

The 1% sulfuric acid is transformed into sulfate and uranium located among sand granules dissolved, without moving rocks. The solution with uranium is then pumped back up to the surface through production wells and sent to the processing plant.

At the plant, uranium is extracted from the solution and purified to produce "yellow cake". The uranium-free solution is then reinjected again into the orebody. The in-situ mining is a loop process where groundwater is recirculated.

The "yellow cake" powder is then calcinated (equivalent process to a smelter) to obtain a final and standard product, Uranium Oxide (U_3O_8), directly usable by the nuclear industry to produce nuclear fuel.



Conditions for ISR mining

Suitable geological conditions for In-Situ Recovery (ISR) mining mean that:

- the geological formation containing the natural uranium, mainly sandstone layers, must be permeable enough to allow the leaching solution to circulate throughout the mineral layer,
- at the same time this formation should be isolated from underneath and above aquifers by impermeable clay layers,
- there is no communication between acquifers.

Before undertaking a mining project, Orano and Badrakh energy geologists carried out **lengthy hydrogeological studies.** Using geological maps and taking samples of underground and surface water for analysis, hydrogeologists built a detailed picture of how water flows underground.

Controlling water quality at Zuuvch Ovoo pilot

URANIUM TRANSFORMATION AT THE PLANT

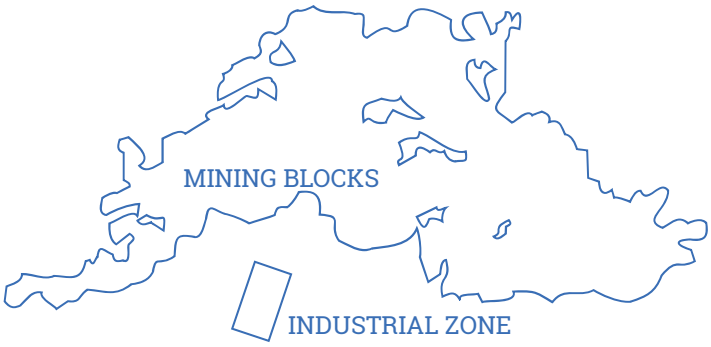
1. The uranium bearing solution comes from the well-field and goes through sorption-desorption process where the uranium is fixed to the ion-exchange resin.
2. The yellow-coloured solution named eluate is obtained after the resins have been washed with a solvent.
3. The eluate goes via a precipitation process, it is purified and dried to obtain a yellow cake powder (natural uranium concentrate).
4. Yellow cake is calcinated to increase the uranium concentration and remove excess moisture and impurities. The final product, black-coloured uranium oxide U3O8 containing 80% uranium is a standard product sold on the market and shipped to customers, nuclear electrical utilities worldwide.

Throughout this transformation process, uranium remains a natural product. For uranium to become nuclear fuel it still needs to go through several stages including concentration and enrichment in specialized facilities.

1. *Uranium bearing solution*
2. *Eluate*
3. *Yellow Cake*
4. *U3O8 (calcinated product)*

Mining site, a limited footprint with compact industrial area

Zuuvch Ovoo mining site, production cell and the pilot plant



Wellfield

The deposit is exploited through a network of pipes and a distribution system to circulate the leaching solution and uranium-bearing solution.

Production cells

The wells are arranged in hexagonal cells (6 injection wells and 1 production well per cell) which are in turn grouped into mining blocks of 10 - 20 cells to simultaneously leach a mineralized zone with production capacity of 350 tU.

Production cells have limited impact on the landscape.

View of a well few months after drilling, Kazakhstan

Distribution System

Piping bearing the leaching and uranium bearing solutions can be placed on the ground and underground to avoid any freezing.

Dedicated distribution units control the pressure and the quantity of the solution circulating in the pipes. One unit can control 60 wells.

Well-house – internal view

Industrial zone

The uranium is processed at the compact industrial area (400 meters by 350 meters).

Processing plant

The processing plant is where the natural uranium is extracted from the uranium-bearing solution arriving via the pipeline from the field. The uranium is purified and calcinated to obtain an uranium oxide (U3O8), a standard product for the industry.

The plant will run on a 24/7 basis.

Tortkuduk processing plant, KATCO site, Kazakhstan

Laboratory

The Zuuvch-Ovoo laboratory will be able to conduct analyses of samples of uranium solution from the wellfield and plant as well as analyses of water, air, and soil for environmental monitoring. It will operate under the international certification standard **ISO 17025.**

- 1,000 analyses per day

KATCO's ISO 17025-certified laboratory

Acid Plant and Co-generation

Acidified solution (1%) is used for leaching the uranium underground. To ensure the security of supply of this critical reagent, it will be produced on site.

Thanks to **the eco-design approach,** the plant will generate the heat needed to provide 5MW to energize site operations.

Acid production unit, SOMAÏR, Niger

Product storage

All Badrakh Energy production will be stored at the site in the controlled area, which is fenced, with video surveillance and security guards, before being exported.

Natural uranium emits low levels of radiation, which can be blocked by simple barriers like the drums themselves.

Due to its very low radioactivity, the packaging for natural uranium requires standard ISO containers, designed primarily to prevent physical damage.

Pilot production storage, Zuuvch Ovoo, Badrakh Energy, Mongolia

Caring about environment

Preservation of the environment is an ongoing commitment of Orano Mining and its subsidiaries. The company's actions seek to strengthen risk prevention and preserve the environment. Orano Mining is committed to have its sites in operation certified ISO 14001 (Environment) and ISO 45000 (Safety).

ISR - a non-destructive technology with minimal environmental footprint

- No open pit, waste dump or tailings
- No mine dewatering
- Landscape preserved – with minimal impact
- Less energy and water consumption than a conventional mining technology
- Coexistence with herders activities in the mining area – no fence
- Surface water preserved – no mining dewatering
- Reduced heavy traffic and minimal use of heavy equipments – minimal noise, dust and diesel emission
- No impact on human and animal health proved after 25 years of experience in Mongolia

The way the Zuuvch-Ovoo teams will work to preserve the environment is defined in the **Detailed Environmental Impact Assessment (DEIA)** being conducted in 2023 and 2025, and validated in 2026. The company is committed to implementing these recommendations and to fulfilling the various Mongol regulations.

Environmental monitoring

Environmental monitoring is maintained and reinforced from construction to operation, and an environment management system is used at the mine in line with Mongolian regulations

Partnership with national laboratories

Badrakh Energy is working with several national laboratories, including the Mongolian Nuclear Research Laboratory and the Geological Center for Research and Analysis to perform analyses of soil chemical structure, groundwater and surface water and to monitor the background radiation level in the environment, comparing it with the permissible level under the relevant standard

ISR and water

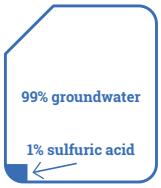
ISR consumes less (2 to 5 times less) water than conventional mining

There is no **mine dewatering** and haul roads watering requirements in an ISR mine:

- The water consumption of the Zuuvch Ovoo mine will be approximately 550,000 m3 per year.
- This translates to 220 m3/tU, which is at least 5 times less than a typical conventional uranium mine.

ISR process involves injection of water with some sulfuric acid

The solution injected underground is "moderately acidified" with a concentration of **less than 1% of acid per 1 liter of solution.**



Once injected, the acidified water dissolves uranium. The acid is transformed into sulfates (a natural element) and the underground water Ph decreases.

More than 99% of the acidity in the mineralized acquifer is neutralized over several years thanks to natural interactions between water and rock taking place underground. This has been proven by observations made on ISR sites, internationally, and - in Mongolia - by the monitoring of the Umnut pilot test.

ISR has no impact on herders wells

The impact of the activity will be limited to the deep mineralized layer that is mined, and which is not connected to the water reservoir used by herders like water reservoir of Bayanshiree and Quarternary which are close to surface. The herders get their water from a shallow aquifer (usually less than 15 m deep) while the acidified water is injected only in the deep orebody that contains uranium (more than 150 m deep).

The shallow aquifer is not hydraulically connected to the uranium orebody thanks to many layers of clay located between the shallow acquifer and the orebody. Existing herder's wells will remain available as before the start of the mine.

Close environmental monitoring

The circulation of the leaching solution is under permanent monitoring by piezometers installed throughout the Zuuvch-Ovoo mining area and surrounding area.

PARTICIPATIVE WATER MONITORING

Since 2013, Badrakh Energy has organized a participative environmental monitoring program with local citizens (representatives of the authorities and local communities, independent experts and schoolchildren) within the framework of the pilot.

The water samples are extracted from six places across the territory of Argalant, Bayanbogd and Zuunbayan bags and sent to be analyzed in the Geological Center for Research and Analysis and Nuclear Research Centre Laboratory, chosen by local people. Radioactivity measurements are also made in the field. Results that shown no impact from the ISR pilot on water of herder wells and other aquifers were peresented and reported to the stakeholders.

Participative monitoring at the Zuuvch Ovoo site

ISR and waste

The quantity of waste produced by the ISR mine is low

There is no physical extraction and processing of solid uranium ore in an ISR mine.

The Zuuvch Ovoo project will generate approximately 250 tonnes of very low-level waste (pipes, filters, laboratory material, PPE) per year, corresponding to approximately ten 20-foot containers.

The ISR mine doesn't produce any tailings. For the same uranium grade and production, a traditional mine would generate 10 millions tonnes of tailings per year.

According to **international standards,** very low-level waste is suitable for disposal in **near surface landfills,** therefore:

- During lifetime of mine operation, waste will be managed in an engineering landfill with a 5,000 m3 capacity.
- At the end of the mine, a larger (40,000 m3) waste management facility will be constructed on site to dispose of conventional waste resulting from the decommissioning of the site

Industrial storage of very low-level waste. ANDRA (National Agency for Managment of Radioactive Waste). France

Conventional (industrial & domestic) waste

Badrakh Energy applies the waste management hierarchy: **prevent, reuse, recycle, disposal,** including to the domestic waste produced on site.

Badrakh Energy teams are working to define a solution for recycling of industrial and domestic waste for the Zuuvch Ovoo mine. The recycling of the domestic waste of the mine can be a business opportunity for the region.

ISR and energy

ISR is more energy efficient compared to conventional mining

Energy consumption and carbon emissions are at least 3 times lower in an ISR mine compared to a conventional open pit mine:

- For the same uranium production rate, pumps (ISR) consume less than shovels and dumpertrucks (open-pit)
- There is no grinding and crushing of ore in an ISR mine.

Addressing Energy Challenges

Mongolia is striving to upgrade and modernize its energy supply facilities following recent urban and industrial development.

While designing the future Zuuvch Ovoo industrial site, Orano and Badrakh energy teams address these challenges with an ambition of building a **100% low-carbon energy mine.**

The site will need 15 - 17 MW to operate. The target of Badrakh Energy is to have the site meeting its own energy needs thanks to co-generation (heat produced by the acid plant should provide around 5 MW) and green energy sources. Contacts have been taken with specialized energy companies in the region (ie Sainshand Wind farm).

ISR and animal health

ISR has no consequence for the livestock health

All inspections organized by the Government of Mongolia and studies by international organizations between 2013 and 2023, have demonstrated that there is no impact from uranium exploration and pilot test operations on the health of livestock or people.

The veterinary studies demonstrated **the absence of any particular animal health issues in the vicinity of the Zuuvch-Ovoo pilot area.**

For example, Dornogovi arimag ranks 11th among 21 aimags for animal health according to the studies conducted by Joint Cooperative of Veterinary Clinics.

VETERINARY STUDY

The Mongolian Veterinary Institute conducted a study on cattle health in Dornogobi region between April and June 2023.

The study covered 3 different areas of Dornogobi including the one administrative unit that hosts the Zuuvch Ovoo pilot. The three areas with different levels of mining activities showed no specific difference in terms cattle health.

The cattle diseases identified were mainly caused by:

- impact of excessive use of pasture leading to malnutrition: across the aimag pastureland capacity exceeded by 1.3-3.4 times
- changing climate conditions leading to the scarcity of water

The experts also concluded the need to promote modern cattle caring methods with local herders

INDEPENDANT ENVIRONMENTAL MONITORING BY MONGOLIAN ACADEMY OF SCIENCE

The Academy of Science was mandated by the Government of Mongolia, to determine the impact on the environment and health of the in-situ recovery activities during and after the Zuuvch Ovoo pilot operations.

After the comprehensive study conducted on site in July, 2021, with samplings, the scientists reached the conclusion that:

- The soil and the ecosystem of that area are not contaminated.
- The concentrations of fluorine, arsenic and uranium were naturally high in the wells for the drinking water of people and livestork
- The exploitation of uranium through the technology of the in-situ recovery is the most suitable option for Umnut, Dulaan Uul and Zuuvch Ovoo deposits on the territory of Ulaanbadrakh soum in Dornogobi aimag

The Academy of Science performed respectively in 2023, 2024 and 2025 and has also concluded of the safety of the ISR operations for people and the environment.

Water sampling by the representatives of the Mongolian Academy of Science

Remediation, an integral part of the project

The major shareholder of Badrakh Energy, Orano is committed to leaving remediated sites safe, healthy and non-polluting, in compliance with local regulations and the highest international standards.

Orano's remediation expertise

Over 70 years in operation, Orano Mining has undertaken the dismantling of facilities, as well as the remediation and monitoring of former uranium mining sites, in France, Gabon, the United States, Canada and Niger.

Mines remediated by Orano and its subsidiaries:

- Shirley Basin (1953- 1988) and Lucky MC (1959-1993) ISR mining sites, Wyoming, USA
- Cluff Lake mine in Canada (in operation from 1980 to 2002, transferred back to the State in 2024): first modern uranium mine to be transferred back to the Canadian Province after remediation
- Mounana mining site in Gabon (in operation from 1961 to 1999)
- 235 mining sites in France (in operation from 1948 to 2001)

Remediated Cluff Lake site, Canada

The Zuuvch-Ovoo mine remediation plan

All Orano Mining's sites (majority shareholder of Badrakh Energy LLC) are covered by a specific remediation plan that systematically includes technical, social and societal aspects in line with the principles of the International Council of Mining and Metals.

Remediation budget committed by Badrakh Energy 320 millions USD of which 180 millions for remediation of mineralized layer

Remediation steps

- **Well field:** filling in of technological wells, dismantling of the surface facilities and rehabilitation of land
- **Industrial facilities:** dismantling, demolition and rehabilitation of land
- **Mineralized layer:** restoration by monitored natural attenuation, based on monitoring system set up following various hydrogeological studies
- **Revegetation:** Plantation of saxauls (protected local trees) in rehabilitated areas and in neighboring areas as part of an environmental offset project
- **Preservation/monitoring of surface water** through a network of monitoring wells (piezometers)

ISR and monitored natural attenuation

The ISR technology is well suited for strictly monitored natural attenuation. This remediation technique encompasses all the physico-chemical processes occurring in a natural way that lead to the reduction of salinity and acidic conditions without intervention.

UMNUT PILOT EXAMPLE

The effectiveness of natural attenuation closely monitored by company was demonstrated at the Umnut test site with salinity levels returning to values close to those observed before uranium extraction, 11 years after the end of the ISR test. Monitoring is still in progress at the Umnut site; the reactive mechanisms have been well understood and reproduced by modelling.

Before: Umnut pilot site with wells

After: Remediated site (2015)

Groundwater restoration

The objective of Badrakh Energy is to restore the groundwater quality to its pre-mining category of use

The most appropriate restoration method will be selected according to these objectives and based on ongoing observations and data collection throughout the life of the mine (the company invests in environmental R&D to ensure the most efficient restoration).

Orano Mining and Badrakh Energy experts believe that several years are needed to achieve the restoration objectives through monitored natural attenuation.

Should additional action be needed to enhance the natural attenuation process, a dedicated budget has been included in the budget committed for remediation

Commitment to biodiversity

Orano's objectives in terms of biodiversity preservation are as following:

- From 2021, any new remediation plan includes a biodiversity component.
- By 2025, each site in operation has a faunaflora inventory less than 10 years old.
- By 2030 at the latest, an appropriate assessment/ evaluation of biodiversity actions is put in place at each site

Biodiversity Inventory

The animals present on Zuuvch Ovoo sites were inventoried during environmental baseline studies. Inventories animal species were performed according to the Mongolian Red Book classification.

TREES PLANTATION PROGRAM

In November 2021, Badrakh Energy LLC, along with the major mining companies in Mongolia, committed to planting 5 million trees during the period of exploitation of the mine, thus contributing to the National Programme to Plant 1 bn Trees, initiated by the President of Mongolia. As of end of 2025, 33,000 trees are have been already planted.

Successful Zuuvch Ovoo pilot 2021-2022

Badrakh Energy conducted a pilot test for uranium extraction from the Zuuvch Ovoo deposit from July 2021 to December 2022.

PILOT DATA

- **2 - cell** wellfield
- **2,208 m²** covered by wellfield
- **150 - 200m** Drilling depth
- **10 m** mineralization

Pilot objectives

On-site testing is also part of the legal requirement in Mongolia. The objectives of the Zuuvch Ovoo pilot test consisted of the following:

- Providing operational data for the feasibility study and confirming technical and economic parameters,
- Confirming the expected very low environmental impact of the ISR mining method,
- Involving the local communities in the monitoring of the test, thus contributing to the social acceptance of the project.

Technical and economic parameters confirmed

The pilot test extracted uranium from the deposit using two cells. This uranium was then processed on site at the small-scale processing facility and packaged to be exported.

The test covered all the stages of uranium mining, from extraction to production of an uranium concentrate.

During the tests, analyses and monitoring was carried out via 32 monitoring wells

Pilot test results

The Zuuvch Ovoo pilot plant operated for the whole test duration **without any safety or environmental incidents.**

All technical aspects (ex. uranium recovery rate, reagent consumption, concentrate purity) of uranium recovery and processing have been tested. **Badrakh Energy has successfully produced about 10 tonnes of natural uranium.**

The pilot plant teams, mainly consisting of local recruits from the surrounding communities, have successfully **demonstrated their ability to safely operate the ISR technology.**

Out of 52 employees working on site, only were foreign experts, 50% of pilot employees were young people recruited locally.

For the Zuuvch Ovoo pilot test, the monitoring of the local population, demonstrated that there was **no additional radiation exposure from the activity of the company.**

The average additional dose of radiation received by the employees working on the Zuuvch Ovoo pilot was several times lower than the limit set by Mongolian and International legislation(0.7 mSv vs 20 mSv). For comparison, a routine medical examination like an X-Ray represents an extra radiation dose for a patient of 0.1 mSv

Transparent communication

Information about the project has been widely shared with local communities. **More than 2,000 people from different sector of activity** (teachers, herders, students, journalists...) visited the site during the pilot's operation.

Pilot's ecological offset scheme

On the basis of the Detailed Environmental Impact Assessment (DEIA) of the pilot, (approved by the Ministry of Environment, Green Development and Tourism in 2016 and updated in 2021) the largest impact is on the flora and on the indigenous saxaul plant.

Badrakh Energy opted for a single offset scheme which resulted in **the planting of an area equivalent to the pilot footprint (5 ha.).**

After 5 years of studies, the planting started in 2021 and finished in 2024. The monitoring of the plants' growth will continue for 4 to 5 more years.

PILOT COMPENSATION PROJECT

12,500 trees over 3 years (2020-2022)

Tree survival rate - **75-85%** (standard average 45-60%)

11,000 seedlings prepared

Seasonal employment - **15 work places**

380 people participated in 2022 (employees, site visitors, representatives of local communities)

Economic benefits,

infrastructures & skills

RESOURCE GOVERNANCE & TRANSPARENCY

Orano believes in the importance of supporting good resource governance through EITI and voluntary company policies - more transparency, more reporting, more compliance. Since early 2021, Orano has been publishing the mining contracts and licenses concluded with local governments which are not subject to legal, regulatory or contractual confidentiality obligations.

Orano Mining maintains a dual approach to distribute revenues/taxes targeting both national and local/regional stakeholders in all countries where it operates - signature of contracts/licenses with states and collaboration agreement at local level.

Good governance helps to increase the level of development in the country in terms of education, health and infrastructure wherever Orano operates.

PROJECT BENEFITS TODAY AND TOMORROW

The Zuuvch-Ovoo project is only at the development stage but the company's contribution to the local and national development is already tangible:

- More than **1 bn MNT** per year is paid to the state as a license fee,
- **800 million MNT** paid to Dornogobi province in land use rights last year of 2025.
- **150** employees*, of whom more than **90%** are Mongolian citizens,
- **96%** of suppliers come from Mongolian registered companies,
- **10.2 bn MNT** in total invested in local social projects (2006-2025)

During its industrial phase, Zuuvch Ovoo project will bring:

- **1.6 bn USD** direct investment,
- **4-5 bn USD** of direct benefits (tax, dividends and royalties) over the life of the project at national and local level (with a market price range from 70$ to 80$/lbs),
- **1 million USD/year** for local development,
- **1,600** direct & indirect jobs.

** End of 2025*

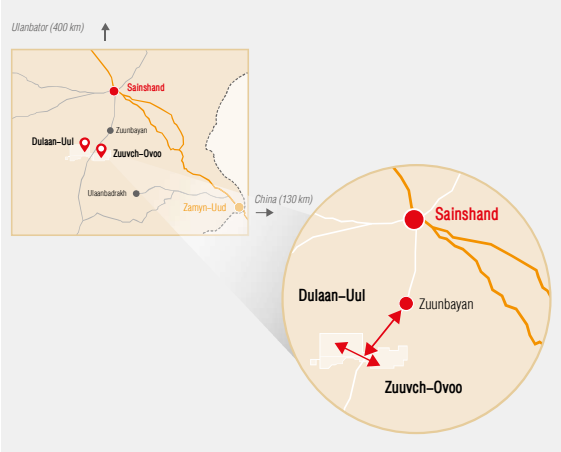
New infrastructure around the mine

Besides the wellfield and the industrial zone, the operation of the Zuuvch-Ovoo mine will require additional facilities such as a base camp, new roads and electrical lines, plus a transportation terminus. The mine will bring new infrastructure to the Dornogobi Aimag (Ulaanbadrakh soum and Zuunbayan bagh of Sainshand soum).

Roads

Approximately 100 km of regional paved road will be constructed between the site and nearest towns (Sainshand, Zuunbayan and Ulaanbadrakh).

96 km of high-voltage (HV) power lines will be installed between the regional center of Sainshand and the site.



Expected traffic between the mine and Zuunbayan will be much fewer than a traditional mine.

Base camp

The mine living compound will be equipped with comfortable living amenities including sporting and leasure facilities.

Orano standards:

- Permanent building eco-designed to minimize water and energy consumption.
- Good insulation
- Sporting equipment, communication facilities
- 2 persons per room accommodation
- Orano is committed to ensuring that its subcontractors enjoy the same living standards as its own employees.

Particular attention will be paid to the location of the compound to avoid long daily travelling to and from the mine for the employees and ensure the safety conditions for travel.

The Zuuvch-Ovoo base camp is envisaged to have housing capacity for 1000 people.

Export of uranium

The natural uranium is commercialized in the form of uranium oxide (U3O8), which will be exported by road or rail, respecting international transportation standards. It will be delivered to the customer for further transformation into nuclear fuel to produce carbon-free electricity.

Once the final logistics scheme for the Uranium export route is chosen, other decisions as to the infrastrucures will be defined (intermediate storage facility for the reagents and final product, railway terminal enhancement...).

CONSTRUCTION PHASE

Some 400 jobs will be needed during the construction period starting 2026.

All the contracts for the preparation of the site (early works) - water, electricity, living compound, sewage, waste management - will be under the responsibility of Orano and Badrakh Energy (not subcontractors) to ensure proper working conditions and environmental care.

Employment

The Zuuvch-Ovoo mine is expected to create up to 800 direct jobs and 800 subcontractor jobs once the mining starts, with the development of a highly skilled workforce and numerous training programs

Typical mine jobs:

- Mining (drilling, network)
- Mining (planning) & geosciences
- Processing & laboratories
- Maintenance
- Logistics & procurement
- Site management
- HSE, community relationship, security
- HR
- Finance & legal
- IT
- Interpreters & translators
- Management

Commitment to local recruitment and local sourcing

Orano Mining's commitment is to maintain a high level of local recruitment (>90%) and local sourcing (>60%) in Mongolia.

At Badrakh Energy, during the pilot test:

- 96% of employees were Mongolian citizens, of which
- 33% were from Ulaanbadrakh soum and

The mine will create numerous subcontracting opportunities for local companies, in:

- Transport
- Technical service (possibility to develop local mechanical workshops, spare parts production)
- Meat purchasing/Catering (100% of meat for the canteen, which could amount to at least 30 tonnes per year)
- Supply of Personal Protective Equipment
- Production of the uranium packaging drums

Building up local expertise

To develop local workforce both for blue collar and engineering jobs, Badrakh Energy invested into a wide cooperation program with national and local educational institutions.

Cooperation with local universities

3 Memorandums of Understanding signed in 2023:

- National University of Mongolia
- Mongolian University of Science and Technology
- Polytechnical College (situated in Sainshand) focused on blue collar specialties

Signature of MOU with the National University of Mongolia, July 2023

Directions of cooperation:

- Organization of long-term and short-term training to build human resources , exchange of mutual experience
- Improve the practical knowledge of the young lecturers and increase their research skills
- Co-organize academic meetings and symposiums of the mining industry ; to provide further research and development opportunities for researchers, engineers, graduate students, students, and staff
- Provide study and industrial internships for students of geology and mining schools, and jobs for graduates
- Support professional development of the Company's engineers, technicians, specialists, and employees
- Conduct joint research work based on modern advanced technologies and methods
- Co-organize joint projects among students and teaching staff

Scholarships

Badrakh Energy has been continuously supporting a scholarship program since 2010, in order to train qualified personnel and support education in the region where it operates. **Between 2010-2025, in total 93 students have received 230 scholarships.**

ISR TRAINING MODULE FOR STUDENTS

Spring 2024 and 2025, experts from Orano Mining ran the 6 module training on the ISR mining method delivered to students and teaching staff from two of the country's technical universities.

70 students and teachers graduated from this course, respectively in 2024 and 2026. The next training is scheduled for March and April 2026.

The purpose is to prepare the specialists that Badrakh Energy will need to operate the Zuuvch Ovoo mine in the future.

Communities

Badrakh Energy makes community investment targeting education, health, access to water and electricity, economic development.

The company investment areas have been confirmed by the Cooperation Agreement that Badrakh Energy signed with the Ulaanbadrakh Soum and the Zuunbayan bagh in 2018 and updated since.

In addition to the above, Badrakh Energy also has animal health and culture/sport categories. These are also the investment areas that are envisaged for the mine.

The contribution allocated by the Company into the regional development projects will amount to:

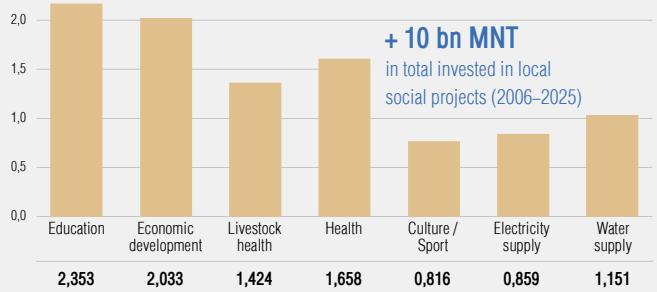
- 300,000 USD/year during project development phase
- 1 million USD/year during mining operations

Community projects & governance

The choice of the community projects needs to be tailored to the specific needs of the given community, in consultation and cooperation with local stakeholders.

For example, during the pilot test stage, projects were submitted and decided upon on an annual basis, through Local Cooperation Committee representatives. The selection of projects was done with the participation of the local administration according to the above priorities. The Mines Societal Committee, set up by Orano Mining, assessed and confirmed the conformity of projects with the priority areas.

Social and economic investment made by Badrakh Energy from 2006-2025 (bn MNT)



LOCAL INFORMATION COUNCIL

Badrakh Energy holds Local Information Council meetings with representatives of local communities in Ulaanbadrakh sum and Zuunbayan bag of Dornogobi province on a regular basis.

The Local Information Council was set up in 2013 to facilitate the exchange of opinions, to ensure transparency, as well as to provide information on company activities and its short and medium-term plans related to the project.

Local Information Council meeting

SCAN ME

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