



**Contact person**

Nicolas Flotté  
VP Exploration - Orano Mining  
[nicolas.flotte@orano.group](mailto:nicolas.flotte@orano.group)

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From : Orano Mining

To : Ministry of Mineral Resources of Greenland

**Consultation on draft Bill to ban uranium prospecting, exploration and exploitation**

Orano Mining respect the decision of the people of Greenland expressed in the early parliamentary elections held on April 6<sup>th</sup>, and the will of the government to put in place a ban on prospecting, exploration and mining of uranium. Nonetheless, we would like to share with you, in light of the global situation regarding combating climate change, a number of points concerning uranium and the crucial role it can play.

**Uranium as a useful resource in the fight against global warming**

In 2050, due to factors including global demographic growth, the deployment of electric vehicles and economic development in emerging countries, the world's population will need twice as much electricity as today, while, at the same time, achieving carbon neutrality.

Climate change and access to energy represent very significant challenges.

Nuclear energy is an essential component of the anticipated energy transition and of each of the effective greenhouse gas mitigation scenarios envisaged. Responsible mining of uranium deposits makes possible the production of decarbonized electricity and thus contributes to the fight against global warming.

Nuclear energy is one of the very least greenhouse gas (GHG) emitting energies in the world, with emissions comparable to wind power, four times lower than solar power and 40 times lower than gas. Its very small CO<sub>2</sub> footprint makes it an indispensable energy for the low-carbon transition. A significant development of renewable energies can only be envisaged in conjunction with nuclear energy in order to avoid the use of fossil fuels.

According to the IPCC experts, in order to limit global warming to + 1.5°C, the use of nuclear energy is essential. Renewable energies (solar, wind) are by

nature intermittent and cannot alone meet the existing and future energy needs of 8 billion people. Consequently, nuclear energy and renewables must be considered together in order to sustain the low-carbon energy transition and fight global warming.

Nuclear energy will necessarily be part of the ecological and energy transition, by contributing, along with hydroelectric power, to the production of controllable, low-carbon electricity, particularly for the development of electric mobility.

This growing general awareness and the crucially important role that nuclear energy will be called upon to play in combating global heating and atmospheric pollution, may lead public opinion, including Greenland's public opinion, to reconsider the question of uranium mining. It may at some point be deemed meaningful to engage as a stakeholder in the solution that mining, carried out in a reasoned, controlled and responsible manner, can bring to the planetary problem of global warming.

### **Uranium can be mined in a responsible manner that respects the environment and the community**

Our mining activities are carried out with the approval of governments, with full respect for international standards, in compliance with a responsible environmental and social policy, and contribute significantly to the social and economic development of the countries in which they are based.

To this end, our mines currently in operation respect international standard ISO 14001 associated with an environmentally responsible management system. Radiological monitoring of the environment and local residents is carried out at all of our mining sites, with analysis of the quality of air, water, soils and food chain. The results are systematically communicated to the competent authorities and shared with all stakeholders in the interest of complete transparency.

The specific nature of our mining activities is that they are inherently long-term. It takes several decades, from the project phase through mining operations, and onto remediation, and requires us to build long-term relationships based on trust with the regions where our mining sites are located. We are committed from the outset to building close relationships with our local stakeholders in order to share our vision of contributing to economic development while preserving the environment in frank and constructive dialogue underpinned by transparency and trust.

The countries in which we work benefit positively from the development of uranium mines. As well as creating jobs, training local populations with specific industrial skills and contributing to countries' tax revenues, mining activity also makes it possible to establish and develop projects to help the population in terms of healthcare, education and local development.

### **What we propose**

In this particular context, we are convinced that responsible uranium mining and nuclear energy have a major role to play in the fight against global warming.

#### Proposal 1: Authorize uranium prospecting and exploration

Aerial and ground prospecting and reconnaissance drilling (exploration) have extremely limited environmental impact.

We suggest that uranium prospecting and exploration not be banned in order to:

- allow airborne or on-ground geophysical surveys
- authorize field campaigns for ground reconnaissance of the geology
- authorize the collection of rock samples for chemical analysis
- authorize reconnaissance drilling

The geological data collected serves to improve knowledge of Greenland's geology, for uranium and other mineral resources and to demonstrate the country's mineral resource potential.

Orano Mining was granted 2 exploration licenses with special terms. Those special terms indicate that Orano Mining will have no automatic right to exploitation and cannot claim any right to exploit. Rights to extract would have to be applied for separately, with no guarantee to obtain it. The right to explore for uranium does not therefore go against Greenland's decision not to authorize its extraction. These special conditions themselves secure Greenland's control over its future choices to exploit or not.

#### Proposal 2: Not to limit uranium prospecting and exploration to grades below 100 ppm

Insofar as prospecting and exploration for uranium remain possible (Proposal 1), we suggest that no maximum limit be imposed on the uranium grades that can be prospected/explored.

In addition, should there be prospecting or exploration for other mineral resources (excluding uranium), imposing a maximum threshold of 100 ppm of uranium would be too restrictive to allow proper assessment of Greenland's mineral resource potential. Gold or copper deposits may be locally associated with significant uranium grades. We suggest not to limit the capabilities of the mining operators in the field at the prospecting and exploration stages. The ultimate decision on whether or not to exploit a uranium-bearing deposit is the responsibility of Greenland.

#### Proposal 3: Not to withdraw uranium from our exploration licenses

Insofar as prospecting and exploration for uranium remain possible (Proposal 1), we advocate not revoking our exploration licenses, which are granted for all mineral resources (except hydrocarbons) and radioactive elements.

#### Proposal 4: Put a time limit on the ban

If the Greenland government decides on a moratorium on prospecting and exploration, we suggest that this ban be limited in time (e.g. 4 years), with the possibility of reviewing the situation at the end of that period, either to extend it or to terminate it.

This limitation of the ban gives visibility to investors and gives the Greenland government the possibility to reconsider or not its policy on radioactive materials.

Proposal 5: Suspend our exploration permits or give us priority over the reallocation of a uranium permit in the event of a revocation of our licenses

The envisaged revocation of our uranium exploration rights on our licenses is detrimental to Orano Mining. In the eventuality of a future change in the policy on radioactive materials, we suggest either allowing the suspension of the licenses granted, for the period of the ban, or, if the licenses were to be revoked, introducing a priority for the current licensees if they meet the stipulated conditions, in the eventuality of the ban being lifted in the future.

We remain at the service and disposal of the Government of Greenland.

**For Orano Mining**

Nicolas Flotté, VP Exploration