

What is
URANIUM?



GREENLAND
MINERALS AND ENERGY A/S

WHAT IS URANIUM?

- Uranium is a naturally occurring element that can be found in low levels within all rock, soil, water and even animal and human tissue. It is a silver-grey metallic element, has the highest atomic weight of all the naturally occurring elements, and is 70% more dense than lead.
- Uranium is most widely known for its radioactive properties and it is these radioactive properties that drive most of its commercial use, particularly in power generation.

URANIUM IN GREENLAND

- As the main minerals at Kvanefjeld contain both rare earths and uranium it is not possible to selectively mine and process the rare earths and keep the uranium separate. The only way to separate the two products will be during the chemical processing of the mined ore. A 'NO' to exploitation of uranium is a 'NO' to REE exploitation at Kvanefjeld.
- The Greenland Government has introduced an amendment to Standard Terms for Exploration Licenses in Greenland. These amendments allow for, upon application approval, the inclusion of radioactive elements as exploitable minerals for the purpose of thorough evaluation and reporting.
- Greenland Minerals & Energy's application under these new regulations has been approved and we therefore see a clear path for the continued development of the Kvanefjeld rare earth and uranium project through definitive feasibility study in cooperation with Greenland Government and stakeholder groups.



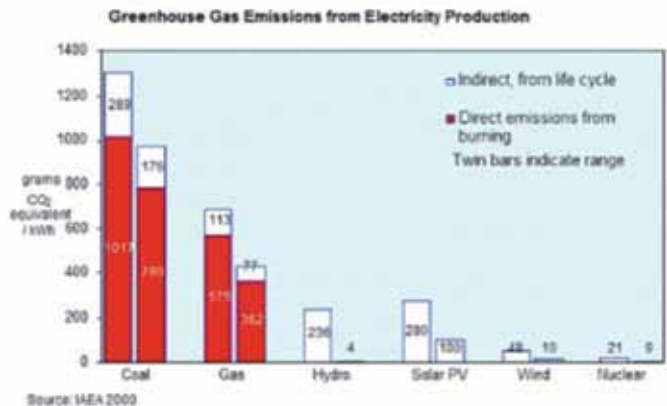
- The uranium from the Kvanefjeld mine cannot be used for weapons. The uranium can only be exported to countries that need uranium to produce clean energy in their nuclear power plants, and only if those countries have signed the Nuclear Non-Proliferation Treaty, controlled by the International Atomic Energy Agency, a United Nations organisation. The uranium will not be enriched in Denmark or in Greenland.

ABOUT 16 % OF THE WORLD'S ELECTRICITY COMES FROM NUCLEAR ENERGY

- Uranium's primary commercial use is as a fuel to generate electricity. Approximately 16 % of the world's electricity comes from nuclear energy.
- The nuclear fuel cycle produces virtually no emissions of greenhouse gases. This avoids the release of several billion tonnes of CO₂ into the atmosphere. Countries like Finland, Germany and France use nuclear energy to generate electricity. Denmark currently benefits from the supply of electricity from Sweden, which also uses nuclear energy to generate power.
- Like all other thermal power plants, nuclear reactors work by generating heat, which boils water to produce steam to drive the turbo generators. In a nuclear reactor, the heat is the product of nuclear fission.

NO GREENHOUSE GASSES

- Unlike other base-load energy supplies, such as coal, oil and gas, uranium emits no greenhouse gases.



From: 'Comparative Carbon Dioxide Emissions from Power Generation'.

RADIATION SAFETY

- Whilst the level of uranium in the Kvanefjeld area is low, especially compared to those operating in places like Canada, the security standards of the Kvanefjeld project are very strict. A number of precautions are taken to protect the health of workers: Dust and radon emissions are controlled, so as to minimize exposure through inhalation. Strict hygiene standards are imposed on workers handling the drill cores, and respiratory protection is required when dealing with dusty conditions.
 - Everybody around the world is exposed to a certain amount of radiation, regardless of mining. Radiation exposure on the mine will be reduced to very low levels (well below international and Australian/Canadian exposure guidelines) by minimizing handling time , maximizing distance to radioactive materials, regular hand washing and wearing protective equipment – including gloves, safety glasses and coveralls.
 - Rocks that contain multi-element minerals, including uranium, have been exposed on the face of the earth in the vast Kvanefjeld region for millions of years. As such, the associated radiation has occurred as part of the natural environment long before man ever first set foot on Greenland and without any visible or known side -effects on local ecosystems.
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