

# URANIUM: WHAT STRATECO IS TELLING YOU

**False.** Aboriginal people around the world are against uranium mining and the nuclear industry.

**True.** “The Bayda Commission (Saskatchewan) in the 1970s showed that over 80 percent of northern Aboriginal men supported a moratorium on mine development (Harding, 1986). Specific reasons identified at the time for not supporting the mines included views that government regulation could not control risks, technology could not prevent damage to the environment, and uranium projects would harm the Northern economy. In the ten years following the report, with the development of the mine and increased employment, opposition from Aboriginal men dropped by 50 percent. Since that time, as they achieved a larger share of the social and economic benefits from mining, First Nation bands and their companies became strong supporters of environmentally safe development of the uranium industry. In 1999, 80 percent of the northern population approved of uranium mining under the conditions set by the communities and governments” (Graham F. Parsons and Ron Barsi, 2001). In the most recent survey conducted by the firm Fast Consulting in 2009, 81% of Saskatchewan residents supported the uranium mining industry (Cameco Corp, 2012).

In December 2011, the Inuit government of Nunatsiavut, whose territory is in Labrador, announced the lifting of the moratorium on uranium exploration following public hearings. The moratorium had been imposed in April 2008 to allow, among other things, the completion of studies and the development of environmental protection legislation (Nunatsiavut Government, 2011).

**False.** Modern uranium mines pollute the environment.

**True.** Regulations governing uranium mining not only set limits, they impose guidelines, a code of conduct, procedures, monitoring, inspections and some of the strictest sanctions in the mining industry. These regulations contribute to the excellent environmental record of today’s uranium mines. “There have been several scientific studies on the environment that studied the impacts of uranium mining on the air, water, plants, fish and animals near mining facilities. These studies have shown that levels of radionuclides were no different around operating mine sites compared to nearby or remote reference sites.” (CNSC, 2009)

“It isn’t just the CNSC watching what we do. Local aboriginal stakeholders monitor our operations through an environmental quality council. [...] From my experience, uranium mining has evolved significantly over the years and is a safe, highly regulated industry in Canada. I see uranium mining as a positive force, bringing tremendous benefit and opportunity with minimal environmental impact.”

*- Donald Deranger, Dene First Nations community in northern Saskatchewan, Cameco, 2010*

**False.** Nuclear is not the solution to climate change and energy needs.

**True.** Nuclear energy is an environmentally-sound choice for electricity generation, as only a small quantity of greenhouse gas (GHG) is emitted during the production cycle. Greenhouse gas emissions are similar to, or even lower than, those emitted by the production cycle of renewable energies (OECD, 2010). The use of low-carbon energy sources like nuclear and renewable energy is necessary, as currently about 30% of new global GHG comes from electricity generation using non-renewable sources, primarily fossil fuels (MNR, 2012). If governments fail to implement energy policy, the world is heading for a temperature increase of 6°C or more (IEA, 2011). An increase of just 4°C would have a major impact on the planet, including an increase in forest fires and drought and a decline in water availability and agricultural production (UK Government, 2009). Nuclear energy is widely available and can meet the world’s present and future energy needs.

**False.** Management of mining wastes represents a permanent environmental risk.

**True.** Management of waste rock and tailings from uranium mining activities are two aspects of the industry that have considerably evolved to minimize risks to the environment (CNSC, 2009). The new methods are proving effective in controlling the production of acid mine drainage as well as heavy metal and radioactive contamination. They meet existing standards for eliminating the risk of dam failure and accidental spills.

Even Ugo Lapointe, the spokesperson for the *Québec meilleure mine* coalition, acknowledges that major progress has been made in mining waste management, and that the mining industry has made great strides in some of its environmental practices in the past 30 years, particularly in terms of reducing air pollution from mineral processing and mining waste management, with sites that are now much safer (improved containment structures) and less polluting (control of liquid effluents and regulatory compliance ) (Ugo Lapointe, 2008).

**False.** Uranium is no longer needed in medical applications.

**True.** Medical isotopes produced from uranium in nuclear reactors are essential for cancer detection and treatment. New technologies for producing these isotopes, like the cyclotron, will be excellent supplementary sources for avoiding new shortages, but for now there is no indication that they alone can meet global demand. For instance, one of the problems is that medical isotopes from cyclotrons will not have a long enough lifespan to be transported to remote regions. According to a report by Canadian experts on the subject, “While cyclotrons in major urban areas and radiopharmacy networks seem viable, the cyclotron option is not a complete solution” (Expert Review Panel on Medical Isotope Production, 2009). In other words, no alternative can yet claim to fully replace nuclear technology for the production of medical isotopes. Uranium mining therefore remains necessary to meet present and future global demand.

**False.** The Matoush project is at a disadvantage compared to the uranium projects in Saskatchewan.

**True.** It is a well-known fact that the uranium grades found in the Athabasca Basin of Saskatchewan are unique in the world. The Matoush project is currently acknowledged to be one of the projects outside the Athabasca Basin with the highest grades worldwide. Uranium mines all over the world operate with grades 5 to 10 times lower than those at Matoush, and still manage to stay very profitable. Activities related to project development generate economic benefits for local communities, notably thanks to the use of local contractors. The communities will continue to enjoy economic spinoffs from the project throughout its lifespan.

Due to the number of pounds of  $U_3O_8$  and the number of tonnes of ore currently outlined at the Matoush project, the footprint of the tailings management facility will be very small compared to many uranium projects. Furthermore, unlike the Saskatchewan ore, the Matoush project ore is clean, meaning that it is not acid-generating, and contains only trace of thorium, arsenic and selenium, among other things. In other words, the Matoush project has huge potential and very positive features that favour its development.

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