



# ***DISARMING ARCTIC SECURITY***

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## **Greenland's Turn to Uranium Mining**

***The Parliament of Greenland has just voted by a narrow margin to lift the 25-year ban on mining radioactive materials. What that means is a controversial first step along a still very long road toward the mining and exporting of uranium.***

That the move is controversial is clear from the 15 to 14 vote and the intense debate the preceded it. The new policy is intended in particular to permit uranium extraction where it exists together with other minerals – namely as part of a rich find of rare earth elements (REE) deposits at the southern tip of Greenland, the Kvanefjeld project near the town of Narsaq.

Greenland Minerals and Energy Limited, an Australian domiciled company, has been exploring the Kvanefjeld region since 2007 and describes it as “one of the largest deposits of rare earth metals in the world.”<sup>1</sup> The REE deposits include relatively low concentrations of uranium, but there is enough of it to be commercially attractive and to lead experts to claim that Greenland’s uranium deposits could turn out to be the world’s fifth largest.<sup>2</sup>

These REEs, rare earth elements, are essential resources for the production of a wide range of hi-tech products, from wind turbines and hybrid vehicles, to rechargeable batteries, mobile phones, computers, and many more. And some 95 percent of currently exploited REEs are now in China – so there is little wonder that the Greenland discovery, “the largest deposit of rare earth minerals outside China,”<sup>3</sup> is of intense interest.

Until now, exploitation of that resource has been prohibited by Denmark’s policy of zero tolerance toward uranium mining and nuclear power. It is a policy that has endured for more than a quarter century.<sup>4</sup> In 1985 the Danish Parliament declared that no nuclear power plants would be built on Danish soil, and much earlier than that, in 1957, Denmark declared itself a nuclear-weapon-free state, and, with the support of popular opinion, has been an active proponent of nuclear disarmament (all the while, of course, being a member of NATO, a nuclear alliance).<sup>5</sup>

The semi-autonomous Government of Greenland, however, had become increasingly keen to exploit the rare earth minerals – despite the inconvenient fact that it could not get at the REEs without also extracting the uranium. At the recent Arctic Circle forum in Reykjavik, representatives of the Government of Greenland actively promoted plans to build a major mining industry. Greenland’s Premier Aleqa Hammond, a lead-off speaker, told the gathering that her new Government was committed to exploiting the rich uranium resources. She predicted that Parliament, in its October 24 vote, would in fact abolish the “zero-tolerance towards uranium” policy and thus “pave the way for Greenland to exploit its rare earth elements.” She went on to declare her full support for nuclear power as “one of the real mitigation options available in dealing with climate change today.”<sup>6</sup>

After the vote in Nuuk had taken place and the policy was overturned, she emphasized the economic argument: “We cannot live with unemployment and cost of living increases while our economy is at a standstill.”<sup>7</sup> In January Greenland’s Deputy Prime Minister, Jens Frederiksen, said, “we support uranium mines as long as these are handled in a proper way and in collaboration with Denmark. If everybody else can sell uranium,” he said, “then we might as well. There’s a lot of money in it.”<sup>8</sup>

And that collaboration with Denmark is still necessary because, under Greenland’s home rule, Denmark retains responsibility for security and foreign policy, including responsibility for compliance with international atomic energy and non-proliferation regulations. Greenland’s Directory of Raw Materials has recently issued a report, concluding that Greenland has on its own the sovereign authority to extract and export resources, including uranium,<sup>9</sup> but the report also essentially acknowledges that cooperation with Copenhagen on international compliance questions cannot be avoided.<sup>10</sup>

Reports in January already indicated that Copenhagen is also shifting its position and that a majority in the Danish Parliament now has signalled a readiness to allow uranium mining and exports.<sup>11</sup> “We have to approach this positively,” is how a foreign policy spokesperson of the Social Liberals, one of the parties in the coalition government, put it. “We would be caught in a very weird Danish role if we block Greenland’s wish.”

Denmark’s principle obligation, in the event the REE and uranium mining project moves ahead, will be to meet International Atomic Energy Agency (IAEA) requirements related to non-proliferation safeguards and Nuclear Supplier Group regulations. Cindy Vestergaard, senior researcher at the Danish Institute for international Studies, confirms that the Danish Government appears willing to support Greenland’s pursuit of uranium mining,<sup>12</sup> but also suggests it will be a major challenge for Denmark “to build a robust regulatory export control system for uranium production from scratch.”<sup>13</sup>

Denmark has an existing safeguards agreement with the IAEA for Greenland and, in a statement to the September 2013 meeting of the IAEA General Conference, the Danish government confirmed that it has also concluded an Additional Protocol agreement (a provision for enhanced monitoring and inspections of nuclear-related facilities, including a requirement to report "the location, operational status and the estimated annual production" of uranium mines)<sup>14</sup> pertaining to Greenland. The statement also thanked the IAEA for its assistance in Denmark's explorations, with Greenland, of uranium exporting prospects.<sup>15</sup>

Not all share the Greenland Government's and the mining industry's enthusiasm for uranium extraction. At the Arctic Circle forum some publicly doubted that uranium would deliver the economic boon that Greenland officials anticipate. And, more significantly, in April 2013, 48 non-governmental organizations signed a statement appealing to the Governments of Greenland and Denmark to uphold the "uranium zero tolerance policy" and to "prevent the combination of rare earth elements and uranium mining." The appeal's signatories included the Inuit Circumpolar Council of Greenland, the Bellona Foundation of Norway, various branches of Friends of the Earth, Greenpeace Nordic, the World Information Service on Energy, and many others.<sup>16</sup> Among the other points made, the NGOs referred to the toxic tailings that uranium mining leaves behind: "The Greenlandic marine areas contain some of the planet's cleanest waters and make an important contribution to the reproduction capacity of the marine biodiversity and the ecosystems in the Northern part of the Atlantic Ocean. These areas will be threatened by a lift on the ban on uranium mining."

It is notable that the Greenland ICC, representing the island's indigenous community, joined the appeal. Researchers at the Danish Institute for International Studies reported in 2012 that "there is a strong majority in opposition to uranium mining on the island" and argued that "a number of studies on the impact on the environment, society and economy have to be conducted before an informed and final decision can be made."<sup>17</sup>

Greenland is not the only Arctic community contemplating new uranium mining. In Canada's Nunavut, the Kiggavik Project is a proposed uranium mining and milling operation to be located in the Kivalliq region, about 80 km west of Baker Lake.<sup>18</sup> The project is now moving through the environmental and community review process. A 2009 hearing revealed a strong strain of suspicion and opposition,<sup>19</sup> and by February 2013, despite major promotional efforts by the company, AREVA Resources Canada Inc., to win support, the community was still heavily divided. Interest in the jobs and economic activity the mine's construction and two decades of operations would bring are countered by concerns about the impact on the environment, drinking water, wild life, and traditional practices. The Mayor of Baker Lake, Joe Aupaluktuq, told the local paper that while he is "keen on the mine's potential to bring jobs" to the community's nearly 1,900 people, he remains

“worried about the possible effects of radiation on the environment.” Furthermore, he believes the community overall is similarly divided.<sup>20</sup>

The Greenland vote to overturn the Danish policy against uranium mining opens a perilous new avenue, not only for Greenland, but also for Arctic uranium extraction. It’s still a long road from Parliamentary votes to backhoes in the ground, and much longer to economic returns for affected communities. Greenland will be closely watched as it heads down that road for how it handles both local and global interests – the concerns and interests of local indigenous communities and the non-proliferation interests of the international community.

## Notes

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<sup>1</sup> “Uranium at Kvanefjeld,” Greenland Minerals and Energy. <http://www.ggg.gl/uranium/uranium-at-kvanefjeld/>

<sup>2</sup> Jane George, “Environmental groups urge Greenland, Denmark to stay away from uranium,” Nunatsiaq Online, 29 April 2013. [http://www.nunatsiaqonline.ca/stories/article/65674environmental\\_groups\\_urge\\_greenland\\_denmark\\_to\\_stay\\_away\\_from\\_uranium/](http://www.nunatsiaqonline.ca/stories/article/65674environmental_groups_urge_greenland_denmark_to_stay_away_from_uranium/)

<sup>3</sup> Lesley Price, “No uranium, no investments, mining company tells Greenlanders,” The Copenhagen Post, 25 September 2013. <http://cphpost.dk/business/no-uranium-no-investments-mining-company-tells-greenlanders>

<sup>4</sup> “Greenland report paves way for sovereign uranium mining,” EurActiv.Com, 17 September 2013. <http://www.euractiv.com/sustainability/greenlands-parliament-vote-urani-news-530483>

<sup>5</sup> Cindy Vestergaard and France Bourgooin, “Should Greenland Mine its Uranium?” Policy Brief, April 2012, Danish Institute for International Studies. [http://en.diis.dk/files/publications/Policybriefs2012/PB\\_should-Greenland-mine%20its%20uranium\\_web.pdf](http://en.diis.dk/files/publications/Policybriefs2012/PB_should-Greenland-mine%20its%20uranium_web.pdf)

<sup>6</sup> [http://arcticjournal.com/sites/arcticjournal.com/files/arctic\\_circle\\_presentation\\_final\\_en.pdf](http://arcticjournal.com/sites/arcticjournal.com/files/arctic_circle_presentation_final_en.pdf)

<sup>7</sup> “Greenland votes to allow mining of uranium, rare minerals,” GMA Network, 25 October 2013. <http://www.gmanetwork.com/news/story/332432/economy/agricultureandmining/greenland-votes-to-allow-mining-of-uranium-rare-minerals>

<sup>8</sup> “Danish U-turn clears way for uranium mining in Greenland,” EurActiv.Com, 29 January 2013. <http://www.euractiv.com/specialreport-rawmaterials/turn-denmark-ready-uranium-adven-news-517403>

<sup>9</sup> “Greenland report paves way for sovereign uranium mining,” EurActiv.Com, 17 September 2013. <http://www.euractiv.com/sustainability/greenlands-parliament-vote-urani-news-530483>

<sup>10</sup> Lesley Price, “No uranium, no investments, mining company tells Greenlanders,” The Copenhagen Post, 25 September 2013. <http://cphpost.dk/business/no-uranium-no-investments-mining-company-tells-greenlanders>

<sup>11</sup> “Danish U-turn clears way for uranium mining in Greenland,” EurActiv.Com, 29 January 2013. <http://www.euractiv.com/specialreport-rawmaterials/turn-denmark-ready-uranium-adven-news-517403>

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<http://www.gmanetwork.com/news/story/332432/economy/agricultureandmining/greenland-votes-to-allow-mining-of-uranium-rare-minerals>
- <sup>13</sup> Cindy Vestergaard, “Starting from zero: Denmark and Greenland’s uranium,” The Copenhagen Post, 21 September 2013. <http://cphpost.dk/opinion/opinion-starting-zero-denmark-and-greenland%E2%80%99s-uranium>
- <sup>14</sup> “The 1997 IAEA Additional Protocol At a Glance,” The Arms Control Association, updated October 2013.  
<http://www.armscontrol.org/factsheets/IAEAProtoco>
- <sup>15</sup> Statement by Denmark to the IAEA 57<sup>th</sup> General Conference, 16-20 September 2013.  
<http://www.iaea.org/About/Policy/GC/GC57/Statements/denmark.pdf>
- <sup>16</sup> Appeal to the Greenlandic and Danish governments not to abolish the uranium zero tolerance policy in the Danish realm, Nuuk and Copenhagen, 26 April 2013.  
<http://www.nirs.org/international/westerne/Statement%20on%20uranium%20mining%20in%20Greenland%2026%20April.pdf>
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- <sup>18</sup> “Nunavut: New Uranium Mining and Milling Projects,” Canadian Nuclear Safety Commission.  
<http://nuclearsafety.gc.ca/eng/mycommunity/facilities/nunavut/index.cfm>
- <sup>19</sup> Katherine Krampol, “Nunavut Grapples With Controversial Uranium Mine,” The Epoch Times, 30 September 2010.  
<http://www.theepochtimes.com/n2/canada/nunavut-grapples-with-controversial-uranium-mine-43486.html>
- <sup>20</sup> Sarah Ladik “Despite the lure of jobs, uranium remains a tough sell,” *Nunavut News*, 01 April 2013.  
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