

Greenland - a secure and reliable source of rare earth materials for Europe

Response to the Public Consultation on the Raw Materials Initiative by the European Commission by

Greenland Minerals and Energy Ltd

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Executive summary

- The EU is facing a potential shortage of raw materials. In particular, there are projected global shortages of rare earth materials, which are essential for many green and innovative technologies, due to the decision of major producer China to restrict export.
- A shortage of rare earth materials would threaten Europe's industrial competitiveness as well as its ability to innovate.
- The Kvanefjeld Mine in southern Greenland, if developed, can provide significant supply of rare earth materials to the EU market, from a politically stable and reliable partner. The Kvanefjeld deposit is one of the biggest rare earth material reservoirs worldwide.
- Furthermore, development of the Kvanefjeld site would offer an opportunity for the development and diversification of Greenland's economy.
- Greenland Minerals calls on the EU to recognize the strategic importance of rare earth materials, and to support the further exploration and development of the Kvanefjeld site.

The consultation of the European Commission on the Raw Materials Strategy asks for answers on a wide range of raw material issues. This submission outlines the contribution that Greenland Minerals, through its Kvanefjeld project in particular, can make to increasing global security of supply for rare earth materials, with clear benefits to the European Union.

Rare earth materials – essential for Europe

As the European Commission pointed out in its Raw Materials Strategy (2008)¹ and again in its 2010 report "Critical raw materials for the EU"², the EU faces a potentially serious shortage of essential raw materials in the future. This includes a potentially critical shortage in the supply of rare earth materials, as highlighted in the report "Critical raw materials for the EU."³

Rare earths have unique physical, chemical and light-emitting properties. Because of their application in many of today's most innovative technologies, demand has increased substantially. Applications include:

- green technologies like hybrid cars, wind turbines;
- consumer and knowledge society applications such as laptops, MP3 players or flat screen TVs;

¹ European Commission: The Raw materials Initiative – Meeting our critical needs for growth and jobs in Europe, 2008

² Raw Materials Supply Group: Critical raw materials for the EU, 2010

³ Raw Materials Supply Group: Critical raw materials for the EU, 2010, p. 36

- a wide range of medical and military applications.

With little domestic supply of rare earths, Europe is vulnerable to a supply shortage. Global demand is likely to continue growing as more economies advance their green technology and innovation plans. At the same time, China – the majority producer of rare earths and itself an emerging ‘green power’ nation – has announced the intention to significantly restrict, and possibly stop, international exports. There is a strong risk of trade restrictions and supply bottlenecks for European business in the near future.

Fortunately, the existing reserves in Greenland – particularly at the Kvanefjeld deposit in the southern part of the country – can provide a significant part of the solution if development of this site is allowed.

Greenland and the Kvanefjeld mine – a secure and reliable source for rare earth materials supply

Greenland is strategically located between Europe and the United States and is a reliable partner to both. It is a stable democracy and an autonomous country within the kingdom of Denmark, with ever-increasing levels of independence. With this transition comes a need to diversify the country’s economic base, and mining shows great potential to help with this, although it is as yet relatively under-explored. As new technology and techniques open up more of the country to exploration, mining shows great potential; indeed recent years have seen several new developments in this area. Mining, and especially the Kvanefjeld project, can deliver a number of benefits to Greenland, including:

- economic and social development opportunities;
- skilled jobs for businesses and workers in Greenland (in total, 709 personnel will be required for the project; approximately 222 of these will be recruited locally);
- additional benefits to local businesses, due to “spin-off” revenues and the multiplier effect.

Greenland Minerals is currently developing the Kvanefjeld mine (Ilimaussaq Ore Field), which we hope will be ready for production from 2015. The mine in the southwest of Greenland is expected to be one of the biggest rare earth material reserves in the world, on a par with the largest mines in China. Because of this, it is very much in the strategic interests of the EU and its Member States to support to continued development of the Kvanefjeld project as a route to a more secure and reliable source of rare earths than currently exists.

It is worth noting in this context that, within the Ilimaussaq ore field, rare earths co-exist with uranium; they can only be separated at the end of the mining process. Because of this, Greenland Minerals is currently working with Greenlandic authorities to discuss the current ban on uranium mining.

Conclusion

As it looks to revise its policy on raw materials, Greenland Minerals asks the European Union to actively consider the question of rare earth materials in a strategic context. We request that consideration be given to putting in place the necessary framework to take advantage of the Kvanefjeld project.

For further information on Greenland and Greenland Minerals please visit: www.gqq.qi