

ASX Announcement : 25 June 2013

Kvanefjeld Project Update

Open Briefing interview with Executive Director Dr John Mair

Greenland Minerals and Energy Limited
Ground Floor, Unit 6
100 Railway Road
SUBIACO WA 6008

Greenland Minerals and Energy Limited (ASX: GGG) is an exploration and development company focused on the Kvanefjeld (GGG 100%) multi-element deposit (rare earth elements, uranium, zinc) project in southern Greenland with a JORC indicated and inferred resource of 956 million tonnes containing 10.33 million tonnes total rare earth oxides, 575 million pounds U₃O₈ and 2.25 million tonnes zinc.

In this Open Briefing®, Dr John Mair discusses

- Benefits of project scale reduction
- Greenland government support
- Project finance outlook

Record of interview:

openbriefing.com

Greenland Minerals and Energy Limited (ASX: GGG) in its ongoing feasibility studies for the Kvanefjeld Project (GGG 100%), has decided to focus on a staged development strategy with an estimated start-up cost of \$810 million for an initial mine throughput of 3Mtpa. The original plan was for a 7.2Mtpa project costing \$1.53 billion. How will the reduction in capital requirement and planned throughput impact finance and marketing risk? Will this make it easier to attract project funding?

Executive Director John Mair

Reducing the start-up capacity to a 3Mtpa throughput was largely aimed at establishing the best output quantum to mitigate marketing risk, particularly for the rare earths, where the market is currently more limited in its capacity to absorb additional supply. Based on our analysis of the market for our products we'll aim to produce 20,000 to 25,000 tonnes of rare earth concentrate with at least 1Mlb U₃O₈ per annum, and that will equate to a throughput of 3Mtpa.

By reducing the scale of the project, capital costs will also be reduced substantially. Overall the costs will come down to US\$810 million, but the project can be separated into two parts; firstly a mine and concentrator in Greenland that is estimated to cost \$450 million, and secondly a refinery to produce U₃O₈ and rare earth carbonate, estimated to cost \$360 million. Importantly, separating the project into two parts will provide greater flexibility with regard to financing of the project.

openbriefing.com

After winning Greenland's national election in March, the Siumut-led coalition has indicated its support of uranium mining in Greenland. Denmark's government has also indicated support for overturning Greenland's zero-tolerance uranium policy. What issues must be addressed in order to begin fast tracking a uranium exploitation license and when would you anticipate the award of this licence?

Executive Director John Mair

The new government has stated a clear aim to remove the zero-tolerance policy and to prioritise Kvanefjeld's development. There has been a lot of work conducted by the government and advisory bodies in regard to the regulation of uranium production, with the

aim being to address the matter in the autumn sitting of parliament that commences in September.

We recently had a positive round of meetings in Greenland with the new government and we are confident about establishing a strong working relationship and are comfortable with how regulatory issues are being addressed.

We aim to work closely with the Bureau of Minerals and Petroleum through the second half of the year to finalise a mining license application for Kvanefjeld, with the intention of lodging in early 2014. That is in general alignment with our broader timeline, and a clearly supportive government should provide a lot more confidence to the development schedule.

openbriefing.com

With the mine and concentrator study components of the feasibility study now completed, what remains to be done before you can complete a bankable feasibility study (BFS)?

Executive Director John Mair

The feasibility-level mine and concentrator study is completed and we are focussed on wrapping up the refinery study. The refining process is now well developed with product specifications established. This is important to ongoing discussions with potential refiners of rare earth concentrates.

We're continuing to explore potential locations to establish a refinery outside Greenland, and that will naturally influence the final cost estimates. The technical components of the BFS are well advanced.

openbriefing.com

What progress have you made on securing the required \$810 million funding for the project? What funding options are you considering and what is the level of interest?

Executive Director John Mair

Financing in the resources business is definitely challenging as the sector comes off a long term period of high commodity prices driven by strong demand growth. But it is in this phase of the broader cycle where high quality, advanced assets start to stand out. Projects need to be technically de-risked with cost-competitive development scenarios, and in stable jurisdictions with supportive governments. It also helps if you have exposure to any growth sectors.

As I outlined earlier, we are viewing the Kvanefjeld project in two parts; the mine and concentrator, and the refinery. We are looking to establish partners to aid in the development of the refinery through structured financing and off-take agreements. The uranium product component is important in this process, particularly with the broader outlook for a steadily strengthening uranium market.

For the mine and concentrator (the Greenland component), we are looking to specific investment funds that are interested in development opportunities in stable jurisdictions such as Greenland. These funds would generally be considered as unconventional sources of capital in the resources sector, but in the current climate they become potential high quality investors and financiers. We're fortunate to have a unique project that stands out and gives us access to potential funding options in a market where conventional financing sources are tight.

openbriefing.com

The price of a Mt Weld rare earth element (REE) basket has declined to a recent level of US\$37/kg from a high of more than US\$200/kg in 2011. What are your expectations for REE prices and how do you anticipate operating margins at Kvanefjeld will compare with your global peers?

Executive Director John Mair

Rare earth prices have come off a lot, but that was inevitable given the highs of 2011. Light rare earths have been particularly volatile with cerium and lanthanum prices retreating significantly. We anticipated that this was where the greatest risk in rare earth pricing was, and as a result we assumed low prices for these elements in our economic models.

However, the demand outlook for the so called 'critical' rare earths remains strong, with no significant new heavy rare earth production in sight. In general we would expect that prices will stabilise in the near term with potential for recoveries across some of the critical rare earths where demand growth is strongest. There also been downward pressure on pricing owing to illegal rare earth miners in China continuing to operate and export outside the quota system. Ongoing efforts to transform the rare earth industry in China should ultimately curb this supply in time as stricter regulations are enforced. Overall we've seen prices return toward the longer term trend, so technically pricing should stabilise.

Kvanefjeld is a polymetallic project so it immediately differs from a rare earth-only operation, and will have less REE pricing sensitivity as a result. Kvanefjeld concentrates will likely be the first significant new global production to be rich in heavy REEs with 12-15% in final concentrate. Compared with other projects in advanced feasibility stages, Kvanefjeld will have a very competitive cost structure for both uranium and rare earths. It will be a quality project. The unusual non-refractory ore lends itself to a relatively simple process route with low technical risk, which will help to deliver cost-competitive production.

openbriefing.com

Is project construction still scheduled to begin in 2015 or does the recent project scope reduction alter your planned commencement?

Executive Director John Mair

At this point we hope to have all approvals in place in order to commence construction in 2015. The government is increasingly aware of the regulatory requirements that are needed in order to work to this project schedule. If anything, the reduction in initial capacity should expedite the development timeline as technically the project hasn't changed from the PFS; we've just reduced the start-up scale.

openbriefing.com

Thank you John.

For more information about Greenland Minerals and Energy Limited, visit www.ggg.gl or call John Mair on +61 8 9382 2322

For previous Open Briefings by Greenland Minerals and Energy Limited, or to receive future Open Briefings by email, visit openbriefing.com

DISCLAIMER: Orient Capital Pty Ltd has taken all reasonable care in publishing the information contained in this Open Briefing®; furthermore, the entirety of this Open Briefing® has been approved for release to the market by the participating company. It is information given in a summary form and does not purport to be complete. The information contained is not intended to be used as the basis for making any investment decision and you are solely responsible for any use you choose to make of the information. We strongly advise that you seek independent professional advice before making any investment decisions. Orient Capital Pty Ltd is not responsible for any consequences of the use you make of the information, including any loss or damage you or a third party might suffer as a result of that use.