GREENLAND
MINERALS AND ENERGY LTD

Company Announcement, 26th March, 2013

Kvanefjeld Feasibility Study Developments:

Mine and Concentrator Study Lowers Initial Start-Up Costs

Greenland Minerals and Energy Ltd's ('GMEL' or 'the Company') 100% owned Kvanefjeld multi-element project contains one of the world's largest undeveloped resources of rare earth metals and uranium (JORC-code compliant), and is ideally located near the southern tip of Greenland. Feasibility studies are well advanced and demonstrate Kvanefjeld's potential to be developed as a long term, low-cost uranium supply, and a large low-cost supplier of both heavy and light rare earth oxides (REOs).

GMEL is now focussed on a staged development strategy with an initial mine-throughput of 3Mtpa, expanding to 6Mtpa. There are two main steps in the processing of Kvanefjeld ores; a concentrator stage, and a refining stage. The Company has completed the testwork program for the concentrator stage with two successful pilot pant campaigns, and has now finalised a Mine and Concentrator Study.

Key Outcomes of the Mine and Concentrator Study:

- The mine and concentrator (flotation circuit) will produce a high-grade REE-uranium mineral concentrate, along with zinc (6,180tpa) and fluorspar by-products (8,865tpa)
- The REE-uranium mineral concentrate containing 14% total REO and 0.24% U_3O_8 will then be treated in a dedicated refinery to produce 23,000tpa of high purity mixed rare earth hydroxide, and 1.1 Mlbs U_3O_8
- **Significantly reduced capital costs:**
  - Overall start-up costs are now estimated at **$810M**
  - The mine and concentrator capable of treating 3Mtpa is anticipated to cost $450M
  - The refinery to produce marketable REE and U products is estimated to cost $360M
- **Unit costs of production are low**; less than US$6.40/kg TREO (after by-product credits) which will make Kvanefjeld one of the lowest cost REE producers worldwide.
  - Upon mine expansion from 3.0 Mtpa to 6.0 Mtpa, the unit cost of TREO production drops to less than **US$4.90/kg TREO** (after by-product credits)

PERTH: Unit 6 100 Railway Road, Subiaco Western Australia 6008 Postal: PO Box 2006 Subiaco WA 6904
Telephone: +61 8 9382 2322 Facsimile: +61 8 9382 2788
LONDON: First Floor 47 Charles Street, Mayfair, London W1J 5EL
GREENLAND: PO Box 156, Narsaq, Greenland 3921
WEB: www.ggg.gl EMAIL: info@ggg.gl ABN 85 118 463 004

- The incremental cost of recovering the uranium is less than US$37/lb U_3O_8. Following expansion to 6Mtpa the uranium unit production costs drop to less than **US$31/lb U_3O_8**. This will make Kvanefjeld one of the lowest cost uranium producers amongst projects that are being considered for development in the next 5-10 years.

- The initial 3Mtpa Project generates a pre-tax, ungeared internal rate of return of 32% and a cash payback period of 3 years, based on long term prices of US$70/lb U_3O_8 and US$23/kg TREO*. The pre–tax NPV is US$1,913 M.
  (*assumes 60% value recognition in concentrate for a basket price of US$37.80)

Background

The Kvanefjeld multi-element project is ideally located in southern Greenland with direct year-round shipping access and an international airport nearby. The project is centred on the highly prospective northern Ilimaussaq Complex. To date approximately less than 20% of the prospective area has been evaluated with drill programs already unearthing a multi-element resource base of 956Mt (JORC-code compliant).

Importantly, the Company has rigorously developed a simple, highly effective process flow sheet for Kvanefjeld that presents the opportunity to develop a cost-competitive, long life and readily scalable poly-metallic mining operation. This provides the foundation for Kvanefjeld to be a cornerstone of future rare earth supply, as well as being an important source of uranium.

GMEL released a prefeasibility study on Kvanefjeld in May 2012 that presented a technically sound and economically robust mining project. Subsequent testwork has continued to optimise the flowsheet, enhance metal recoveries and improve the economic metrics (Technical Update, August 2012). The process flowsheet developed for Kvanefjeld is technically advantageous in its relative simplicity. The concentrator circuit delivers a very high upgrade ratio using a single methodology, and also produces marketable zinc and fluorspar by-products. A refinery circuit then effectively extracts REEs and uranium from the mineral concentrate utilising a conventional atmospheric acid leach circuit to produce marketable rare earth and uranium products. Of significance is that the REE-U rich minerals at Kvanefjeld are non-refractory and do not require complex and costly, high temperature 'mineral cracking' that many RE-producing operations require.

The technical development for Kvanefjeld is now significantly de-risked. Test work for the concentrator circuit is complete, with two highly successful pilot plant operations. Continuous test work programs for the refining circuit have been completed, with patent applications lodged for the refining methodology developed by GMEL's technical team.

GMEL's recent focus has looked to identify the optimal means of implementing the Kvanefjeld project. As announced on February 28th, 2013, the Company has firmed up an initial start-up capacity of 3Mtpa, with a subsequent expansion to 6Mtpa, which mitigates both market and financing risk. In addition, the Company is evaluating the establishment of a dedicated refinery offshore. Investigations are currently underway into potential locations for a refinery, and discussions are advancing with potential partners interested in participating in establishing the refinery.

At 6Mtpa, Kvanefjeld will be a significant uranium producer, and one of the largest and lowest cost producers of rare earth concentrates. Notably Kvanefjeld will have significant output of both the important light and heavy REEs, including neodymium, dysprosium, terbium and yttrium.

With the Mine and Concentrator Study component of the Feasibility Study completed the Company can now finalise the Environmental and Social Impact Assessment studies and prepare an application to the Greenlandic Government for an Exploitation Licence. In the current project schedule construction is targetted to commence in 2015, with first production in 2017. The Company looks forward to working in co-operation with the newly elected Greenlandic Government to reach a successful conclusion to the planning and approvals stage of the project development.

Yours faithfully,

Roderick McIllree

Managing Director

Greenland Minerals and Energy Ltd

Statement of Identified Mineral Resources, Kvanefjeld Multi-Element Project (Prepared by SRK Consulting)

Multi-Element Resources Classification, Tonnage and Grade										Contained Metal				
Cut-off	**Classification**	**M tonnes**	**TREO[2]**	**U_3O_8**	**LREO**	**HREO**	**REO**	**Y_2O_3**	**Zn**	**TREO**	**HREO**	**Y_2O_3**	**U_3O_8**	**Zn**
(U_3O_8 ppm)[1]		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Mt	Mt	Mt	M lbs	Mt
Kvanefjeld - March 2011														
150	**Indicated**	437	10929	274	9626	402	10029	900	2212	**4.77**	0.18	0.39	**263**	0.97
150	**Inferred**	182	9763	216	8630	356	8986	776	2134	**1.78**	0.06	0.14	**86**	0.39
150	**Grand Total**	619	10585	257	9333	389	9721	864	2189	**6.55**	0.24	0.53	**350**	1.36
200	**Indicated**	291	11849	325	10452	419	10871	978	2343	**3.45**	0.12	0.28	**208**	0.68
200	**Inferred**	79	11086	275	9932	343	10275	811	2478	**0.88**	0.03	0.06	**48**	0.20
200	**Grand Total**	370	11686	314	10341	403	10743	942	2372	**4.32**	0.15	0.35	**256**	0.88
250	**Indicated**	231	12429	352	10950	443	11389	1041	2363	**2.84**	0.10	0.24	**178**	0.55
250	**Inferred**	41	12204	324	10929	366	11319	886	2598	**0.46**	0.02	0.03	**29**	0.11
250	**Grand Total**	272	12395	347	10947	431	11378	1017	2398	**3.33**	0.12	0.27	**208**	0.65
300	**Indicated**	177	13013	374	11437	469	11906	1107	2414	**2.30**	0.08	0.20	**146**	0.43
300	**Inferred**	24	13120	362	11763	396	12158	962	2671	**0.31**	0.01	0.02	**19**	0.06
300	**Grand Total**	200	13025	373	11475	460	11935	1090	2444	**2.61**	0.09	0.22	**164**	0.49
350	**Indicated**	111	13735	404	12040	503	12543	1192	2487	**1.52**	0.06	0.13	**98**	0.27
350	**Inferred**	12	13729	403	12239	436	12675	1054	2826	**0.16**	0.01	0.01	**10**	0.03
350	**Grand Total**	122	13735	404	12059	497	12556	1179	2519	**1.68**	0.06	0.14	**108**	0.31
Sørensen - March 2012														
150	**Inferred**	242	11022	304	9729	398	10127	895	2602	**2.67**	0.10	0.22	**162**	0.63
200	**Inferred**	186	11554	344	10223	399	10622	932	2802	**2.15**	0.07	0.17	**141**	0.52
250	**Inferred**	148	11847	375	10480	407	10887	961	2932	**1.75**	0.06	0.14	**123**	0.43
300	**Inferred**	119	12068	400	10671	414	11084	983	3023	**1.44**	0.05	0.12	**105**	0.36
350	**Inferred**	92	12393	422	10967	422	11389	1004	3080	**1.14**	0.04	0.09	**85**	0.28
Zone 3 - May 2012														
150	**Inferred**	95	11609	300	10242	396	10638	971	2768	**1.11**	0.04	0.09	**63**	0.26
200	**Inferred**	89	11665	310	10276	400	10676	989	2806	**1.03**	0.04	0.09	**60**	0.25
250	**Inferred**	71	11907	330	10471	410	10882	1026	2902	**0.84**	0.03	0.07	**51**	0.2
300	**Inferred**	47	12407	358	10887	433	11319	1087	3008	**0.58**	0.02	0.05	**37**	0.14
350	**Inferred**	24	13048	392	11392	471	11864	1184	3043	**0.31**	0.01	0.03	**21**	0.07
Project Total														
Cut-off	**Classification**	**M tonnes**	**TREO[2]**	**U_3O_8**	**LREO**	**HREO**	**REO**	**Y_2O_3**	**Zn**	**TREO**	**HREO**	**Y_2O_3**	**U_3O_8**	**Zn**
(U_3O_8 ppm)[1]		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Mt	Mt	Mt	M lbs	Mt
150	**Indicated**	437	10929	274	9626	402	10029	900	2212	**4.77**	0.18	0.39	**263**	0.97
150	**Inferred**	520	10687	272	9437	383	9820	867	2468	**5.55**	0.20	0.45	**312**	1.28
150	**Grand Total**	956	10798	273	9524	392	9915	882	2351	**10.33**	0.37	0.84	**575**	2.25

[1]There is greater coverage of assays for uranium than other elements owing to historic spectral assays. U_3O_8 has therefore been used to define the cut-off grades to maximise the confidence in the resource calculations.

[2]Total Rare Earth Oxide (TREO) refers to the rare earth elements in the lanthanide series plus yttrium.

Note: Figures quoted may not sum due to rounding.

ABOUT GREENLAND MINERALS AND ENERGY LTD.

Greenland Minerals and Energy Ltd (ASX – GGG) is an exploration and development company focused on developing high-quality mineral projects in Greenland. The Company's flagship project is the 100% owned Kvanefjeld multi-element deposit (Rare Earth Elements, Uranium, Zinc), that is rapidly emerging as a premier specialty metals project. A comprehensive pre-feasibility study has demonstrated the potential for a large-scale, cost-competitive, multi-element mining operation. For further information on Greenland Minerals and Energy visit http://www.ggg.gl or contact:

Roderick Mcillree
Managing Director
+61 8 9382 2322

Greenland Minerals and Energy Ltd will continue to advance the Kvanefjeld project in a manner that is in accord with both Greenlandic Government and local community expectations, and looks forward to being part of continued stakeholder discussions on the social and economic benefits associated with the development of the Kvanefjeld Project.

The information in this report that relates to exploration targets, exploration results, geological interpretations, appropriateness of cut-off grades, and reasonable expectation of potential viability of quoted rare earth element, uranium, and zinc resources is based on information compiled by Mr Jeremy Whybrow. Mr Whybrow is a director of the Company and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whybrow has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Whybrow consents to the reporting of this information in the form and context in which it appears.

The geological model and geostatistical estimation for the Kvanefjeld and Zone 2 deposits were prepared by Robin Simpson of SRK Consulting. Mr Simpson is a Member of the Australian Institute of Geoscientists (AIG), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Simpson consents to the reporting of information relating to the geological model and geostatistical estimation in the form and context in which it appears.