GREENLAND
MINERALS AND ENERGY LTD

ASX: GGG
US-OTC: GDLNF.PK

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Kvanefjeld Project Drilling Update:

2011 Program Aiming to Define Initial Resources at Zones 2 and 3

Greenland Minerals and Energy Limited ('GMEL' or "the Company") is pleased to provide an update on the 2011 drill program that is currently underway on the Kvanefjeld multi-element project (REEs, U, Zn) in Greenland. A major focus for the current program is to generate sufficient data to establish initial resource estimates on Zones 2 and 3, both located within the broader northern Ilimaussaq project area (Figure 1). These both represent satellite deposits to Kvanefjeld, where a 619 Mt JORC-code compliant resource has been defined that contains 6.6 Mt total rare earth oxides (TREO), 350 Mlbs U_3O_8, and 3 Blbs Zn.

Initial multi-element resource estimates on Zones 2 and 3 are anticipated to increase the overall resource base substantially. Approximately 15,000 m of core will be drilled in total.

2011 Resource Drilling

In 2010, GMEL unearthed two significant new multi-element (REE, U, Zn) deposits within the northern Ilimaussaq complex, termed Zones 2 and 3. Significantly, these deposits demonstrated that mineralisation is far more widespread than had previously recognised (Figure 1). Geological evidence suggests that Zones 2 and 3 represent outcropping, or near-surface expressions of a mineralised system that extends over several kilometers from Kvanefjeld, and is interconnected at depth. Following the highly encouraging initial drill results that were generated by the 2010 drill program, GMEL set about to generate sufficient drill data in 2011 to generate initial resource estimates for both Zones 2 and 3. The clear aim is to increase resources at the upper end of the grade range established for resources already defined at Kvanefjeld.

The 2011 drilling at Zone 2 is now complete with 10 holes drilled to depths of approximately 550m. All drill holes intersected mineralised lujavrite (host rock to REE-U-Zn), which remains open to the east, north and west. The results firm up the geometry of the main mineralised zone that was established from holes drilled in 2010.

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These initial holes identified an upper high-grade lens (e.g. **KS_006: 185m @ 1.2% TREO, 442ppm U_3O_8, 0.34% Zn**), overlying a broad lower grade lens. The drill hole array at Zone 2 now covers an area of 800m by 500m, and extends to depths of up to 550m.

At Zone 3, two drill rigs are still operating. At completion of the planned drilling, the drill hole array at Zone 3 will cover an area of 800m by 200m, and will extend to depths of approximately 250m. Numerous lujavrite intervals greater than 100m in thickness have been returned to date in the upper levels, with narrower zones intersected at greater depth. Surface mapping of extensive outcrops has also been conducted as a further constraint to be utilised in the resource estimation process.

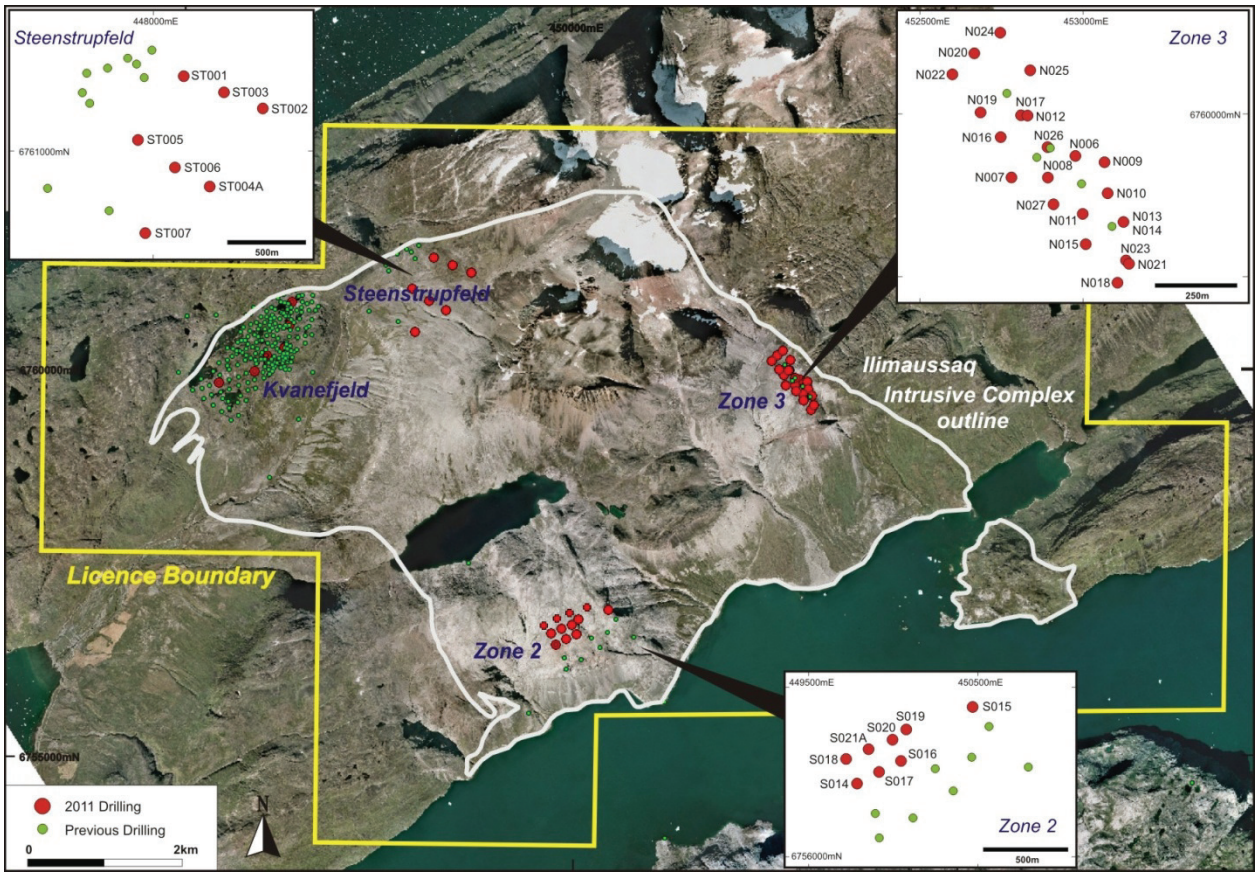

Figure 1. Overview of GMEL's multi-element project on the northern Ilimaussaq Complex in Greenland. A JORC-code compliant 619Mt resource has been defined at Kvanefjeld. The primary objective of the 2011 drill program is to establish initial resource estimates at Zones 2 and 3. There is also scope to produce a resource estimate at Steenstrupfjeld were further holes have been drilled. Metallurgical core has also been drilled at Kvanefjeld.

A first container load of sampled drill core was dispatched from the Company's operations base in Narsaq, south Greenland, in mid-July. The results from this shipment are anticipated early in Q4 2011. The remaining core will be shipped from Narsaq in the coming weeks, after the program is completed. The initial JORC-code compliant resource estimates on Zones 2 and 3 are anticipated to be finalised in Q1 2012. There is also potential to generate an initial resource estimate at Steenstrupfjeld, where seven additional holes have been drilled (Figure 1).

Metallurgical Drilling

Additional metallurgical core has also been drilled at Kvanefjeld. This material supplements existing metallurgical sample material, with bulk high-grade mineral concentrates now being generated to facilitate ongoing hydro-metallurgical leach tests. These leach tests follow on from major technical advances in mineral beneficiation (announced June 21st, 2011) which will ultimately lead to a low cost, increasingly efficient mining operation.

Engineering Studies – Site Selection

Engineering studies onsite in the Kvanefjeld project area have recently been completed. These are aimed at generating further information to aid in site selection for critical infrastructure items. Key members of GMEL's technical division were onsite through mid-August along with consultant engineers to further evaluate contending locations for the processing plant and new port facilities.

Environmental Studies

Environmental studies continue with comprehensive baseline studies underway at Johan Dahl Land, located to the east of the Ilimaussaq complex, where a lake system was the subject of extensive historical studies to develop a hydro-electric power plant. These studies have been updated to reaffirm the opportunity to draw a significant component of Kvanefjeld's power requirements from hydro-electricity.

Yours faithfully,

Roderick McIllree
Managing Director
Greenland Minerals and Energy Ltd

Table 1. Statement of Identified Mineral Resources, Kvanefjeld Multi-Element Project, March 2011.

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
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	12312	352	10950	443	11281	1032	2363	**2.84**	0.10	0.24	**178**	0.55
250	**Inferred**	41	11251	324	10929	366	10426	825	2598	**0.46**	0.02	0.03	**29**	0.11
250	**Grand Total**	272	12152	347	10947	431	11152	1001	2398	**3.30**	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

[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 cutoff 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 Kvanefjeld multi-element deposit (Rare Earth Elements, Uranium, Zinc), that is rapidly emerging as a premier specialty metals project. An interim report on pre-feasibility studies has demonstrated the potential for a large-scale multi-element mining operation. For further information on Greenland Minerals and Energy visit http://www.ggg.gl or contact:

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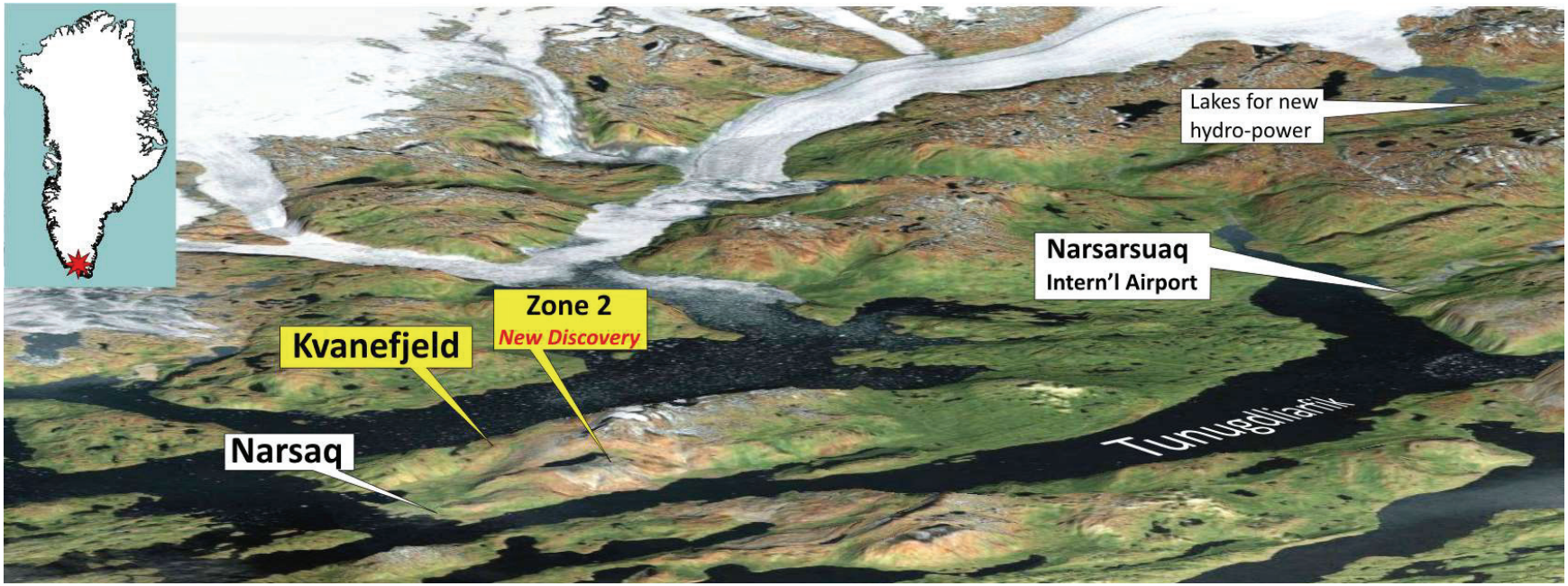
Greenland Minerals and Energy Ltd is aware of and respects the Greenlandic government's stance on uranium exploration and development in Greenland – which is currently a zero tolerance approach. However, a new amendment has been introduced to the standard terms for exploration licenses in Greenland that creates a framework for the evaluation of projects that include uranium amongst other economic elements. Within this framework the Company is permitted to fully evaluate the Kvanefjeld project, inclusive of radioactive elements.

The Kvanefjeld Project is recognised as the world's largest undeveloped JORC-compliant resource of rare earth oxides (REO), in a multi-element deposit that is also enriched in uranium and zinc.

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

The information in this report that relates to 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 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 deposit 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.



View over the broader geography of GMEL's multi-element project on the northern Ilimaussaq Complex located in southern Greenland. The fjords form a large-scale natural harbor system that is open to the north Atlantic shipping lanes all year round, and provide easy access to the project area. The distance from Narsaq to Narsarsuaq is approximately 45 km.