

Exploring the highly-prospective Ilimaussaq Intrusive Complex, favourably located near the southern tip of Greenland

619 Mt JORC-code compliant multi-element resource (REE, U, Zn) defined at Kvanefjeld plateau, with new satellite deposits recently discovered

Pre-Feasibility Study indicates potential for an economically robust, long life mine

Greenland Minerals and Energy Ltd is a mineral exploration and development company positioning itself to become the world's premier supplier of Rare Earth Elements.

The company is listed on the Australian Securities Exchange.

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June 2011 Quarterly Report

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Highlights

- Technical work programs yielding major breakthroughs on Kvanefjeld multi-element project
 - Significant improvements in mineral beneficiation, rare earth recoveries and mine schedule set to enhance efficiency and reduce capital and operating costs
 - > Further technical advances anticipated in the coming months
- 2011 drill program commences in Greenland:
 - Program aimed to generate data for initial multi-element resource estimations at Zones 2 and 3
 - > 7500 m of diamond drill core drilled to date, thick intercepts of black lujavrite (host rock to mineralisation) continue
- Successful 'open day' held in Qaqortoq, south Greenland's largest town, as part of ongoing stakeholder engagement program
- Majority of outstanding options exercised prior to June 30 expiry date; lifts Company's cash position to approximately \$23,780,000 (AUD)





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Introduction

Greenland Minerals and Energy Ltd is a mineral exploration and development company operating in southern Greenland. The Company is primarily focused on advancing the Kvanefjeld multi-element project (both light and heavy rare earth elements, uranium, and zinc) through the feasibility phase and into mine development.

Kvanefjeld is located within the Company's license over the northern Ilimaussaq Intrusive Complex; a unique geological entity that is highly prospective for specialty metals. Mineral resources at Kvanefjeld now stand at **619 Mt**, and new deposits have recently been discovered in the broader project area (see dill intercepts reported in recent company announcements). Kvanefjeld is a highly-accessible resource that outcrops on a broad plateau, with the higher grade portions located close to ground surface. Adjacent deep-water fjords provide shipping access directly to the project area.

An *Interim Report* on the Kvanefjeld pre-feasibility study was released in February 2010 that indicates the potential for the multi-element resources to sustain a large-scale mining operation for decades (*for more information visit the Company's website at* http://www.ggg.gl).

The Company's aim is to be a cost-effective producer of metals of fundamental strategic importance and value to tomorrow's world. Rare earth elements (REEs) are now recognised as being critical to the global manufacturing base of many emerging consumer items and green technologies. However, China controls more than 95% of global REE supply, and has maintained a policy of significantly reducing export quotas. This continues to raise serious concerns to non-Chinese consumers over the long-term stability of REE supply and pricing, at a time when REE-demand continues to grow.

June Quarter Activities

The key developments for GMEL during the June Quarter were the first major technical breakthroughs that result from work programs aimed at establishing an increasingly efficient develop scenario for the Kvanefjeld project. Significant advances have now been made in the areas of mineral beneficiation, rare earth recoveries, and REE and uranium grades in the mine schedule. These work programs are ongoing, and further developments are anticipated in the coming months.

GMEL commenced the 2011 drill program on the northern Ilimaussaq complex in late May with a focus on resource definition at Zones 2 and 3. Following outstanding drill intercepts from the first holes drilled in 2010, the Company is aiming to establish initial JORC-code compliant

resource estimates. Each deposit offers the opportunity to substantially increase the overall multi-element resource base beyond that established at Kvanefjeld.

Stakeholder engagement programs are ongoing in order to keep all parties up-to-date on Kvanefjeld's status and future developments. A well-attended open day was held in Qaqortoq in early June.

June 30th marked the expiry point for all options in GMEL, excluding unvested employee performance options that were approved at the Company's annual general meeting held in May, 2011. Of the options set to expire, the great majority were exercised to substantially improve the Company's cash position.

Technical Advances

Since releasing the Interim Pre-Feasibility Report, GMEL has been focused on advancing the process flow-sheet to generate an increasingly efficient and scalable development scenario for Kvanefjeld. This has involved the establishment of a strong metallurgical process development team in-house. Three key areas have been focused on to bring about improvements;

- 1. Effective mineral beneficiation;
- 2. Enhanced mineral resources; and
- 3. Improved metal recoveries.

Mineral Beneficiation

GMEL has been developing a very detailed understanding of the mineralogy of the Kvanefjeld resources. This is an essential step in any specialty metal project. GMEL's mineralogical program is run through the University of British Columbia. The results provide a solid foundation for beneficiation studies that are now well-advanced. The beneficiation studies are aimed at developing an effective method of concentrating the economic minerals (REE-U minerals) into a small mass fraction. In the base-case flow sheet there was no beneficiation step prior to uranium extraction.

Beneficiation testwork has now revealed that floatation can effectively <u>concentrate</u> >85% of REEs into <15% of the mass.

This represents a very significant development and endorses the Company's firm belief that the Kvanefjeld ores can be successfully beneficiated.

A method to effectively concentrate the economic minerals will allow for significant reductions in the capacity of hydrometallurgical leach circuits, which will ultimately lead to a lower cost, highly efficient mining operation.

Testwork is ongoing; however the results achieved to date provide a clear indication for the opportunity to significantly reduce the capacity of the REE leach circuit while maintaining a high output, further strengthening the projects economics. More advances are anticipated in the coming months, as work programs progress.

Resources

Advances in mineral resources at Kvanefjeld and their geological characteristics has now brought major improvements to the project. The establishment of a method to domain resources represented an important step in characterizing the ores by common mineralogical and geochemical features, as well as identifying higher-grade zones. 'Inferred' resources that had included high-grade material were infill drilled in 2010 in order to be reclassified as 'indicated' resources. These improvements were incorporated into the latest resource estimate, released in March 2011, which has now allowed for a significantly improved mine schedule. At a given throughput, mine output increases significantly.

Over the first 15 years of mining, the new mine schedule would see an increase in output of 21% for TREO's and 10% for U₃O₈ using the 'base-case' mining parameters.

Whilst this represents a significant increase in mine output, it more importantly confirms an opportunity to reduce the mining rate and downstream processing capacity and cost, whilst maintaining a high rare earth output. GMEL is aiming to develop an operation, which at full capacity will have an annual production of approximately 40,000 tonnes TREO.

By 2015, global rare earth demand is estimated to be in the order of 200,000 tonnes, and demand is predicted to continue to grow significantly beyond this point. Annual growth in demand of just 10% would require an additional 20,000 tonnes of REO production per annum, post 2015. The Kvanefjeld multi-element project is being designed to cost-effectively contribute toward filling the looming rare earth supply void from 2015 and beyond.

Improve Metal Recovery

Improving recoveries is another key point of focus, particularly for REEs. In the 'base-case' flow sheet only 34% of REEs are recovered. Recent testwork has improved the efficiency of REE leaching, resulting in the recovery of 40% of total REEs (as oxides or TREOs). This represents a 17% increase.

The increase does not take into account advances in leaching conditions, which are likely to lead to further substantial improvements in the recovery of REEs. Work programs to improve REE recovery continue and include studies to evaluate a number of leach solution chemistries and leach conditions.

Testwork on high grade mineral concentrates generated from a pilot plant of the floatation circuit will soon be commencing.

2011 Drill Program

Within the northern Ilimaussaq Complex, much of the drilling to-date has focussed on Kvanefjeld, where the global resource now features a metal inventory of 6.6Mt of total rare earth oxides (including 0.25 Mts of heavy REOs and 0.5 Mts of yttrium oxide), 350 Mlb's of U_3O_8 , and 3 Blb's of zinc. Already Kvanefjeld ranks as the world's largest resource of rare earths as defined by internationally-recognised reporting codes.

In 2010, regional drilling confirmed the presence of three other significant multi-element deposits within the broader project area (see Figure 1). Currently resource definition drilling is being conducted on these new areas to establish initial JORC-code compliant resource estimates. To-date approximately 7,500 m of diamond core has been drilled, which represents approximately 50% of the program. A first load of drill core has recently been shipped for assay, with results anticipated around the start of Q4 of this year.

It is anticipated that the initial resource estimates on Zone 2 and 3 will serve to increase the overall multi-element resource base substantially. Importantly, the intercepts returned from the 2010 holes (reported earlier this year) provide an indication for the potential of significant tonnage toward to the upper end of the grade range that has been established at Kvanefjeld.



Figure 1. Drilling at Zone 3, with high-grade black lujavrite outcropping in the foreground.

Three diamond drill rigs are currently operating with approximately 7,500 m of core having been drilled to date. At Zones 2 and 3, drilling is continuing to intersect thick intervals of lujavrite; the host rock to REE-U-Zn mineralisation. A first shipment of drill core has recently left site, with results anticipated at the start of Q4 2011. Approximately 15,000 m of drilling is planned for the season.





Figure 2. View over GMEL's multi-element project on the northern Ilimaussaq Complex in Greenland. Resources have been defined at Kvanefjeld, with Steenstrupfjeld, Zone 2 and Zone 3 representing new areas of significant mineralisation. See recent company announcements for drill results from these zones. The distance from Kvanefjeld to Zone 2 is 6 km. The deposits identified represent the outcropping expressions of an ore system that is interconnected at depth.

Stakeholder Engagement: Qaqortoq Open Day

GMEL has also continued with its stakeholder relations program, with a company open day held in Qaqatoq; the largest town in south Greenland. Qaqatoq is located approximately 30 km from the town of Narsaq where GMEL's operations are based. The open day format is designed to provide a comprehensive update on the Kvanefjeld project, with a strong emphasis on the feasibility studies and the environmental and social impact assessments. The open day took place in the Qaqortoq sports centre, which was turned into a display of posters and presentations covering all aspects of the Kvanefjeld project (Figure 3). A large contingent of company personnel and key consultants were on hand to talk through all aspects of the Kvanefjeld project.





Figure 3. Scenes from GMELs recent open day held in Qaqortoq, the largest town in south Greenland.



The event was extremely well attended with well over 1,500 south Greenland residents embracing the opportunity to learn more about the Kvanefjeld project. This was the second open day that the company has conducted, with a similar open day having been held in the town of Narsaq where the Company's operations are based, in August 2010. The open day was reported on as a successful event by Greenlandic media.

Update on Rare Earth Prices: Values continue to climb

Rare earth prices continue to increase into 2011, following the substantial price gains that occurred through 2010. The surge in REE prices has largely been due to further restrictions in Chinese export quotas that are creating imminent short supply to the rest of the world. In late-December 2010, China's commerce ministry announced a further 35% reduction in REE exports for the first half of 2011. With China currently controlling greater than 95% of global REE supply, a continued program of reducing export quotas is having a massive impact on global REE supply and pricing. In order to meet the rapidly emerging void in supply, a new generation of REE-producing mines is needed, outside China.

Table 1. In-situ valuation of Kvanefjeld ore, as of July 2011.

Ore	Value (US\$)/kg*	US\$/tonne	% by Value		
Component	11/4/2011	Kvanfjeld Ore			
Lanthanum Oxide	\$153.00	\$499.00	20.1		
Cerium Oxide	\$159.00	\$790.00	31.8		
Neodymium Oxide	\$320.00	\$480.00	19.3		
Praseodymium Oxide	\$250.00	\$125.00	5.0		
Dysprosium Oxide	\$2,520.00	\$327.00	13.2		
Terbium Oxide	\$4,220.00	\$88.60	3.6		
Yttrium Oxide	\$127.00	\$125.00	5.0		
Zinc	\$2.46	\$6.15	0.2		
Uranium Oxide	\$130.00	\$45.50	1.8		
Total		\$2,486.25			

^{*}La-Tb prices from Metal Pages (China export FOB), Y from Asia Metal, U spot price, Zn - LME. Values based on resource grades in the 200 ppm U_3O_8 cutoff.



Australian Resources Rent tax and Carbon Tax

Both these taxes relate only to Australian operations and therefore will have no impact on the operations of GMEL in Greenland and in particular the Kvanefjeld project.

Exercise of Options, Capital Structure and Cash Position

The 20th June, 2011 marked the expired date of a significant number of outstanding options in GMEL. As at 31 December 2010 GMEL had 115,743,501 options capable of exercise at \$0.20. These options originated as part of the acquisition process of the Kvanefjeld multi-element project. All but 558,082 of these options were exercised prior to the expiry date.

In addition, since 31 December 2010, 190,000 options exercisable at \$1.00, and 5,450,000 options exerciseable at \$0.50 were also converted. Following the conversion of the \$0.20, \$0.50 and \$1.00 options as outlined above the cash now on hand approximately totals \$23,780,000. The proceeds resulting from the conversion of options provides funding for the Company's ongoing operational work programs for the coming financial year.

GMEL's capital structure now includes 410,407,582 ordinary shares, with no options on issue aside from unvested performance options that were approved at the last Annual General Meeting (May 2011).



Tenure, Permitting and Project Location

Tenure

Greenland Minerals and Energy Ltd (ABN 85 118 463 004) is a company listed on the Australian Securities Exchange. The Company is conducting exploration of EL2010/2 in accordance with a joint venture agreement. The Company currently controls 61% of the license (with options to move to 100%). The Company, through its subsidiary, is also the operator of the project.

The tenement is classified as being for the exploration of minerals. The project hosts significant multielement mineralisation within the Ilimaussaq Intrusive Complex.

Historically the Kvanefjeld deposit, which comprises just a small portion of the Ilimaussaq Complex, was investigated by the Danish Authorities. The project has received significant past exploration in the form of drilling, geophysics, geochemistry, an exploratory adit and numerous and varying metallurgical test work and technical papers.

Permitting

Greenland Minerals and Energy Limited is permitted to fully evaluate the Kvanefjeld multi-element project. Under the evaluation permit, the Company can undertake and report on all studies that form part of assessing the feasibility of a multi-element mining project at Kvanefjeld. Critical components include the *Environmental and Social Impact Assessments*, which are to follow the guidelines established by Greenland's Bureau of Minerals and Petroleum (BMP).

Location

The exploration lease covers an area of 80km² in Nakkaalaaq North on the southwest coast of Greenland. The project is located around 46° 00′W and 60 55′N.

The town of Narsaq is located approximately 7 kilometres to the south west of the license area. Narsaq is connected to Narsarsuaq International Airport by commercial helicopter flights operated by Air Greenland. Local transport between settlements is either by boat or by helicopter.

The Company has office facilities in Narsaq where storage, maintenance, core processing, and exploration activities are managed. This office supports the operational camp located on the Kvanefjeld Plateau above the town where the operational staff are housed.

Access to the Kvanefjeld plateau (at approximately 600m asl) is generally gained by helicopter assistance from the operations base located on the edge of the town of Narsaq. It is possible to access the base of the plateau by vehicle and then up to the plateau by a track.



Other Exploration License Holdings

As announced on 18 May 2011 GMEL had applied for, and was granted license holdings to consolidate its ground position in the Kvanefjeld area. The new license areas occur immediately adjacent to the Ilimaussaq Complex and may be prospective for specialty metal mineralization hosted near the margins of the complex (see Figure 4). GMEL aims to conduct evaluations to assess the potential for mineralization, in conjunction with sterilising key areas that are under assessment for plant and infrastructure locations. The Company is considering a number of possible locations for key infrastructure items, which include areas adjacent to the Kvanefjeld resource, as well as the broad area on the northeastern side of the Ilimaussaq Complex. Stakeholder input and environmental considerations are a critically important to the site selection process. Options for the location of key infrastructure items have recently been presented to Greenlandic stakeholders during public meetings held in early April.

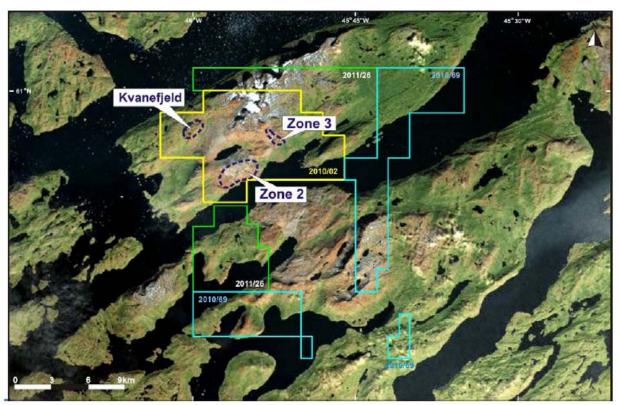


Figure 4. GMEL's license holdings around the Ilimaussaq complex in south Greenland. License EL2010/02 is held under the joint venture agreement with Westrip Holdings, whereas all other licenses are held outright by GMEL.



Licence EL 2011/23

GMEL has also been granted exploration license EL 2011/23.

This license area located along the southeast coast of Greenland, is underlain a diverse collection of metamorphosed Archean rocks including felsic to intermediate gneisses, as well as mafic to ultramafic intrusive rocks. Very little is known about the area beyond reconnaissance mapping and surveying; however company geologists identified the region as an area that holds the potential to feature precious and base-metal mineralisation, consistent with other well-explored Archean cratons elsewhere. GMEL is aiming to conduct initial reconnaissance evaluations of the license area during 2011.

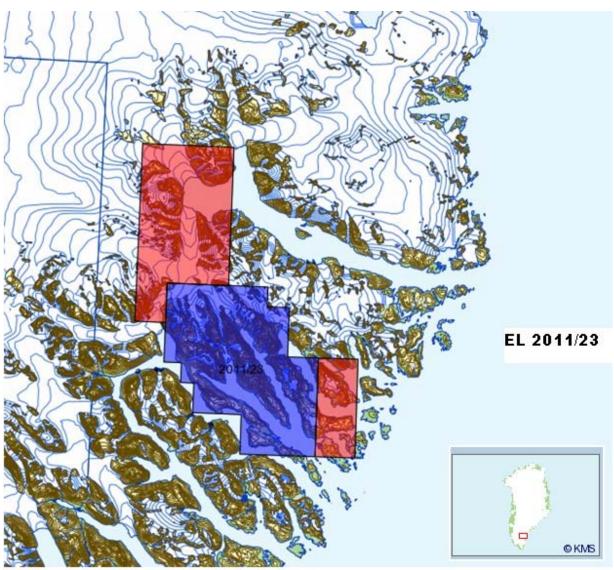


Figure 5. License area EL 2011/23 (blue) covering part of the Archean craton in SE Greenland. The red areas are further license applications that have been made by GMEL.



Capital Structure

Total Ordinary shares: 410,407,582

Unquoted unvested performance options exercisable 1.75

7,000,000

Please visit the company's website at www.ggg.gl where recent news articles, commentary, and company reports can be viewed.

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-Ele	Multi-Element Resources, Classification, Tonnage and Grade								Contained Metal					
Cut-off	Classification	M tonnes	TREO ²	U ₃ O ₈	LREO	HREO	REO	Y_2O_3	Zn	TREO	HREO	Y_2O_3	U ₃ O ₈	Zn	
(U ₃ O 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	0.9	
150	Inferred	182	9763	216	8630	356	8986	776	2134	1.78	0.06	0.14	86	0.3	
150	Grand Total	619	10585	257	9333	389	9721	864	2189	6.55	0.24	0.53	350	1.3	
200	Indicated	291	11849	325	10452	419	10871	978	2343	3.45	0.12	0.28	208	0.6	
200	Inferred	79	11086	275	9932	343	10275	811	2478	0.88	0.03	0.06	48	0.2	
200	Grand Total	370	11686	314	10341	403	10743	942	2372	4.32	0.15	0.35	256	0.8	
250	Indicated	231	12312	352	10950	443	11281	1032	2363	2.84	0.10	0.24	178	0.5	
250	Inferred	41	11251	324	10929	366	10426	825	2598	0.46	0.02	0.03	29	0.3	
250	Grand Total	272	12152	347	10947	431	11152	1001	2398	3.30	0.12	0.27	208	0.	
300	Indicated	177	13013	374	11437	469	11906	1107	2414	2.30	0.08	0.20	146	0.	
300	Inferred	24	13120	362	11763	396	12158	962	2671	0.31	0.01	0.02	19	0.	
300	Grand Total	200	13025	373	11475	460	11935	1090	2444	2.61	0.09	0.22	164	0.4	
350	Indicated	111	13735	404	12040	503	12543	1192	2487	1.52	0.06	0.13	98	0.2	
350	Inferred	12	13729	403	12239	436	12675	1054	2826	0.16	0.01	0.01	10	0.	
350	Grand Total	122	13735	404	12059	497	12556	1179	2519	1.68	0.06	0.14	108	0.3	

¹There is greater coverage of assays for uranium than other elements owing to historic spectral assays. U₃O₈ has therefore been used to define the cutoff grades to maximise the confidence in the resource calculations.

Note: Figures quoted may not sum due to rounding.

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



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.

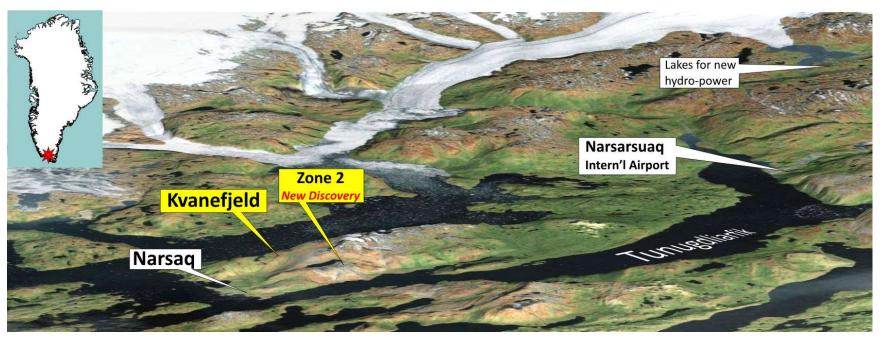
The Kvanefjeld Project is recognised as the world's largest undeveloped JORC-compliant resource of rare earth oxides (REO), in a multi-element deposit that is also enriched in uranium and zinc.

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 cutoff 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.