GREENLAND
MINERALS AND ENERGY LTD

ASX: GGG

December 2017 Quarterly Report

Tuesday 30th January 2018

Highlights:

- **Collaborative optimisation program with Shenghe Resources Holding Co Ltd (Shenghe) conducted through 2017 delivers outstanding results**
  - Flotation improvements produce 60% increase in RE mineral concentrate grades, without recovery loss
  - New leaching methodology developed to simplify circuit dramatically that eliminates a number of processing steps and utilises smaller equipment, which will result in reduced capital and operating costs, smaller in-country footprint and reduced impacts

- **Technical optimisations allow for an updated development strategy that will maximise core strengths and unique advantages of the Kvanefjeld project**
  - Investigations underway to assess phased development strategy
  - Phase 1 – export of RE mineral concentrate
  - Phase 2 – establishment of refinery in Greenland, export of intermediate RE product and by-products

- **Meetings with Shenghe senior representatives planned for coming weeks in Perth to map out next steps in development strategy, following successful technical optimisation**

- **Permitting progress – advances to EIA, SIA**
  - Key meeting held in Denmark with representatives from Greenland's Environmental Agency for Mineral Resource Activity (EAMRA), and Danish Centre for Environment (DCE)
  - Workshop conducted to address wet or dry tailings storage strategy,
  - Important progress in closing out key components of EIA

- **Successful capital raising conducted to secure $10.25M before costs**
  - Funding sees GMEL well-positioned to update the development strategy and feasibility study, and complete project permitting
  - Capital raising well-supported by Asian and Australian institutional investors

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
GREENLAND: PO Box 156, Narsaq, Greenland 3921
WEB: www.ggg.gl **EMAIL**: info@ggg.gl **ABN**: 85 118 463 004

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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
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GREENLAND
MINERALS AND ENERGY LTD

December 2017 Quarterly Activities

The December Quarter ended a highly productive year for Greenland Minerals and Energy Ltd ('GMEL' or 'the Company'). A key focal point for the year had been the integration of Shenghe's leading technical expertise and rare earth industry understanding with the Kvanefjeld Project.

By year end, technical optimisation work programs had delivered outstanding results to markedly improve both the concentrator and refinery circuits for Kvanefjeld. These developments pave the way for an updated, simpler development strategy with reduced capital and operating costs. Importantly, the developments have been conducted will all aspects of downstream processing in consideration, under guidance from Shenghe.

The Kvanefjeld Project, 100% owned by GMEL, is underpinned by a JORC-code compliant resource of >1 billion tonnes, and an ore reserve estimate of 108 million tonnes to sustain an initial 37-year mine life. It is projected to be one of the largest producers globally of key magnet metals including neodymium, praseodymium, dysprosium and terbium, along with by-production of uranium and zinc.

Shenghe is a leader in RE processing technology, one of the largest RE producers globally, and is the largest shareholder in GMEL. Both companies are working to optimise Kvanefjeld, and develop the project as a low-cost, long-life cornerstone to future rare earth supply.

Substantial progress was also made through the course of 2017 on project permitting, and specifically the social impact assessment (SIA) the environmental impact assessment (EIA) and the maritime safety study. Many of the recommendations that were put forward following detailed reviews were addressed, and additional data was generated to supplement datasets where requested. Key consultant Liz Wall (Shared Resources) spent time in Greenland to meet with a cross section of the local community and representatives from government departments to assist in finalising the impact assessments.

In late November the Company completed a strongly oversubscribed share placement to raise A$10.25M. The capital raising has the company well positioned to update the Kvanefjeld development strategy, revise the feasibility study to incorporate optimisation enhancements, and to complete project permitting.

2017 saw a notable recovery in rare earth prices, driven by ongoing supply side reforms in China, and an increasingly strong demand outlook for rare earths on the back of the electrification of transport systems, and the strengthening demand for rare earth permanent magnets.

Kvanefjeld Optimisation Program

In early 2017 a technical committee was established with representatives from both GMEL and Shenghe to oversee test work programs that improve the metallurgical performance, simplify the processing route and related infrastructure, and improve the cost structure of the Kvanefjeld Project. Flotation beneficiation test work is being directed by Shenghe, and draws on the expertise of a number of Chinese technical institutes.

Concentrator Circuit

Shenghe has been guiding test work that aims to improve the flotation circuit to increase the mineral concentrate REO grade. Shenghe is very well connected with the Chinese rare earth technical community allowing them to assist with the placement of metallurgical test work with eminent technical institutes in China.

The Institute of Multipurpose Utilisation of Mineral Resources – Chinese Academy of Geological Sciences (IMUMR) is based in Chengdu in Sichuan Province. They have developed flotation reagents and methods which have been successfully commercialised at Shenghe's operating mines.

The IMUMR has tested a wide range of Chinese supplied flotation reagents on the Kvanefjeld ore. An optimum reagent scheme has been identified and has been subjected to further development. This new reagent scheme is lower cost than the Feasibility Study (2016) equivalents and is able to operate with simpler processing conditions. Importantly, the metallurgical performance is superior.

The development has advanced to the stage that continuous (locked cycle) test work has been completed. This test work mimics the conditions in the commercial operation at smaller scale.

Recent test work has confirmed that a mineral concentrate grading 23.25% REO at a REO recovery of 78.03%, can readily be produced.

These results are significantly superior to previous flotation test work performed by GMEL which achieved 15% REO at a recovery of 79% REO back in 2014. Significantly, the economically robust Kvanefjeld Feasibility Study (2016) factors a mineral concentrate grade of only 14% REO.

In addition to the IMUMR work program, other Chinese technical institutes are also conducting test work under Shenghe's guidance to ensure the best-possible outcome is achieved for the revised Kvanefjeld flotation process. Additional sample material has been deployed from GMEL's operations base in Narsaq, southern Greenland, to facilitate ongoing work in the Chinese laboratories. When the best possible process has been determined, Shenghe and GMEL will move directly into a further pilot plant operation.

Refinery Circuit

Following reviews of the existing Kvanefjeld refining circuit, the technical committee identified a number of opportunities to simplify the leach process and re-address the reagent strategy. This aimed to reduce project infrastructure in Greenland, reduce the number of processing steps and equipment sizing, and best align intermediate product with downstream separation technology. Test work has been highly successful in validating the enhanced and simplified leaching method.

Key to the revised processing strategy has been the evaluation of hydrochloric acid (HCl) for direct concentrate leaching. This is a departure from the 2016 Feasibility Study process which uses sulphuric acid for direct leaching and hydrochloric acid for secondary leaching.

Previous attempts to use direct hydrochloric acid were met with issues owing to silica contamination (gelling). GMEL has now devised a method which allows the silica in the concentrate to be controlled in a single leaching step. This occurs while still extracting high levels of rare earths and uranium from the concentrate.

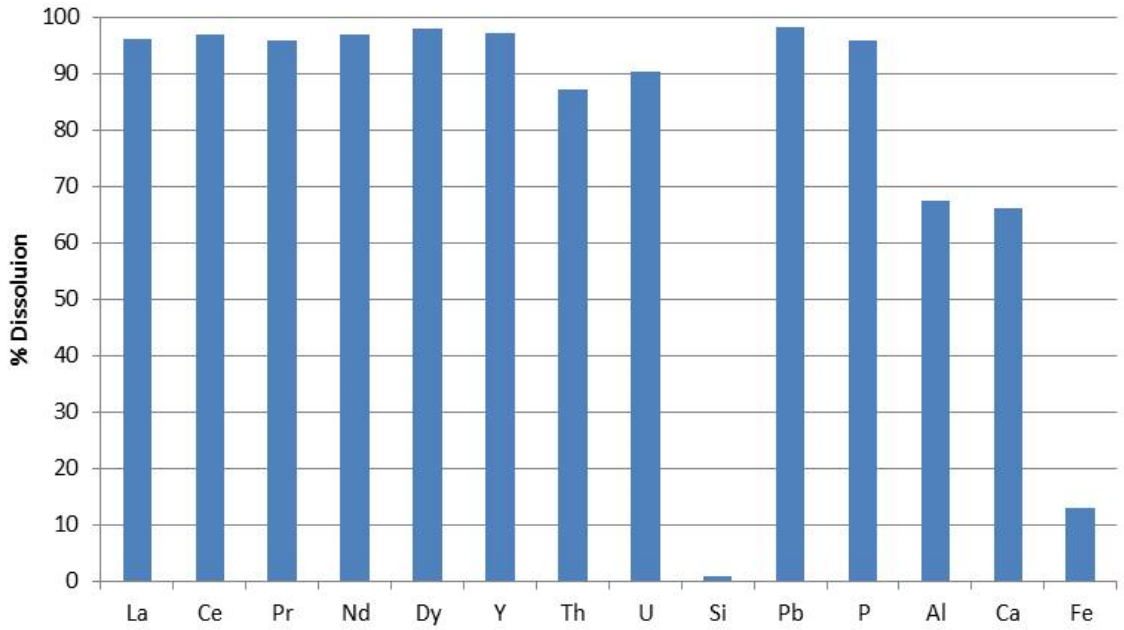


Figure 1. Hydrochloric acid soak elemental extraction results. Solid liquid separation tests were performed to observe the ease of producing a clear pregnant leach solution. After examining a range of flocculants and coagulants good settling and clarity was observed. The resulting pregnant leach solution was also low in soluble silica making it suitable for downstream processing.

The new method mixes hydrochloric acid directly with mineral concentrate to produce a viscous paste. This viscous paste is then mixed for 30 minutes before being dissolved in water (water leach). In the viscous paste, the rare earths are dissolved, and the silica is controlled by precipitation in a favourable form.

This is a remarkably elegant and simple method for extracting the rare earths which is not dependent on high temperature, high pressure or extreme chemical treatment that is otherwise the norm in rare earth production.

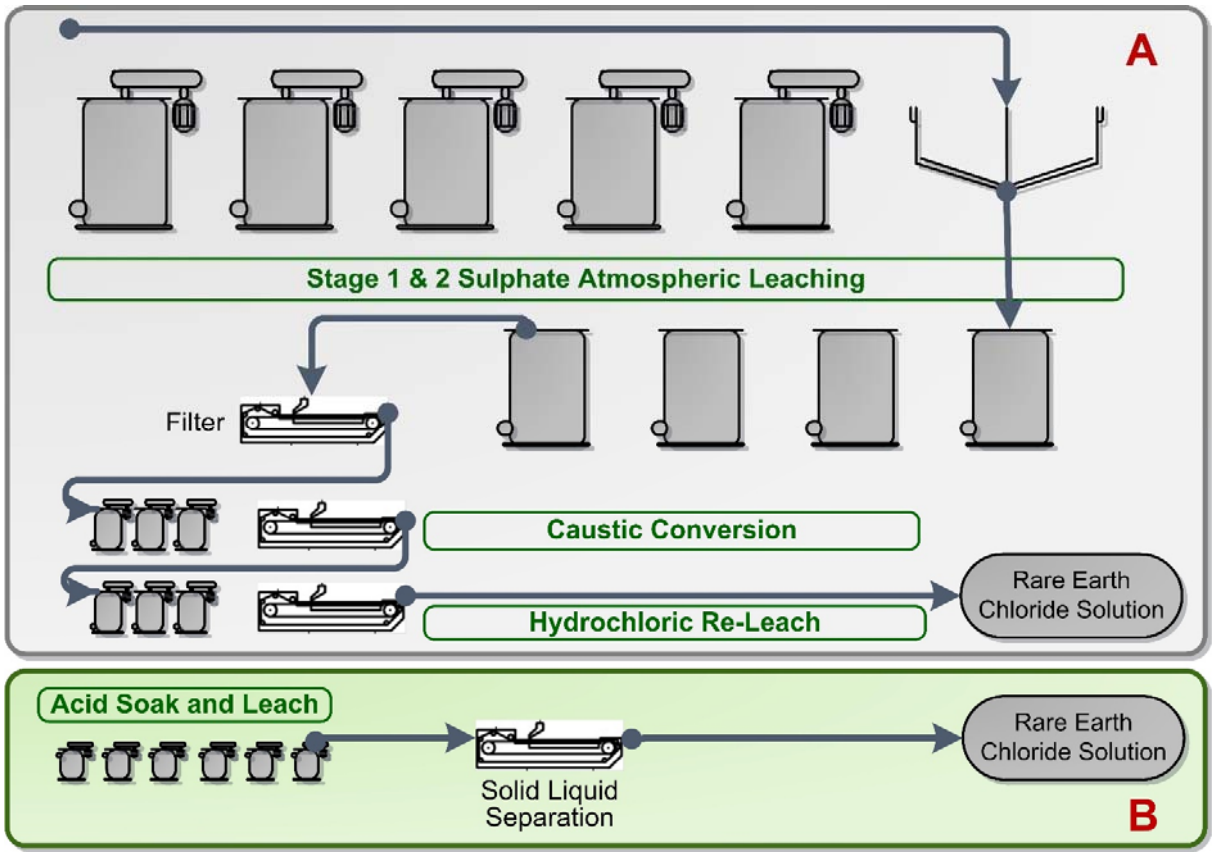


Figure 2. Comparison of the refinery circuit utilised in the Kvanefjeld Feasibility Study (A) and the new optimised circuit (B). The size of equipment needed for the Hydrochloric Acid Soak Process is much smaller than the previous flowsheet. The new flowsheet uses a single stage of leaching rather than three stages in the previous flowsheet. This simplifies the flowsheet leading to improved operability. The residence time (time needed for the leaching reactions to occur) is much lower for the acid soak with only 40 minutes of residence time required compared to over 24 hours with the previous flowsheet. This has a primary influence on the equipment sizing. The simplification and reduction in equipment size will significantly reduce the capital cost for the new refinery design.

The method is applicable owing to the non-refractory nature of the key RE mineral steenstrupine. Steenstrupine contains 25-30% REO, is enriched across the RE spectrum, and is only known to occur in large quantities in the northern Ilmaussaq Complex that sits within the Company's exploration license in Greenland. It represents a very important new source of REE's, and is key to Kvanefjeld's strategic value.

Extensive laboratory test work has been performed since mid-2017 developing the hydrochloric acid soak to the point that it can be incorporated into Feasibility Studies. This laboratory test work has included small scale batch test work and larger scale acid soak tests.

The use of hydrochloric acid soak produces very high leach extraction results for rare earth elements as well as uranium. In addition, high concentrations of the rare metal gallium were also observed in the leach solution.

Optimisation Outcomes – Project Benefits

- The outcomes of the technical optimisation program will simplify the project, increase efficiency, reduce the project footprint and impacts, and reduce capital and operating costs.

- In comparison to the reagent scheme used in the 2016 Kvanefjeld Feasibility Study, the new flotation reagent scheme is lower cost, able to operate with simpler process conditions, and all importantly, delivers a significantly higher grade mineral concentrate.

- A higher-grade, lower-mass RE mineral concentrate reduces the volume to be treated by the refinery circuit and, therefore, reduces equipment sizing and reagent consumption.

- ***Most significantly the higher mineral concentrate grade allows for the investigation of direct concentrate sales from Greenland, as the first step of a phased development strategy.***

Phasing project development would further reduce the capital cost of the initial development, as a refinery would not be required as part of the first phase of operation, and would then be developed as a second phase. Investigations into the technical, economic and regulatory considerations of this scenario are being investigated by GMEL and Shenghe. Shenghe would look to establish a special purpose joint venture company to purchase the mineral concentrates in a scenario that follows a number of industry precedents.

The development of a new leach process will result in a smaller, simpler refinery. Investigations have revealed that it will be possible to transport hydrochloric acid directly to Greenland for use in the refinery. This will remove the requirement for a hydrochloric acid plant as well. Removal of reagent production facilities in Greenland will reduce capital costs.

Test work has established a method for the effective removal of uranium from the leach solution, allowing for the generation of saleable uranium product in Greenland. GMEL and Shenghe are investigating the benefit of shipping an intermediate rare earth product as a chloride solution, which is ideal feedstock for latest technology separation plants. This approach eliminates solids handling and re-leaching steps common with other solid feedstocks, resulting in considerable cost reductions across the overall supply chain.

The strategy of exporting RE intermediate product in liquid form draws on the efficiency and cost savings of importing reagent, and backloading the ship with RE chloride solution.

Such as scenario can only be considered where direct shipping is available to the project area and ore minerals are of sufficient grade and can be directly leached; all unique attributes of the Kvanefjeld Project.

The proximity of year-round direct shipping to world-class mineral resource, the enhanced high mineral concentrate grades and the direct, simple leaching circuit, ***are unique attributes of the Kvanefjeld Project.***

Importantly, the alignment of intermediate rare earth product form with downstream separation facilities provides for an extremely efficient processing chain from mine to final high purity rare earth oxides and metals.

The technical developments confirm the potential for Kvanefjeld to be developed as a cornerstone to future rare earth supply through simple, scalable, low-cost production.

Next Steps

Meetings with senior Shenghe representatives are planned for the coming weeks in Perth to finalise the optimised development strategy, and map out the work programs required to revise the feasibility study and update the project cost-structure.

GMEL representatives will be visiting Greenland and Denmark in February to update government departments on the positive developments, advantages, and implications.

Successful Capital Raise Secures $10.25M

In later November, GMEL completed a successful, oversubscribed share placement to Asian and Australian institutional investors. The Company accepted firm commitments for $9 million, comprising 100,000,000

shares at $0.09 cents per share. In addition, major shareholder Shenghe Resources Holding Co Ltd (Shenghe) will be maintaining their 12.5% shareholding through investing $1.25 million, in accordance with their non-dilution rights. Shenghe is currently working through the necessary regulatory approvals in order to exercise their non-dilution rights. The Company will look to update on the timing of regulatory approvals. In total, funds raised will be $10.25 million.

The placement was limited to institutional and sophisticated investors in accordance with Section 708 Corporations Act and shares were issued within the Company's Listing Rule 7.1 capacity. The participation of numerous Asian and Australian funds alongside Shenghe is a strong endorsement and recognition of the significance of Kvanefjeld as the outlook for the rare earth sector continues to strengthen.

Ashanti Capital acted as Lead Manager to the Placement and introduced a number of prominent institutional investors, the majority of whom are new shareholders to the Company. This enhancement of GMEL's register comes at an important time for the Company as it moves to a transformational year in 2018.

The capital raising has the Company well-funded to incorporate the outcomes of the optimisation work into a revised feasibility study, and complete project permitting.

Permitting Update

Progress on updating impact assessments continued through Q4.

Independent laboratory test work on samples of waste rock were conducted. Special assays featuring very low detection limits were produced for a large range of elements. The results do not show any issues with the release of contaminants for the environment. All the waste rock types mined along with the ore are already present on the surface of the project area owing to natural erosional processes. Waste-rock is unmineralised rock that will be extracted during the mining process, and will be dominated by basalt/gabbro and naujaite (syenite), which is widespread in the local environment. The results have been shared with the Government of Greenland with the aim of identifying any outstanding areas to address concerning the waste-rock stockpile.

A meeting was held with the Government of Greenland and their advisors on the 14th of November 2017 in Denmark. Government advisors present at the meeting included the Danish Centre for Environment (DCE) and the Greenland Natural Institute. The Government of Greenland provided two representatives from the Environmental Agency for Mineral Resources (EAMRA). The meeting was productive in discussing the outstanding items to be addressed in the EIA. A plan was developed to close out all remaining issues and prepare an updated EIA in early 2018 that incorporates additional data.

A number of independent consultants have contributed to the updated EIA. All of the additional studies performed in 2017 have been consolidated by Orbicon (Denmark based Environmental Consultant) who

are drafting the updated version. GMEL has used world's best independent consultants where possible to perform the additional studies and documentation of the EIA.

A key workshop was held which compared the environmental impact of wet tailings disposal versus dry tailings disposal. The scope of the impacts also included the closure phases of the project. The workshop was held at the request of the Government of Greenland and performed by the independent consultant Wood Group ('Wood'). An experienced and multi-skilled group was assembled by Wood to perform the full day work shop and follow-up studies. The results of the trade-off study show that the environmental impact of the two tailings disposal options are similar for the Kvanefjeld project. However, overall, a wet-tailings disposal represents a preferred option, and has been the main strategy studied to date.

There have been on-going technical discussions between GMEL and the Government of Greenland and advisory groups over a number of technical items in the EIA. This has included site hydrology, fuel selection and tailings water impacts. A consistent dialogue GMEL and the advisors to the Government of Greenland is effectively working to resolve all outstanding items.

Site environmental activities continued during this quarter. The collection of baseline environmental information is on-going with both dust and water samples being measured and taken for detailed analysis. Site water samples were sent to ANSTO in Australia for chemical and radiological analysis. Calibration of water stations and dust monitoring equipment remains on-going. Samples of dust were collected and consolidated before sent to NILU in Norway for analysis.

Updating the SIA is progressing well, with the updated version being drafted by Shared Resources, following time spent in Greenland in Q3. The Maritime Safety Study has been accepted as suitable for public consultation.

Potential modifications to the development strategy will simplify the project and reduce impacts. Many aspects of the impact assessments will, therefore, not be affected.

Greenland's Role in New RE Supply Chains

GMEL is at the forefront of a strategic evolution in rare earth supply. Major changes are coming to global RE supply, with China looking to cap primary production in 2020, as a point when demand is set to surge. Prior to establishing a strategic relationship with leading rare earth company Shenghe in 2016, the Company had been actively engaging the Chinese rare earth industry for a number of years; a process which provided strong insight into how the industry was reshaping.

Kvanefjeld has a number of key attributes that, when integrated with Shenghe's downstream processing technology and capacity, can provide the potential to play an important role in new supply networks. These include:

- ✓ **Scale – largest code-compliant rare earth resource, ore reserve for initial 37-year mine life**

- ✓ **Simple mining with 1:1 strip ratio over initial 37-year mine life**
- ✓ **Multiple by-product revenue streams to strengthen project economics (U_3O_8, zinc, fluorspar)**
- ✓ **Composition – ideal production profile across key rare earths – Nd, Pr, Tb, Dy**
- ✓ **Yttrium enrichment is highly beneficial for latest RE separation technology**
- ✓ **RE minerals that allow for simple processing, which will be maximised by technical optimisation work conducted through 2017 with Shenghe**
- ✓ **Favourable country and project location with direct shipping access, international airport nearby**
- ✓ **Regulatory framework implemented to manage project operation and export controls**

-ENDS-

About Shenghe Resources Holding Co. Ltd

Shenghe Resources Holding Co. Ltd (SSE 600392), (Shenghe) is a public company exclusively focused on mining and processing rare earth ores, and producing high purity rare earth oxides, metals and alloys along with a range of rare earth products. Shenghe is listed on Shanghai Stock Exchange (since 2012) and, as at 28 July, 2017 had 1.35 billion shares on issue and a market capitalization of approximately RMB 24.8 billion or AUD 4.6 billion.

Shenghe has a diversified background of its major shareholders. As at 20 June, 2017, the Institute of Multipurpose Utilization of Mineral Resources (IMUMR), a state owned scientific research institute specializing in mineral resources, holds 14.04%, Mr Wang Quangen, former engineer of IMUMR holds 6.85% and the Sichuan Giastar Enterprise Group, a private company involved in the agricultural industry holds 5.52%.

Shenghe is headquartered in Chengdu, Sichuan Province and is a single industry company with mining and processing activities in a number of Chinese centres, and has commenced the strategy of extending business outside China to increase the focus on overseas resources and international markets. Shenghe is involved at all levels of the rare earth industry, from mining through processing to the production of end products. Significantly, Shenghe also holds Chinese production quotas for the mining and separation/refining of rare earths.

For Shenghe, investment in GMEL is aimed to secure access to rare earth resources outside of China which are capable of supporting a range of rare earth businesses, facilitating long term growth opportunities.

About the Kvanefjeld Project

GMEL's primary focus is centred on the northern Ilimaussaq Intrusive Complex in southern Greenland. The project includes several large scale multi-element resources including Kvanefjeld, Sørensen and Zone 3. Global mineral resources now stand at **1.01** billion tonnes (JORC-code 2012 compliant).

The deposits are characterised by thick, persistent mineralisation hosted within sub-horizontal lenses that can exceed 200m in true thickness. Highest grades generally occur in the uppermost portions of deposits, with overall low waste-ore ratios.

Less than 20% of the prospective area has been evaluated, with billions of tonnes of lujavrite (host-rock to defined resources) awaiting resource definition.

While the resources are extensive, a key advantage to the Kvanefjeld project is the unique rare earth and uranium-bearing minerals. These minerals can be effectively beneficiated into a low-mass, high value concentrate, then leached with conventional acidic solutions under atmospheric conditions to achieve particularly high extraction levels of both heavy rare earths and uranium. This contrasts to the highly refractory minerals that are common in many rare earth deposits that require technically challenging and costly processing. The rigorously developed process route for Kvanefjeld has been the subject of several successful pilot plant campaigns.

The Kvanefjeld project area is located adjacent to deep-water fjords that allow for shipping access directly to the project area, year-round. An international airport is located 35km away, and a nearby lake system has been positively evaluated for hydroelectric power.

Kvanefjeld is slated to produce a significant output of critical rare earths **(Nd, Pr, Eu, Dy, Tb**), with by-production of uranium, zinc, and bulk light rare earths (La, Ce). Low incremental cost of recovering by-products complements the simple metallurgy to deliver a highly competitive cost structure.

Rare earth elements (REEs) are used in a wide variety of applications. Most notably, rare earth elements make the world's strongest permanent magnets. The magnet industry continues to be a major growth area, owing to the essential requirement of high-powered magnets in many electrical applications.

Magnetism is the force that converts electricity to motion, and vice-versa in the case of renewable energy such as wind power. In recent years growth in rare earth demand has been limited by end-user concerns over pricing instability and surety of supply; however, demand has returned and the outlook continues to strengthen.

Kvanefjeld provides an excellent opportunity to introduce a large, stable supplier at prices that are readily sustainable to end-users. In addition, rare earths from Kvanefjeld will be produced in an environmentally sustainable manner further differentiating it as a preferred supplier of rare earth products to end-users globally. These factors serve to enhance demand growth.

Uranium forms an important part of the global base-load energy supply, with demand set to grow in coming years as developing nations expand their energy capacity.

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 has conduct extensive exploration and evaluation of license EL2010/02. The Company controls 100% of EL2010/02 through its Greenlandic subsidiary.

The tenement is classified as being for the exploration of minerals. The project hosts significant uranium, rare earth element, and zinc mineral resources (JORC-code compliant) within the northern Ilimaussaq Intrusive Complex.

Historically the Kvanefjeld deposit, which comprises just a small portion of the Ilimaussaq Complex, was investigated by the Danish Authorities. GMEL has since identified a resource base of greater than 1 billion tonnes, including the identification and delineation of two additional deposits. The Company has conducted extensive metallurgical and process development studies, including large scale pilot plant operations.

Permitting

Greenland Minerals and Energy Limited is permitted to conduct all exploration activities and feasibility studies for the Kvanefjeld REE-uranium project. The company's exploration license is inclusive of all economic components including uranium and REEs.

A pre-feasibility study was completed in 2012, and a comprehensive feasibility study completed in 2015. A mining license application was handed over to the Greenland Government in December 2015, which addresses an initial development strategy. The project offers further development opportunities owing to the extensive mineral resources.

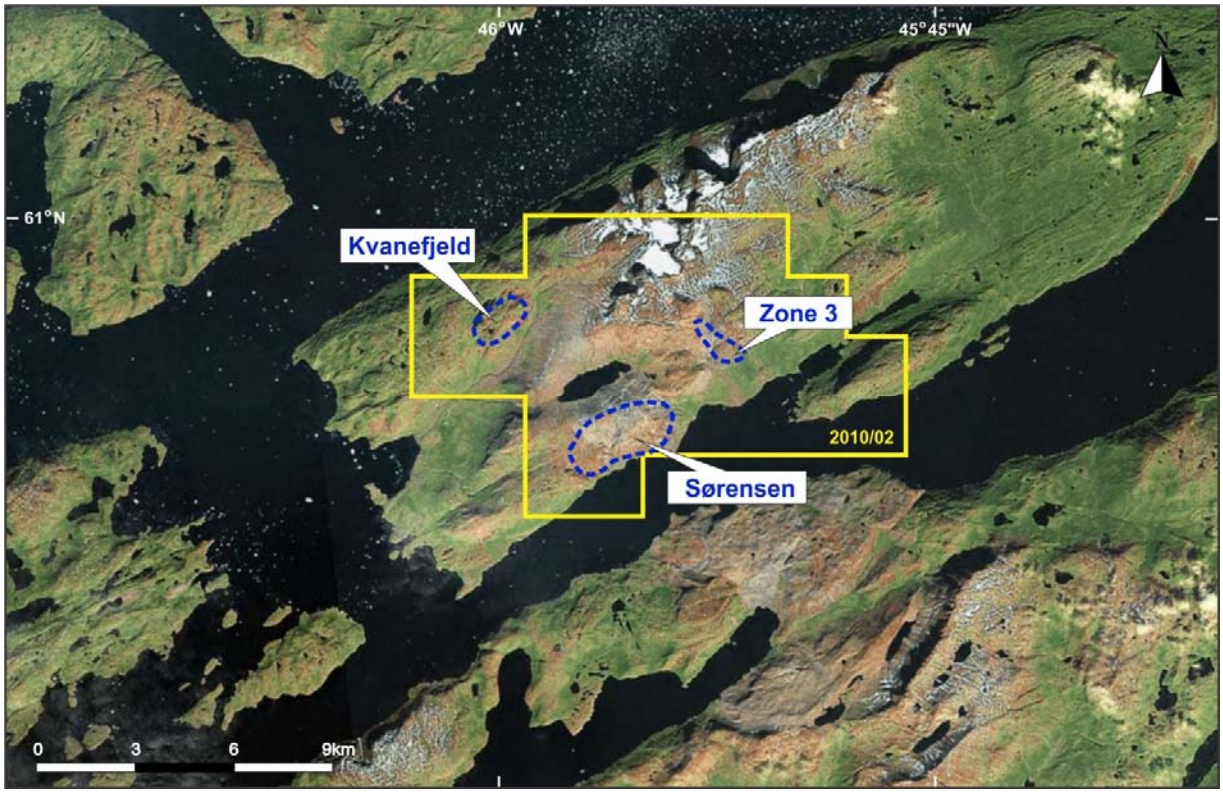
Location

The exploration lease covers an area of 80km^2 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 8 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 and environmental activities are managed.

Access to the Kvanefjeld plateau (at approximately 500m 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.



Overview of GMEL's 100% controlled license EL2010/02. A mining license application has been lodged.

Exploration License	Location	Ownership
EL 2010/02	Southern Greenland	Held by Greenland Minerals and Energy (Trading) A/S, a fully owned subsidiary of GMEL.

Capital Structure – As at 31st December, 2017	
Total Ordinary shares	1,105,251,206
Quoted options exercisable at $0.08 on or before 30 September 2018	187,296,579
Unquoted options exercisable at $0.20 on or before 24 February 2018	7,500,000
Unquoted options exercisable at $0.25 on or before 24 February 2018	7,500,000
Unquoted options exercisable at $0.15 on or before 31 March 2021	4,000,000
Employee performance rights (subject to vesting hurdles – refer announcement 22 Dec 2016)	6,000,000

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

Statement of Identified Mineral Resources, Kvanefjeld Project, Independently Prepared by SRK Consulting (February, 2015)

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 - February 2015														
150	**Measured**	143	12,100	303	10,700	432	11,100	978	2,370	**1.72**	0.06	0.14	**95.21**	0.34
150	**Indicated**	308	11,100	253	9,800	411	10,200	899	2,290	**3.42**	0.13	0.28	**171.97**	0.71
150	**Inferred**	222	10,000	205	8,800	365	9,200	793	2,180	**2.22**	0.08	0.18	**100.45**	0.48
150	**Total**	673	10,900	248	9,600	400	10,000	881	2,270	**7.34**	0.27	0.59	**368.02**	1.53
200	**Measured**	111	12,900	341	11,400	454	11,800	1,048	2,460	**1.43**	0.05	0.12	**83.19**	0.27
200	**Indicated**	172	12,300	318	10,900	416	11,300	970	2,510	**2.11**	0.07	0.17	**120.44**	0.43
200	**Inferred**	86	10,900	256	9,700	339	10,000	804	2,500	**0.94**	0.03	0.07	**48.55**	0.22
200	**Total**	368	12,100	310	10,700	409	11,200	955	2,490	**4.46**	0.15	0.35	**251.83**	0.92
250	**Measured**	93	13,300	363	11,800	474	12,200	1,105	2,480	**1.24**	0.04	0.10	**74.56**	0.23
250	**Indicated**	134	12,800	345	11,300	437	11,700	1,027	2,520	**1.72**	0.06	0.14	**101.92**	0.34
250	**Inferred**	34	12,000	306	10,800	356	11,100	869	2,650	**0.41**	0.01	0.03	**22.91**	0.09
250	**Total**	261	12,900	346	11,400	440	11,800	1,034	2,520	**3.37**	0.11	0.27	**199.18**	0.66
300	**Measured**	78	13,700	379	12,000	493	12,500	1,153	2,500	**1.07**	0.04	0.09	**65.39**	0.20
300	**Indicated**	100	13,300	368	11,700	465	12,200	1,095	2,540	**1.34**	0.05	0.11	**81.52**	0.26
300	**Inferred**	15	13,200	353	11,800	391	12,200	955	2,620	**0.20**	0.01	0.01	**11.96**	0.04
300	**Total**	194	13,400	371	11,900	471	12,300	1,107	2,530	**2.60**	0.09	0.21	**158.77**	0.49
350	**Measured**	54	14,100	403	12,400	518	12,900	1,219	2,550	**0.76**	0.03	0.07	**47.59**	0.14
350	**Indicated**	63	13,900	394	12,200	505	12,700	1,191	2,580	**0.87**	0.03	0.07	**54.30**	0.16
350	**Inferred**	6	13,900	392	12,500	424	12,900	1,037	2,650	**0.09**	0.00	0.01	**5.51**	0.02
350	**Total**	122	14,000	398	12,300	506	12,800	1,195	2,570	**1.71**	0.06	0.15	**107.45**	0.31

Statement of Identified Mineral Resources, Kvanefjeld Project, Independently Prepared by SRK Consulting (February, 2015)

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
Sørensen - March 2012														
150	**Inferred**	242	11,000	304	9,700	398	10,100	895	2,602	**2.67**	0.10	0.22	**162.18**	0.63
200	**Inferred**	186	11,600	344	10,200	399	10,600	932	2,802	**2.15**	0.07	0.17	**141.28**	0.52
250	**Inferred**	148	11,800	375	10,500	407	10,900	961	2,932	**1.75**	0.06	0.14	**122.55**	0.43
300	**Inferred**	119	12,100	400	10,700	414	11,100	983	3,023	**1.44**	0.05	0.12	**105.23**	0.36
350	**Inferred**	92	12,400	422	11,000	422	11,400	1,004	3,080	**1.14**	0.04	0.09	**85.48**	0.28
Zone 3 - May 2012														
150	**Inferred**	95	11,600	300	10,200	396	10,600	971	2,768	**1.11**	0.04	0.09	**63.00**	0.26
200	**Inferred**	89	11,700	310	10,300	400	10,700	989	2,806	**1.03**	0.04	0.09	**60.00**	0.25
250	**Inferred**	71	11,900	330	10,500	410	10,900	1,026	2,902	**0.84**	0.03	0.07	**51.00**	0.20
300	**Inferred**	47	12,400	358	10,900	433	11,300	1,087	3,008	**0.58**	0.02	0.05	**37.00**	0.14
350	**Inferred**	24	13,000	392	11,400	471	11,900	1,184	3,043	**0.31**	0.01	0.03	**21.00**	0.07
All Deposits – Grand Total														
150	**Measured**	143	12,100	303	10,700	432	11,100	978	2,370	**1.72**	0.06	0.14	**95.21**	0.34
150	**Indicated**	308	11,100	253	9,800	411	10,200	899	2,290	**3.42**	0.13	0.28	**171.97**	0.71
150	**Inferred**	559	10,700	264	9,400	384	9,800	867	2,463	**6.00**	0.22	0.49	**325.66**	1.38
150	**Grand Total**	1010	11,000	266	9,700	399	10,100	893	2,397	**11.14**	0.40	0.90	**592.84**	2.42

[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.

Kvanefjeld Ore Reserves Estimate – April 2015

Class	Inventory (Mt)	TREO (ppm)	LREO (ppm)	HREO (ppm)	Y_2O_3 (ppm)	U_3O_8 (ppm)	Zn (ppm)
Proven	43	14,700	13,000	500	1,113	352	2,700
Probable	64	14,000	12,500	490	1,122	368	2,500
Total	**108**	**14,300**	**12,700**	**495**	**1,118**	**362**	**2,600**

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). A pre-feasibility study was finalised in 2012, and a comprehensive feasibility study was completed in 2015 and updated following pilot plant operations in 2016. The studies highlight the potential to develop Kvanefjeld as a long-life, low cost, and large-scale producer of rare earth elements; key enablers to the electrification of transport systems.

GMEL is working closely with major shareholder and strategic partner Shenghe Resources Holding Co Ltd to develop Kvanefjeld as a cornerstone of future rare earth supply. An exploitation (mining) license application for the initial development strategy has been undergoing review by the Greenland Government through the latter part of 2016 and through 2017.

In 2017, GMEL has been undertaking technical work programs with Shenghe Resources Holding Co Ltd that aim to improve the metallurgical performance, simplify the development strategy and infrastructure footprint in Greenland, enhance the cost-structure, and ensure that Kvanefjeld is aligned with downstream processing. In addition, the Company continues its focus on working closely with Greenland's regulatory bodies on the processing of the mining license application, and maintaining regular stakeholder updates.

Dr John Mair
Managing Director
+61 8 9382 2322

Christian Olesen
Rostra Communication
+45 3336 0429

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.

Competent Person Statement – Mineral Resources Ore Reserves and Metallurgy

The information in this report that relates to Mineral Resources is based on information compiled by Mr Robin Simpson, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Simpson is employed by SRK Consulting (UK) Ltd ("SRK"), and was engaged by Greenland Minerals and Energy Ltd on the basis of SRK's normal professional daily rates. SRK has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence. Mr Simpson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Robin Simpson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in the statement that relates to the Ore Reserves Estimate is based on work completed or accepted by Mr Damien Krebs of Greenland Minerals and Energy Ltd and Mr Scott McEwing of SRK Consulting (Australasia) Pty Ltd. The information in this report that relates to metallurgy is based on information compiled by Damien Krebs.

Damien Krebs is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the type of metallurgy and scale of project under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.

Scott McEwing is a Fellow and Chartered Professional of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.

The mineral resource estimate for the Kvanefjeld Project was updated and released in a Company Announcement on February 12th, 2015. The ore reserve estimate was released in a Company Announcement on June 3rd, 2015. There have been no material changes to the resource estimate, or ore reserve since the release of these announcements.