



## September 2016 Quarterly Report

Monday 31<sup>st</sup> October, 2016

### Highlights:

- **Greenland Minerals and Energy Ltd (GMEL) set to commence strategic working relationship with leading rare earth company Shenghe Resources Holding**
- **Shenghe to acquire a 12.5% interest in GMEL, subject to shareholder and Foreign Investment Review Board approval**
- **Shenghe has strong proficiency in all parts of the rare earth industrial chain including mining, beneficiation, metallurgy, downstream processing, and marketing with extensive financial investment background and solid capital strength, thereby making it an optimal strategic partner for the development of Kvanefjeld Project**
- **Greenland formalises status as signatory to international nuclear conventions at the 60<sup>th</sup> IAEA General Conference, held in Vienna in September 2016**
- **Progress continues on Greenland's processing of the Kvanefjeld Mining License Application: main focus during Q3 on key components of the Environmental Impact Assessment with technical reviews by independent expert consultancies**
- **Rare earth industry developments: China's Ministry of Industry and Information Technology (MIIT), announces 13<sup>th</sup> Five Year Plan (2016-2020)**
  - Annual rare earth output reduced to a limit of 140,000 tonnes by 2020.
  - Significant progress on eradicating illegal, unregulated production during previous 5 year plan

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## September 2016 Quarterly Activities

The September Quarter continued a transformative year for GMEL, with the announcement of a subscription agreement and the commencement of a strategic relationship with leading rare earth company Shenghe Resources Holding (Shenghe).

The rare earth sector, by virtue of the extended industrial chain, necessitates that the mining end requires integration with strong downstream processing proficiency to create a strong business. This emphasizes the importance of aligning the Kvanefjeld Project with a strong global industrial partner.

Shenghe has strong competencies across all aspects of the rare earth industrial chain, and has an international customer base with a strong international growth strategy. Subject to shareholder approval, Shenghe, through its subsidiary Le Shan Shenghe Rare Earth Co., Ltd, will become a 12.5% shareholder in GMEL.

Together, GMEL and Shenghe aim to further lower the cost structure of GMEL's 100% owned Kvanefjeld Project, ensure the project is optimally integrated with downstream processing, and ultimately develop the Project as a cornerstone to future international rare earth supply.

Execution of the agreement follows on from a period of extensive due diligence by both GMEL and Shenghe in Greenland, Denmark, Australia and China.

Also during the September Quarter, Greenland formalised its status as a signatory to international nuclear conventions at 60th IAEA General Conference in Vienna. Greenland, filed documents that formalise its status as a signatory in its own right to several important international nuclear conventions essential for Greenland's participation in the global civil uranium industry.

This followed on from the passing of key legislation in both the Greenland and Danish parliaments in the June Quarter to manage the production and export of uranium from Greenland. Uranium will be a by-product from Kvanefjeld, but any production necessitates that all regulatory aspects can be addressed in accordance with international best-practice.

Steady progress continues on the major technical reviews of the Kvanefjeld mining license application. A key area of focus has been the review of key components of the Environmental Impact Assessment (EIA) by expert consultants, on behalf of the Greenland Government.

## **Shenghe Resources Holding Enters Agreement to Acquire 12.5% Interest in GMEL and Commence Strategic Working Relationship**

On September 23<sup>rd</sup>, GMEL announced that it has entered into a Subscription Agreement (SA) with leading rare earth company Shenghe Resources Holding Ltd, and its 99.99% subsidiary Le Shan Shenghe Rare Earth Co., Ltd (Leshan Shenghe). Leshan Shenghe is focussed on rare earth downstream processing.

The two parties commenced a dialogue in late-2015, and recognised a strong alignment of strategy, and complementary strengths at different ends of the rare earth industrial chain. Shenghe's experience and skills will maximise the core strengths of the Kvanefjeld Project ('Project'), which include **scale, processing advantage, and direct shipping access**.

Nowhere else in the world does such a confluence of attributes occur.

The fundamental objective of both parties is to develop the Project as a cornerstone to new supply networks. With the permitting process underway, the partnership with Shenghe will help to ensure that the Project is optimised to integrate with downstream processing, and that customer networks are established. Shenghe's leading technical expertise, processing capacity, and strong international customer base make Shenghe an ideal strategic partner for the Project.

The SA provides for the investment by Leshan Shenghe of \$4.625 million (AUD) for 125 million ordinary shares in GMEL at 3.7 cents/share, subject to shareholder and FIRB approvals, which are to be sought prior to November 30<sup>th</sup>, 2016. The price of 3.7 cents per share represents a 5% discount to the 60-day volume weighted average price (VWAP) as of September 19<sup>th</sup>, 2016.

Shenghe unconditionally and irrevocably guarantees the obligations of Leshan Shenghe under the SA.

Shenghe will have the right to nominate a non-executive director to the board of GMEL, and will have top up rights to maintain a 12.5% position in GMEL.

Once the SA becomes unconditional, both parties will jointly commence technical work programs to further improve the cost-structure of the Kvanefjeld Project, ensure the Project is optimised with respect to downstream rare earth processing, and identify further value add opportunities, including the recovery of additional products. This will be conducted in parallel to GMEL working through the permitting steps for Kvanefjeld that are currently underway in Greenland.

GMEL views the SA and the establishment of a strategic working relationship as a major landmark for both the Company, and future rare earth supply. Given that Shenghe have been assessing rare earth projects globally for a number of years, their participation is a very strong endorsement of the Kvanefjeld project and the company's strategy.

## About Shenghe Resources Holding

**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 the Shanghai Stock Exchange (since 2012) and, as at 20 September, 2016 had 941M shares on issue and a market capitalization of approximately RMB14.3 billion or AUD \$3 billion.

Shenghe has three major shareholders. The Institute of Multipurpose Utilization of Mineral Resources (IMUMR), a state owned scientific research institute specializing in mineral resources, holds just over 20%, Mr Quangen Wang, former engineer of IMUMR holds ~10% and the Sichuan Giastar Enterprise Group, a private company involved in natural resources holds ~8%.

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 international markets. Shenghe is involved at all levels of the rare earth industry, from mining through processing to the production of end products.

### The Shenghe Group;

- **controls domestic sources of rare earth ores and concentrates**
- **controls significant rare earth separation capacity in China**
- **produces rare earth metals and alloys to the highest purities**
- **produces “end use” rare earth products – polishing powders, catalysts, molecular sieves**
- **has an established international customer base for its products**

Significantly, Shenghe also holds Chinese production quotas for the mining and separation/refining of rare earths.

### International Strategy

Shenghe has also commenced the path of international orientation since 2013.

- In 2013 Shenghe established Sheng Kang Ning Mining Investment (SKN) as the platform for overseas investments in rare earths and rare and precious metals.
- In 2015 Shenghe established Shenghe Resources (Singapore) PTE.LTD as the platform for trade and investment.

- In 2016 Shenghe announced the agreement with a Japanese company of acquiring 100% equity in a rare earth metal and separation plant in Vietnam.

Shenghe/SKN has been actively involved in an extensive international search for suitable opportunities to secure supplies of rare earths outside of China, to support its international growth strategy. This has involved an assessment of many of the world's emerging rare earth projects. Shenghe's investment in GMEL is its first investment on an equity level of an overseas listed company since that international search commenced.

For Shenghe, investment in the Kvanefjeld Project secures access to rare earth intermediate products outside of China which are capable of supporting a range of downstream rare earth businesses, facilitating long term growth opportunities.

### **Greenland Formalises Status as Signatory to International Nuclear Conventions at 60<sup>th</sup> IAEA General Conference**

At the 60<sup>th</sup> General Conference of the International Atomic Energy Agency (IAEA), currently underway in Vienna, Greenland, acting on behalf of Denmark, filed documents that formalise its status as a signatory in its own right to several important international nuclear conventions essential for Greenland's participation in the global civil uranium industry.

Greenland was represented by Mr Vittus Qujaukitsoq, Greenland's Minister for Industry, Labour, Trade and Foreign Affairs.

In June, the parliaments of both Greenland and Denmark each adopted legislation to implement uranium export control procedures in accordance with IAEA and EURATOM safeguards reporting systems. This will enable the sale and export of uranium from Kvanefjeld under standard commercial arrangements in the future. Uranium is an important by-product from the Kvanefjeld Project and the development and implementation of export regulations by Greenland and Denmark is a significant milestone in the Company's progress.

### **Kvanefjeld Mining License Application - Processing Update**

In December, 2015, GMEL submitted an exploitation (mining) license application for the Kvanefjeld project to the Greenland Government after years of baseline surveys and scientific analysis. In addition other technical reference documents have also been provided to the Greenland Government at their

specific request. The application included the Feasibility Study (inclusive of the Maritime Safety Study), and Environmental and Social Impact Assessments (EIA, and SIA).

Through the course of 2016, GMEL has also performed a number of additional studies and calculations as requested by the Greenland Government, to bolster specific areas. These relate to technical aspects of the EIA.

The EIA is a very substantive document, drawing on many years of extensive baseline studies, that summarises the existing natural environment and analysing the changes the mining operation will create. There are a number of major contributing studies which are referenced to the EIA document.

These contributing studies have been performed by world-leading independent consultants to ensure the scientific impact is well understood. These studies are referenced by the EIA and each consists of an extensive scientific and engineering evaluation. The independent consultants who contributed major studies to the EIA include:

- Pacific Environment – Air Quality Study
- Orbicon – Hydrology
- Arcadis – Radiation
- Danish Hydraulic Institute – Water
- SGS Laboratories – Tailings and waste rock stability
- AMEC Foster Wheeler – Tailings Dam and water recycling design

### **The EIA Review Process**

The Greenland Government has been rigorous in its review of the EIA by engaging world leading third party environmental consultants to review the EIA. These consultants are based in Denmark and Canada. This approach is aimed to provide confidence to stakeholders that all environmental impacts associated with the project can be effectively managed.

- Greenland Natural Institute
- The Danish Centre for Environment and Energy based at Aarhus University in Denmark.
- Robertson GeoConsultants from Canada
- Canadian Nuclear Safety Commission

The reviews by third party consultants are largely completed with feedback to be provided by the Greenland Government to GMEL. The Company will then incorporate the feedback and update the EIA document accordingly. Once the updated EIA document is accepted, it will then be tabled for a public consultation period. This will allow the local community and stakeholders to learn and understand about the impact of the project, following rigorous independent technical assessment.

GMEL is confident that the findings of the EIA will result in a project that will provide decades of benefits, with rare earths and a range of by-products produced at the highest international environmental standards.

### **Maritime Safety Study**

The Maritime Safety Study examines the impact of the additional ship movements to and from the project site. This study was performed by the Danish shipping company Blue Water Shipping. Feedback has been received from the Greenland Government and the Danish Maritime Authority. No significant shipping issues were identified with the study or the review.

The feedback has been addressed in the second version of the study which will be provided to Greenland Government in November for their approval for the public consultation period.

### **Social Impact Assessment**

Throughout the quarter, GMEL has significantly advanced the SIA reports, addressing many of the comments and suggestions made by the Greenland Government. A regular dialogue between GMEL personnel and Greenland's Ministry for Industry, Trade, and Labour, has allowed this process to advance efficiently. The cooperative approach is to ensure that the SIA is presented in the optimal manner for the public consultation period.

While this process remains ongoing, GMEL is pleased with the meaningful progress being made on these updates. Following the reviews, an updated version of the SIA is expected to be ready for the Government of Greenland in Q4 2016. From this point the public consultation process can be scheduled to commence.

### **Public Consultation Phase**

Once the formal review of the EIA and SIA have been completed and accepted by the Greenland Government, a public consultation phase will be initiated where public feedback will be sought with responses then incorporated into a 'whitepaper'. Following this an Impact Benefit Agreement will be entered into which formalises the commitments made in the SIA. This then feeds into the Exploitation (Mining) Licence documentation.

### **Rare Earth Industry Updates**

Progress in reforming and restructuring the rare earth industry in China continues to meaningfully progress. The impacts of these structural changes along with significantly enhanced regulation will continue to influence global supply networks.

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Recently, China's Ministry of Industry and Information Technology (MIIT), has announced a reduction in annual rare earth production limits to 140,000 tonnes by 2020. This was announced as part of the MIIT's 13<sup>th</sup> Five Year Plan (2016-2020). The limitation reflects the industry consolidation, the ongoing efforts to eradicate illegal (unregulated) production, and heightened environmental standards.

In the past, unregulated mining activities have, over a number of years, caused significant environmental damage in China. The MIIT is looking to limit this damage by better controlling the extent of mining activities and by ensuring that mining activities are efficient and utilize the best available technology.

The MIIT also reported that over the course of the previous plan period a number of illegal operations were closed, over 36,000 tonnes of illegal rare earth products were seized and RMB 230 million in fines/penalties were imposed.

The first significant step in the Chinese Government's management strategy for the rare earth industry was taken in 2014 when China's MIIT issued "Guidelines for formation of large enterprise groups of rare earth". These guidelines legally mandated the consolidation of China's rare earth industry into six large State-Owned-Enterprise (SOE) groups. As reported in the Company's last quarterly report this consolidation process is now complete.

The structural changes to the domestic Chinese rare earth industry provide further context for Shenghe's investment in GMEL and their interest in the Kvanefjeld Project. It marks the beginning of greater integration between the Chinese rare earth industry with top tier international projects to establish new global rare earth supply networks.

-ENDS-

## 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. The rigorously developed process route 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, Y), 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 windpower. In recent years growth in rare earth demand has been limited by end-user concerns over pricing instability and surety of supply.

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.

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## 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 conducted 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.

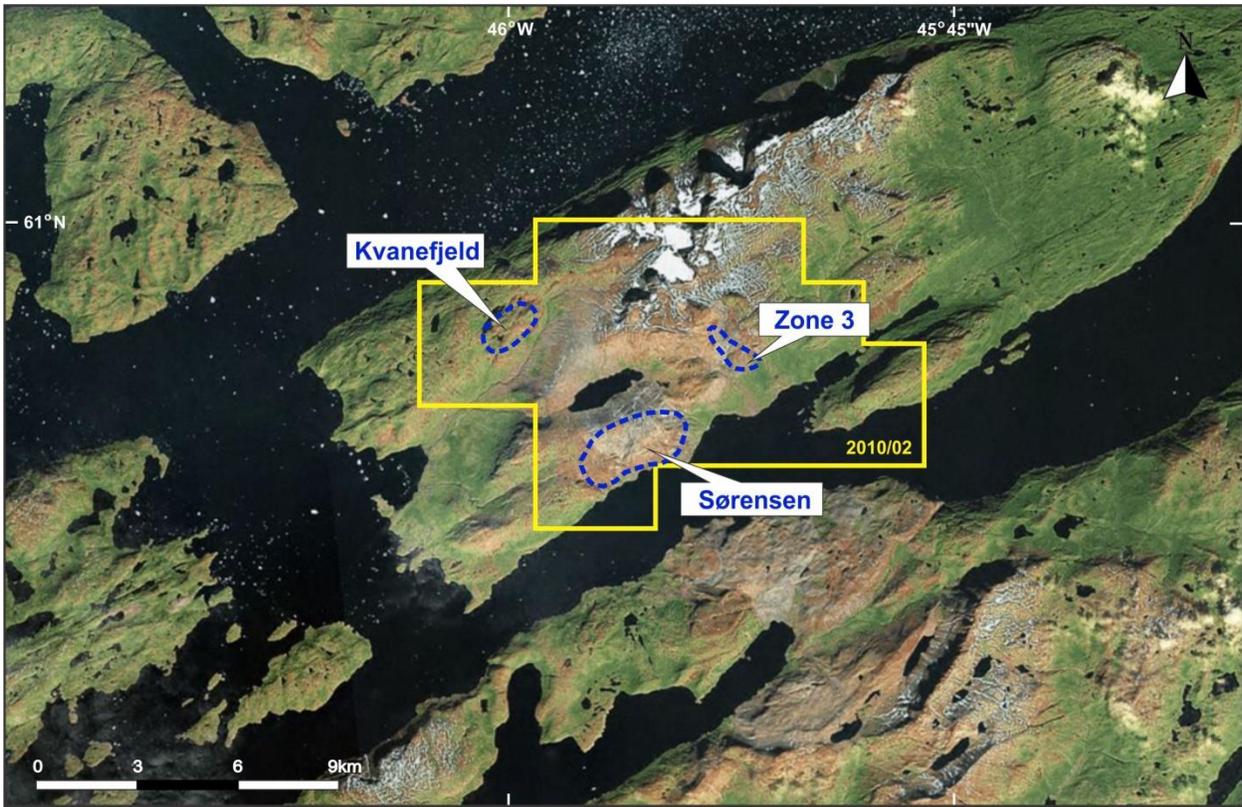
### *Location*

The exploration lease covers an area of 80km<sup>2</sup> 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 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 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 30 <sup>th</sup> September, 2016	
Total Ordinary shares	874,120,060
Quoted options exercisable at \$0.08 on or before 30 September 2018	187,027,713
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

Please visit the company's website at [www.ggg.gl](http://www.ggg.gl) where recent news articles, commentary, and company reports can be viewed.

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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 (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	Classification	M tonnes Mt	TREO <sup>2</sup> ppm	U <sub>3</sub> O <sub>8</sub> ppm	LREO ppm	HREO ppm	REO ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Zn ppm	TREO Mt	HREO Mt	Y <sub>2</sub> O <sub>3</sub> Mt	U <sub>3</sub> O <sub>8</sub> M lbs	Zn Mt
<b>Kvanefjeld - February 2015</b>														
150	Measured	143	12,100	303	10,700	432	11,100	978	2,370	<b>1.72</b>	0.06	0.14	<b>95.21</b>	0.34
150	Indicated	308	11,100	253	9,800	411	10,200	899	2,290	<b>3.42</b>	0.13	0.28	<b>171.97</b>	0.71
150	Inferred	222	10,000	205	8,800	365	9,200	793	2,180	<b>2.22</b>	0.08	0.18	<b>100.45</b>	0.48
150	<b>Total</b>	<b>673</b>	<b>10,900</b>	<b>248</b>	<b>9,600</b>	<b>400</b>	<b>10,000</b>	<b>881</b>	<b>2,270</b>	<b>7.34</b>	<b>0.27</b>	<b>0.59</b>	<b>368.02</b>	<b>1.53</b>
200	Measured	111	12,900	341	11,400	454	11,800	1,048	2,460	<b>1.43</b>	0.05	0.12	<b>83.19</b>	0.27
200	Indicated	172	12,300	318	10,900	416	11,300	970	2,510	<b>2.11</b>	0.07	0.17	<b>120.44</b>	0.43
200	Inferred	86	10,900	256	9,700	339	10,000	804	2,500	<b>0.94</b>	0.03	0.07	<b>48.55</b>	0.22
200	<b>Total</b>	<b>368</b>	<b>12,100</b>	<b>310</b>	<b>10,700</b>	<b>409</b>	<b>11,200</b>	<b>955</b>	<b>2,490</b>	<b>4.46</b>	<b>0.15</b>	<b>0.35</b>	<b>251.83</b>	<b>0.92</b>
250	Measured	93	13,300	363	11,800	474	12,200	1,105	2,480	<b>1.24</b>	0.04	0.10	<b>74.56</b>	0.23
250	Indicated	134	12,800	345	11,300	437	11,700	1,027	2,520	<b>1.72</b>	0.06	0.14	<b>101.92</b>	0.34
250	Inferred	34	12,000	306	10,800	356	11,100	869	2,650	<b>0.41</b>	0.01	0.03	<b>22.91</b>	0.09
250	<b>Total</b>	<b>261</b>	<b>12,900</b>	<b>346</b>	<b>11,400</b>	<b>440</b>	<b>11,800</b>	<b>1,034</b>	<b>2,520</b>	<b>3.37</b>	<b>0.11</b>	<b>0.27</b>	<b>199.18</b>	<b>0.66</b>
300	Measured	78	13,700	379	12,000	493	12,500	1,153	2,500	<b>1.07</b>	0.04	0.09	<b>65.39</b>	0.20
300	Indicated	100	13,300	368	11,700	465	12,200	1,095	2,540	<b>1.34</b>	0.05	0.11	<b>81.52</b>	0.26
300	Inferred	15	13,200	353	11,800	391	12,200	955	2,620	<b>0.20</b>	0.01	0.01	<b>11.96</b>	0.04
300	<b>Total</b>	<b>194</b>	<b>13,400</b>	<b>371</b>	<b>11,900</b>	<b>471</b>	<b>12,300</b>	<b>1,107</b>	<b>2,530</b>	<b>2.60</b>	<b>0.09</b>	<b>0.21</b>	<b>158.77</b>	<b>0.49</b>
350	Measured	54	14,100	403	12,400	518	12,900	1,219	2,550	<b>0.76</b>	0.03	0.07	<b>47.59</b>	0.14
350	Indicated	63	13,900	394	12,200	505	12,700	1,191	2,580	<b>0.87</b>	0.03	0.07	<b>54.30</b>	0.16
350	Inferred	6	13,900	392	12,500	424	12,900	1,037	2,650	<b>0.09</b>	0.00	0.01	<b>5.51</b>	0.02
350	<b>Total</b>	<b>122</b>	<b>14,000</b>	<b>398</b>	<b>12,300</b>	<b>506</b>	<b>12,800</b>	<b>1,195</b>	<b>2,570</b>	<b>1.71</b>	<b>0.06</b>	<b>0.15</b>	<b>107.45</b>	<b>0.31</b>

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

Cut-off (U <sub>3</sub> O <sub>8</sub> ppm) <sup>1</sup>	Classification	Multi-Element Resources Classification, Tonnage and Grade								Contained Metal				
		M tonnes Mt	TREO <sup>2</sup> ppm	U <sub>3</sub> O <sub>8</sub> ppm	LREO ppm	HREO ppm	REO ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Zn ppm	TREO Mt	HREO Mt	Y <sub>2</sub> O <sub>3</sub> Mt	U <sub>3</sub> O <sub>8</sub> M lbs	Zn Mt
<b>Sørensen - March 2012</b>														
150	Inferred	242	11,000	304	9,700	398	10,100	895	2,602	<b>2.67</b>	0.10	0.22	<b>162.18</b>	0.63
200	Inferred	186	11,600	344	10,200	399	10,600	932	2,802	<b>2.15</b>	0.07	0.17	<b>141.28</b>	0.52
250	Inferred	148	11,800	375	10,500	407	10,900	961	2,932	<b>1.75</b>	0.06	0.14	<b>122.55</b>	0.43
300	Inferred	119	12,100	400	10,700	414	11,100	983	3,023	<b>1.44</b>	0.05	0.12	<b>105.23</b>	0.36
350	Inferred	92	12,400	422	11,000	422	11,400	1,004	3,080	<b>1.14</b>	0.04	0.09	<b>85.48</b>	0.28
<b>Zone 3 - May 2012</b>														
150	Inferred	95	11,600	300	10,200	396	10,600	971	2,768	<b>1.11</b>	0.04	0.09	<b>63.00</b>	0.26
200	Inferred	89	11,700	310	10,300	400	10,700	989	2,806	<b>1.03</b>	0.04	0.09	<b>60.00</b>	0.25
250	Inferred	71	11,900	330	10,500	410	10,900	1,026	2,902	<b>0.84</b>	0.03	0.07	<b>51.00</b>	0.20
300	Inferred	47	12,400	358	10,900	433	11,300	1,087	3,008	<b>0.58</b>	0.02	0.05	<b>37.00</b>	0.14
350	Inferred	24	13,000	392	11,400	471	11,900	1,184	3,043	<b>0.31</b>	0.01	0.03	<b>21.00</b>	0.07
<b>All Deposits – Grand Total</b>														
150	Measured	143	12,100	303	10,700	432	11,100	978	2,370	<b>1.72</b>	0.06	0.14	<b>95.21</b>	0.34
150	Indicated	308	11,100	253	9,800	411	10,200	899	2,290	<b>3.42</b>	0.13	0.28	<b>171.97</b>	0.71
150	Inferred	559	10,700	264	9,400	384	9,800	867	2,463	<b>6.00</b>	0.22	0.49	<b>325.66</b>	1.38
150	<b>Grand Total</b>	<b>1010</b>	<b>11,000</b>	<b>266</b>	<b>9,700</b>	<b>399</b>	<b>10,100</b>	<b>893</b>	<b>2,397</b>	<b>11.14</b>	<b>0.40</b>	<b>0.90</b>	<b>592.84</b>	<b>2.42</b>

<sup>1</sup>There is greater coverage of assays for uranium than other elements owing to historic spectral assays. U<sub>3</sub>O<sub>8</sub> has therefore been used to define the cutoff grades to maximise the confidence in the resource calculations.

<sup>2</sup>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.

-ENDS-

## 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 May, 2015. The studies demonstrate the potential for a large-scale, long-life, cost-competitive, multi-element mining operation. An exploitation (mining) license application for the initial development strategy was completed in 2015.

In 2016, GMEL is focussed on working closely with Greenland's regulatory bodies on the processing of a mining license application, and maintaining regular stakeholder updates. A greater emphasis will also be placed on commercial development and progressing the dialogue with strategic partners. In addition, the Company will look to further value add initiatives afforded by the extensive resource inventory and prospective license holding.

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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.

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### **Competent Person Statement – Mineral Resources and Ore Reserves**

*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.*

*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 12<sup>th</sup>, 2015. The ore reserve estimate was released in a Company Announcement on June 3<sup>rd</sup>, 2015. There have been no material changes to the resource estimate, or ore reserve since the release of these announcements.