Ionic Rare Earths Limited: Advances Rare Earth Supply Chain Collaboration

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Melbourne, Australia - The Board of Ionic Rare Earths Ltd. (ASX:IXR) (OTCMKTS:IXRRF) announces it has signed a non-binding Memorandum of Understanding (MOU) with UK based metals and alloy manufacturer Less Common Metals Limited ("LCM") to work collaboratively on building a Western supply chain for rare earth permanent magnet (REPM) production.

UK-based LCM is a world leader in the manufacture and supply of complex alloy systems and metals, offering an innovative and highly flexible approach to a wide range of material requirements. LCM is currently the only commercial rare earth metal and alloy producer outside of China or Chinese associated plants in SE Asia with the existing capability to accept all products that IonicRE aims to produce through recycling, plus provider of feed for IonicRE's recycling process.

Under the MOU, both IonicRE and LCM ("the Parties") aim to formalise definitive agreements to collaborate on the supply of materials for high purity rare earth oxides (REOs). The MOU also encompasses additional collaboration with the governments of the UK and other international entities to pursue mutual incentives.

In September 2023, IonicRE through its 100% owned UK based subsidiary, Ionic Technologies International Limited ("Ionic Technologies"), secured a collaboration partnership with LCM and Ford Technologies (Ford) to develop a UK supply chain for recycled magnet rare earths to magnets, obtaining UK government support through grant funding.

Ionic Technologies has developed rare earth element separation and refining technology and applied this to the recovery and separation of individual rare earths from spent permanent magnets and waste materials in the supply chain. The patented technology offers first mover capability for individual magnet rare earth recycling, separating 99.9% plus magnet rare earth oxides, specifically Nd, Pr, Dy and Tb.

In support of the collaboration with LCM and Ford, in July 2024, the first supply of separated NdPr oxide (NdPr)2O3, dysprosium oxide (Dy2O3) and terbium oxide (Tb4O7) will be supplied to LCM, who will convert to metals first, then alloys, prior to magnet manufacture (through a European based subcontractor). Finally, the magnets produced from the recycled REOs will be delivered to Ford's EV drive train production facility in Halewood, UK, as part of its development of EV production.

The majority of Ford's European Union EV production is expected to come from the Halewood facility, with plans to produce close to half a million units per annum by 2026 in line with growing EV demand.

Ford will test and analyse the performance of magnets provided through the project, to prove the efficacy of high specification magnets containing rare earth elements (REEs) of recycled origin from Ionic Technologies.

Each stage of the process from magnet recycling to EV testing will generate waste (magnets and swarf), including the magnets used in Ford's EV motors. Ionic Technologies will recycle this material, thus completing a totally circular rare earth supply chain within the UK.

Ionic Rare Earths' Executive Chairman, Mr Brett Lynch commented: "We are delighted to progress the relationship further with Less Common Metals and work together on a much more expanded ambition to build resilience in new rare earth supply chains.

"LCM's decades-long experience and its innovative approach make it a valuable partner and we look forward to progressing this partnership further as we build a Western rare earths supply chain from recycled magnets.

"This relationship provides a key unlock from our high purity magnet REOs now to the metals and alloys that magnet manufacturing requires, and collectively we now have a much stronger position working together with a common goal.

"IonicRE and our partners are focused on taking the lead in developing a secure and traceable critical minerals supply chain in the UK and further abroad, powering our decarbonised and electrified future."

Less Common Metals Chairman, Mr Grant Smith said: "LCM is pleased to expand our relationship with Ionic

Rare Earths and their recycling technology with a view to further developing the current UK supply chain and with an eye to future developments in north America."

"LCM has found IonicRE's recycling technology very capable and with sufficient flexibility to assist LCM in the recycling of a wide range of materials and products including materials sourced from outside of the rare earth magnet field and we have been delighted with our progress to date."

IonicRE's capability in processing a wide range of materials is important to LCM, for during LCM's 32-year history we have developed a wide-ranging customer base not only in the rare earth magnet industry but also in the super alloy and hydrogen storage industries, so it is important for LCM to be able to offer a recycling capability to our whole customer base. We look forward to working with IonicRE as we develop all our markets and expand our mutual capabilities."

Both IonicRE and LCM recognise the importance of promoting environmentally responsible, safe, and sustainable practices in all aspects of their projects and operations and have committed to the highest industry standards in safety, environmental protection, and sustainability, including IRMA or equivalent standards.

AGREEMENT DETAILS

The agreement outlines a number of areas of mutual interest where IonicRE and LCM have agreed to work collaboratively to build a more resilient magnet rare earth supply chain.

The MOU outlines the preliminary terms and intentions between the Parties for the following agreements:

1. Collaboration on swarf/magnet recycling to deliver high purity oxides;

2. Collaboration on the production of other alloys (including SmCo and Sc) from high purity oxides;

3. Development of domestic and international supply chain activity;

4. Collaborative engagement with UK and other international governments to further mutual interests; and

5. Pursue opportunities in USA for magnet recycling.

The Parties aim to formalise definitive agreements pertaining to collaborative engagement on the supply of materials for high purity oxides under this MOU. Furthermore, this MOU encompasses additional collaboration with the governments of the UK and other international entities to pursue mutual incentives.

The parties to this MOU recognise the importance of promoting environmentally responsible, safe, and sustainable practices in all aspects of their projects and operations. They commit to adhering to the highest industry standards in safety, environmental protection, and other sustainability topics, such as IRMA or equivalent standards.

The term of this MOU will be 12 months. The Parties expect to negotiate respective definitive agreements to replace this MOU before that date in good faith.

About Less Common Metals

Less Common Metals Limited is a privately-owned company and world leader in the manufacture and supply of rare earth-based metals and alloys. Main markets served comprise the global permanent magnet industry, hydrogen storage alloys, specialist master alloy consumers and producers of functional materials based on rare earth-containing alloys. With considerable experience in the production and characterisation of materials to tight compositional tolerances and controlled microstructures, LCM offers an innovative and highly flexible approach to a wide range of material requirements.

Find out more at https://lesscommonmetals.com

Photograph of IXR and LCM representatives shows Mr Thomas Kelly (Ionic Technologies, Operations Director), Mr Brett Lynch (IonicRE, Chairman), Mr Grant Smith (LCM, Chairman), Mr Tim Harrison (IonicRE, Managing Director), Mr Aaron Riley (LCM, General Manager), Mr Mark Thompson (LCM, Commercial Director), Mr Lynden Polonsky (IonicRE, Chief Development Officer).

*To view images, please visit:
https://abnnewswire.net/lnk/77LRNQ2F

About Ionic Rare Earths Limited:

Ionic Rare Earths Ltd. (ASX:IXR) (OTCMKTS:IXRRF) is focused on developing its flagship Makuutu Rare Earths Project in Uganda into a significant long life, low-cost, supplier of high-value critical and heavy rare earths.

Makuutu is an advanced-stage, ionic adsorption clay-hosted project highlighted by near-surface mineralisation, significant exploration upside, excellent metallurgical characteristics and access to tier-one infrastructure.

The ionic adsorption clay-hosted geology at Makuutu is similar to major rare earths projects in Southern China, which are responsible for the majority of global supply of low cost heavy and critical rare earths, specifically the high value magnet metals (Dysprosium and Terbium) Heavy Rare Earths (>98% originating from ionic clays). Metallurgical testing at Makuutu has returned excellent recovery rates, which provide multiple avenues for a simple process route.

Makuutu is well-supported by tier-one existing infrastructure which includes access to major highways, roads, power, water and a professional workforce.

Rare Earths will play a critical role in the future of clean energy. Rare Earths are a key ingredient in the permanent magnets found in wind turbines and electric vehicles.

IonicRE is led by an experienced and proven team, who have the capabilities to deliver Makuutu into production and realise value for all stakeholders.

Source:
Ionic Rare Earths Ltd.

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