



ASX Announcement

9 April 2025

CHINA EXPORT CONTROLS PUT SPOTLIGHT ON MAKUUTU HEAVY RARE EARTHS

Shovel-ready project offers fast-track to ex-China supply

- **China's move to restrict more exports of medium and heavy rare earths increases focus on new supply sources;**
- **Makuutu Heavy Rare Earth project currently the most advanced Ionic Adsorption Clay (IAC) project globally with product not committed to China;**
- **Makuutu's MREC product basket is one of the highest heavy rare earth content identified to date, being approximately 45% medium and heavy rare earths; and**
- **IonicRE continuing financing discussions with members of the Mineral Security Partnership together with potential offtakers on speeding development of shovel-ready project.**

Ionic Rare Earths Limited ("IonicRE" or the "Company") (ASX: IXR) is advancing discussions on the development of its Makuutu Heavy Rare Earth Project as China's latest rare earth export restrictions increase focus on the necessity of a Western supply chain.

Located in Uganda, IonicRE's Makuutu Rare Earths Project ranks amongst the world's largest and most advanced ionic adsorption clay (IAC) deposits. Added to the Mineral Security Partnership (MSP) in 2023, Makuutu is considered a globally strategic resource for the near term, offering a low capital development and facilitating long-term supply of magnet and heavy rare earth oxides (REO's).

The Makuutu deposit comprises nine licences covering around 300 square kilometres, located 120 km east of Kampala. The defined mineralisation stretches 37 km long and is situated near high-quality infrastructure. It contains a high proportion of magnet and heavy rare earths, including a near-perfect split of magnet rare earths Nd, Pr, Dy and Tb, required for developing the high intensity permanent magnets required for EVs and offshore wind turbines.

A mining licence was awarded in January 2024 for the central Makuutu tenement, representing the first large-scale mining licence issued in Uganda under the 2022 Mining Act. First production of Mixed Rare Earth Carbonate (MREC) was achieved during the March quarter 2024 at the Makuutu Demonstration Plant, fostering engagement with potential offtakers and strategic partners.



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Makuutu's membership of the MSP highlights the strategic importance of the project as a new source of magnet and heavy rare earth elements. IonicRE has continued several financing discussions with MSP partners.

Makuutu is being developed by Rwenzori Rare Metals Limited ("RRM"), a Ugandan private company which owns 100% of the Makuutu Project. IonicRE is a 60% owner of RRM, and previously signed a conditional share purchase agreement to acquire an additional 34% interest in the strategic Makuutu Rare Earths Project, taking its ownership to 94% on completion.

On Friday, 4 April 2024, China's Ministry of Commerce and General Administration of Customs announced new export restrictions on medium and heavy rare earths, including dysprosium, gadolinium, lutetium, samarium, scandium, terbium and yttrium-related items. These add to previous export controls on antimony, gallium and germanium and the technology used to make rare earth magnets.

Importantly, the Makuutu MREC product basket announced in IonicRE's Definitive Feasibility Study released in March 2023 (refer Figure 1) demonstrated a basket rich in medium and heavy REOs, notably able to help offset the elements targeted in the control restrictions.

Makuutu Stage 1 Product Basket, by composition

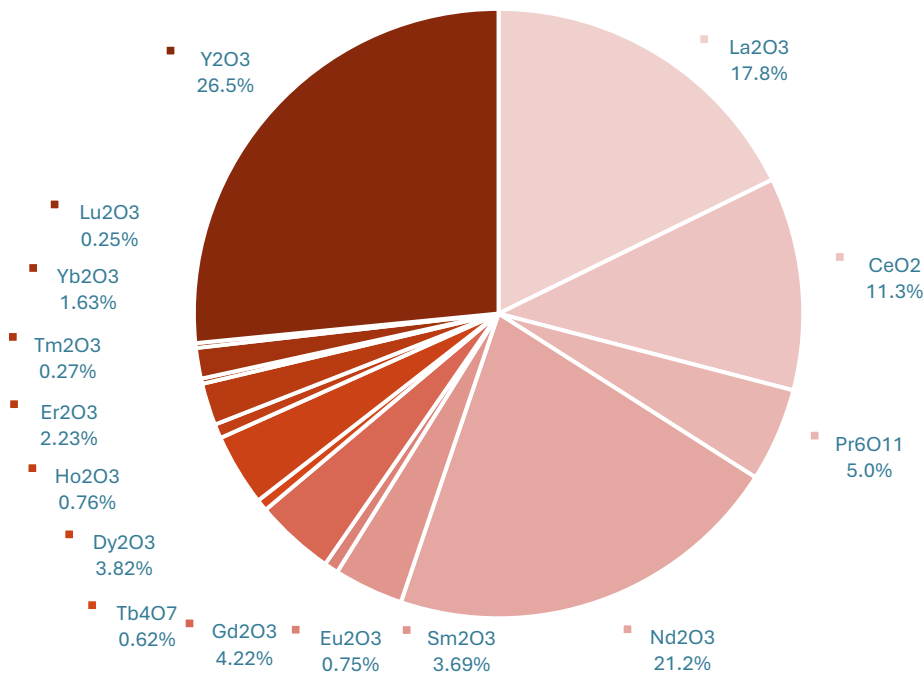


Figure 1: Makuutu Stage 1 REO product basket, excluding Sc₂O₃ (note rounding applied).

IonicRE Managing Director, Tim Harrison commented: "The opportunity for Makuutu is shown by the fact that more than 95% of the world's supply of heavy REOs is from declining reserves of IACs in southern China and Myanmar. The clays of Makuutu present a low capital mining, extraction and processing opportunity and are the most readily available global sources of heavy REOs."

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“We have been actively progressing talks with members of the MSP and with the current focus on securing ex-China supply see an enormous opportunity to find the right project partners for development of this key asset.”

China produces around 90% of the world’s rare earths, and approximately 98% of the world’s medium and heavy rare earths. Its latest export curbs further increase Beijing’s dominance over metals key to clean energy, defence and advanced manufacturing. Currently, there is only one HREE (heavy rare earth element) operation located outside of China, Myanmar and Laos, the Serra Verde mine in Brazil, which exports MREC to south-east Asia for processing within the Chinese supply chain.

The administration of U.S. President Donald Trump has announced an ‘Executive Order’ aimed at increasing U.S. domestic production of critical minerals, including rare earths, given the U.S. has only one operating rare earth mine and is dependent on imports for 80% of its supply.

In Europe, the European Union has published a list of ‘Strategic Projects’ aiming to ensure European extraction, processing and recycling of strategic raw materials meets 10%, 40% and 25% of EU demand by 2030, respectively.

“There can be no defence industry without rare earths, which are used in our radars, sonars and targeting systems - and for which, I would remind you, we are 100% dependent on refined Chinese materials,” EU industry commissioner Stephane Sejourne was quoted saying.

Meanwhile in Africa, the United States and Democratic Republic of Congo are reportedly in talks over a minerals agreement, according to media reports. This follows U.S. interest in securing rare earths and critical minerals from jurisdictions including Ukraine and Greenland.

IonicRE Executive Chairman, Brett Lynch said: *“The Western world has an immediate need for rare earths for its defence and renewables sectors, yet these critical minerals are rapidly becoming unavailable due to China’s export controls.*

“Makuutu has the benefit of being fully permitted, with one of the highest baskets globally of heavy REEs, is shovel-ready and has been progressed with a clear focus on benefitting the local community and protecting the environment.”

He added: “IonicRE has the potential to become an early mover in heavy rare earths supply with the Makuutu project, and this is now coming into fruition as a new source of long-term secure supply. In addition to this, we are focused on the opportunity with Ionic Technologies’ magnet recycling technology, a faster solution in the short term for dysprosium and terbium that only Belfast can provide for the Western world’s national security needs.”

About Ionic Technologies

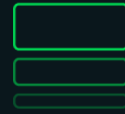
Ionic Technologies has developed separation and refining technology that can be applied to the recycling and refining of individual magnet rare earths from used permanent (NdFeB) magnets.

Our hydrometallurgical process is able to deliver high purity separated magnet rare earth oxides, independent of variability in composition of magnet feedstock.

Ionic Technologies is 100% owned by Australian rare earth resources company **Ionic Rare Earths Limited** (ASX: IXR).

Intake flexibility

Unlike other recycling processes, our technology can recycle any form of mixed waste magnets and production swarf regardless of type, age or coatings. We are not reliant on a single feedstock stream.



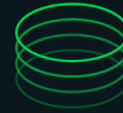
Magnet crushing / grinding



Digestion



Separate base metals (Fe, Mn, Al, Ni, Cu, B)



Nd, Pr, Dy, Tb solvent separation (15 stages)



Individual oxides precipitation

Figure 2: Ionic Technologies technology overview.

For more information about IonicRE and its operations, please visit www.ionicre.com.

Authorised for release by the Board.

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About Ionic Rare Earths Ltd

Ionic Rare Earths Limited (ASX: IXR or IonicRE) is an emerging miner, refiner and recycler of sustainable and traceable magnet and heavy rare earths needed to develop net-zero carbon technologies.

Ionic Technologies International Limited ("Ionic Technologies"), a 100% owned UK subsidiary, has developed processes for the separation and recovery of rare earth elements (REE) from mining ore concentrates and recycled permanent magnets. Ionic Technologies is focusing on the commercialisation of the technology to achieve near complete extraction from end of life / spent

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magnets and waste (swarf) to high value, separated and traceable magnet rare earth products with grades exceeding 99.5% rare earth oxide (REO).

In June 2023, Ionic Technologies announced initial production of high purity magnet REOs from its newly commissioned Demonstration Plant and moved to continuous production in March 2024, providing a first mover advantage in the industrial elemental extraction of REEs from recycling. In September 2023, Ionic Technologies announced collaboration partnerships with Ford Technologies, Less Common Metals (LCM) and the British Geological Survey (BGS) to build a domestic UK supply chain, from recycled REOs to metals, alloys and magnets and supplying UK based electric vehicles (EV) manufacturing, with potential to replicate across other key markets. Ionic Technologies gained further UK Government support in September 2024, via its CLIMATES funding programme to demonstrate a circular supply chain for pre-consumer NdFeB magnet scrap (swarf) in partnership with LCM and Vacuumschmelze. The business also benefited from support from the UK Government to develop magnet demagnetisation and comminution processes in partnership with Materials Processing Institute (MPI) and Swansea University.

In November 2024, IonicRE released a Feasibility Study showing the strong potential for a profitable and unique commercial REO manufacturing facility in Belfast, UK, recycling pre-consumer rare earth magnet scrap and end-of-life magnets, delivering sovereign capability to the UK and supporting regional investment in Northern Ireland.

The Makuutu Rare Earths Project in Uganda, 60% owned by IonicRE, moving to 94% ownership) is well-supported by existing tier-one infrastructure and is on track to become a long-life, low Capex, scalable and sustainable supplier of high-value magnet and heavy REO. In March 2023, IonicRE announced a positive stage 1 Definitive Feasibility Study (DFS) for the first of six tenements to progress to a mining licence, which was awarded in January 2024. Makuutu is now producing mixed rare earth carbonate (MREC) from a Demonstration Plant on site to advance offtake negotiations.

IonicRE has also executed a transformational 50/50 joint venture refinery and magnet recycling facility in Brazil with Viridis Mining and Minerals Limited (ASX: VMM) to separate high value magnet and heavy rare earths from the Colossus Project's full spectrum of REOs.

This integrated strategy completes the circular economy of sustainable and traceable magnet and heavy rare earth products needed to supply applications critical to EVs, offshore wind turbines, communication, and key defence initiatives.

For more information about IonicRE and its operations, please visit www.ionicre.com.

Forward Looking Statements

This announcement has been prepared by Ionic Rare Earths Limited and may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Ionic Rare Earths Limited. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Ionic Rare Earths Limited does not undertake any obligation to update

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or revise any information or any of the forward-looking statements in this document or any changes in events, conditions, or circumstances on which any such forward looking statement is based.

References to Previous ASX Releases

- *December Quarterly Activities & Cash Flow Report – 31 January 2025*
- *Makuutu Mineral Resource Estimate expanded – 15 May 2024*
- *First Mixed Rare Earth carbonate produced at Makuutu – 13 March 2024*
- *Mining Licence signed for Makuutu Heavy Rare Earth Project – 18 January 2024*
- *Makuutu Definitive Feasibility Study – 20 March 2023*

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters continue to apply and have not materially changed.