ionic
rare earths

ASX: IXR

OTC: IXRRF

Annual General Meeting

28 November 2025

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Competent Person Statement

Information in this report that relates to previously reported Exploration Targets and Exploration Results has been crossed-referenced in this report to the date that it was originally reported to ASX. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

The information in this report that relates to Mineral Resources for the Makuutu Rare Earths deposit was first released to the ASX on 15 May 2024 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

The information in this report that relates to Ore Reserves, Production Targets or forecast financial information derived from production the production target, for the Makuutu Rare Earths deposit, which was first released to the ASX on 20 March 2023 and is available to view on www.asx.com.au. Ionic Rare Earths Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates, Production Targets or forecast financial estimates in the announcement continue to apply and have not materially changed.

ionic rare earths

IonicRE's vision is to create a resilient, fully integrated, Western rare earth supply chain starting with magnet recycling

- IonicRE, via 100% owned UK subsidiary Ionic Technologies, has developed a world leading recycling technology to produce separated magnet REOs – NdPr, Dy and Tb – in addition to separating all REEs from primary MREC feed (refinery technology)
- Recycling is the fastest and lowest risk path to secure rare earths supply for the western world
- IonicRE's technology can hyperscale → plans well developed for recycling plants in the US, Europe, Brazil, Asia with key industry and government support
- Future growth exposure through refined, separated REOs via our Viridion Joint Venture and Makuutu Heavy Rare Earth Project

Recycling is the fastest path to supply chain independence from China in magnet REO production – fully circular, green, integrated, low risk, and low CAPEX

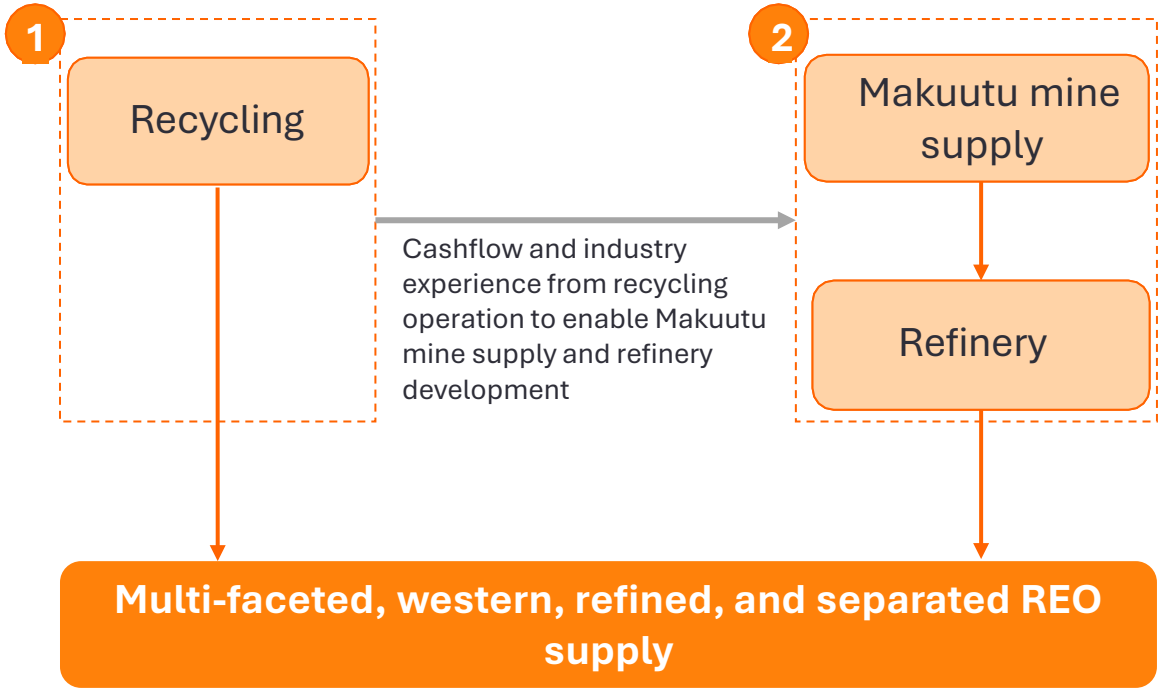
Ionic Rare Earth's vision to support Western defence and industrial demand for rare earths

Supply new defence and industrial rare earth needs while reducing dependence on China

Creating Vertically Integrated and Independent Western Supply Chain

Short-term: Supply for Western defence demand

Medium - long term: Supply for Western defence and industrial demand



1. RECYCLING

Capability to fully supply Western Defence demand

- Producing light and heavy rare earth oxides today
- Partnership with several OEMs
- Proven and scalable technology that can be adapted for Western commercial facilities, including the US
- Capable of supplying 111 tpa of Dy and 39 tpa of Tb by 2032, representing 17% and 24% of the North American demand respectively[1]

2. MAKUUTU MINE SUPPLY AND REFINING

Capability to supply US industrial demand and growing US defence demand

- Strategically positioned and only western ionic clay deposit poised for near-term development[2]
- Supply offtake from Makuutu (60% IXR interest) can support US based large scale refinery
- Capable of supplying 921 tpa of Y, 132 tpa of Dy, 21 tpa of Tb by 2032, representing >100%, 21%, and 13% of the North American demand respectively[1]

IXR'S DIFFERENTIATING FACTORS

- Patented, proven, and operational recycling technology
- Zero reliance on China
- Potential to create circular supply chain through Makuutu

1. IonicRE intends, subject to financing, to establish several magnet recycling facilities across the USA, to satisfy US domestic requirements for HREOs, namely dysprosium oxide (Dy2O3) and terbium oxide (Tb4O7). The inclusion of the Makuutu Project with a US National Solution provides long term scope for increased HREO supply and is subject to financing. 2. Makuutu is the only current mine permitted, development ready IAC project globally with product not committed to Chinese offtake. This creates a strategic opportunity for near term supply to a Western supply chain.

Sustainably Sourcing Magnet and Heavy Rare Earths for the New Economy

Upcycling for the Next Cycle

ionic rare earths

ionic rare earths

ionic technologies

Leading Magnet Recycling and the Circular Economy of Rare Earths

Belfast now first producer of recycled magnet REOs in Western world

Ionic Rare Earths subsidiary Ionic Technologies, is the only western recycler producing separated and refined magnet rare earth oxides today → substantial inbound demand

Ionic Technologies has developed patented recycling technology, ..

Ionic Technologies is a rare earth recycler with patented technology that separates and refines individual rare earths from spent permanent magnets and magnetic swarf

Patented Technology

Spent Magnets

Magnetic Swarf

Solvent separation

Individual rare earth oxides of purity >99.5%

Light REE		Heavy REE	
60 Nd Neodymium	59 Pr Praseodymium	66 Dy Dysprosium	65 Tb Terbium

Capable of producing other heavy rare earths based on buyer demand and available feedstock

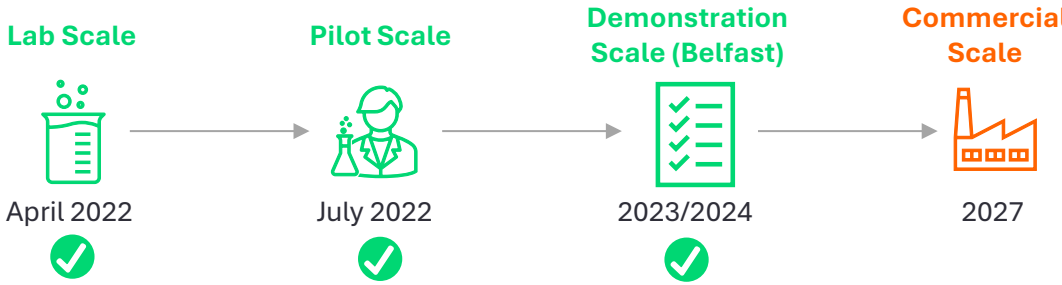
+

62 Sm Samarium

64 Gd Gadolinium

67 Ho Holmium

...has progressed from lab scale to a producing demonstration plant...



...and is the only western recycler producing separated and refined REOs

- Producing demonstration plant
- Separating and refining heavy rare earths today
- Industry Partnerships with leading OEMs
- No dependence on China
- Definitive feasibility study completed
- Ability to vertically integrate

creem
CircularReeconomy

DRIVE 35 Collaborate

- ✓ Commenced 01 September 2025
- ✓ 36 Months Project
- ✓ £11million Project
- ✓ Leading Collaborate project, part of the UK Government's DRIVE35 launch
- ✓ Partners Ionic Technologies with UK industry leaders at each stage of a circular REE supply chain
- ✓ Quantifies/reduces CO_2 and costs
- ✓ Supports renewables and defence businesses
- ✓ Compliments UK's existing REE capacity

Department for Business & Trade · ADVANCED PROPULSION CENTRE UK · BGS British Geological Survey · emr · Ford · ionic technologies · LCM less common metals · WRIGHT

Ionic Rare Earths and US Strategic Metals MOU to fast-track magnet and heavy REO production in the USA via magnet recycling, refining

- MOU announced 10 Nov 2025, outlines collaboration on development of vertically integrated, multi-metallic rare earths production from recycling at USSM's 1,800 acre (728.4 hectare) fully permitted site in Missouri, USA
- Both companies to pursue opportunities for strategic funding, technology development and supply chain collaboration consistent with U.S.-Australia critical minerals cooperative framework
- IonicRE to provide patented rare earth permanent magnet recycling technology, focused on rapid production of magnet rare earth oxides (REOs) from Neodymium-Iron-Boron (NdFeB) and Samarium-Cobalt (SmCo) recycling capacity, with future potential expansion to include a range of magnet and heavy rare earths from mixed rare earth carbonate (MREC)

ionic rare earths + US STRATEGIC METALS

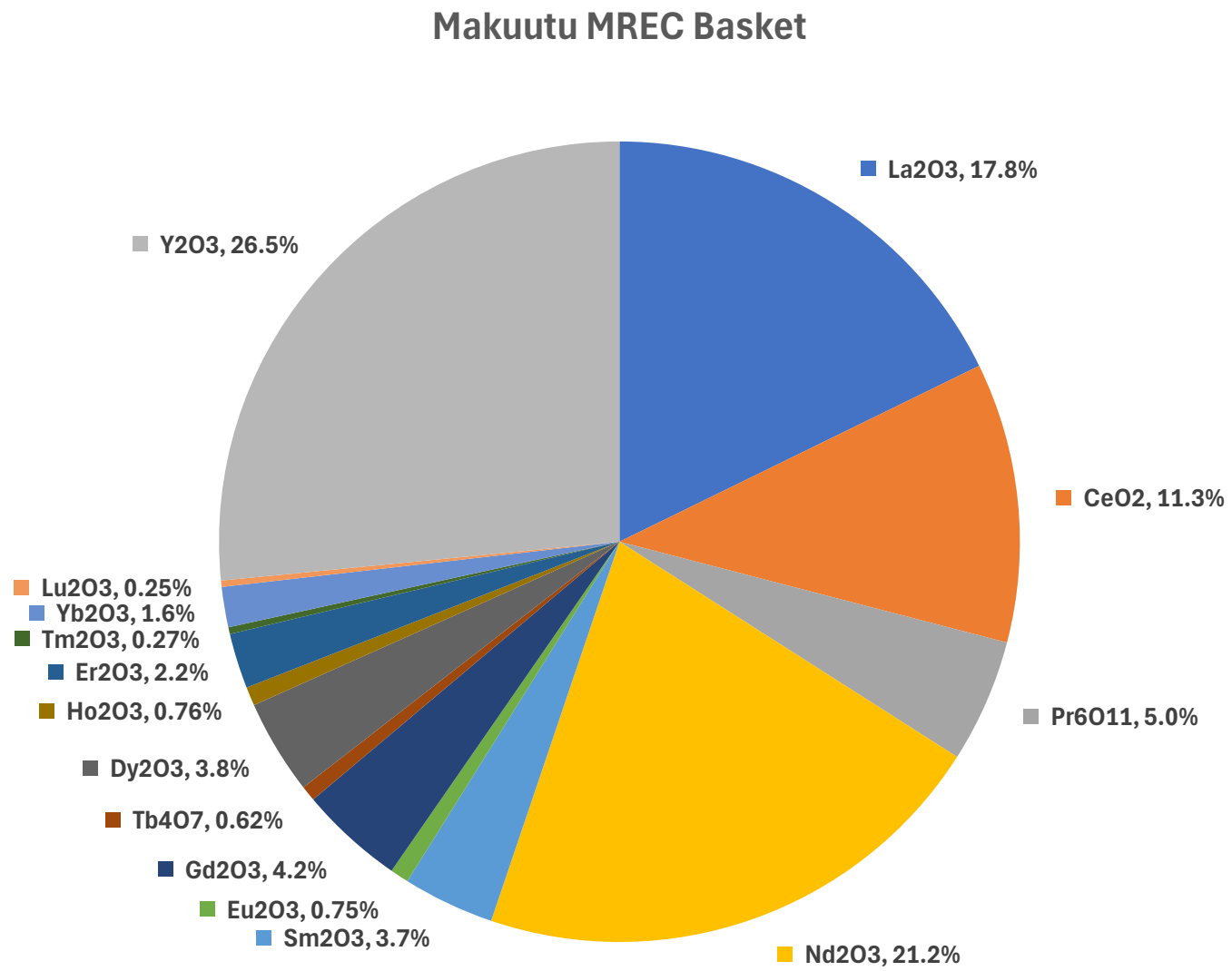
IonicRE is an emerging miner, refiner and recycler of sustainable and traceable magnet and heavy rare earths needed to develop net-zero carbon technologies, and will bring magnet recycling and rare earth separation capability to the JV

US Strategic Metals has a fully permitted 1800-acre site in Missouri, which will produce important critical materials such as alloy grade cobalt, antimony sulfide, nickel metal, lithium carbonate, copper cathode, and rare earth elements




Makuutu Rare Earth Basket – Near-term, permitted, HREE supply

- Large Scale Mining Licence LML00334 awarded in January 2024
- Stage 1 production of a value-added mixed rare earth carbonate (MREC) product (including Scandium), via a modular heap desorption processing plant
- Stage 1 plant capacity is 5.0 million tonnes per annum (Mtpa) Run of Mine (ROM) throughput
- Maiden Ore Reserve for the Makuutu Stage 1 over RL 1693 classified as a Probable 172.9 Mt at 848 ppm TREO, or 584 ppm TREO – CeO_2, and 30 ppm Sc_2O_3
- Further staged development at Makuutu with additional tenements
- Expected Total Development Capital expected to be circa US$150m today including additional works to prepare for FID
- Makuutu a Mineral Security Partnership Project with 45% heavy REOs

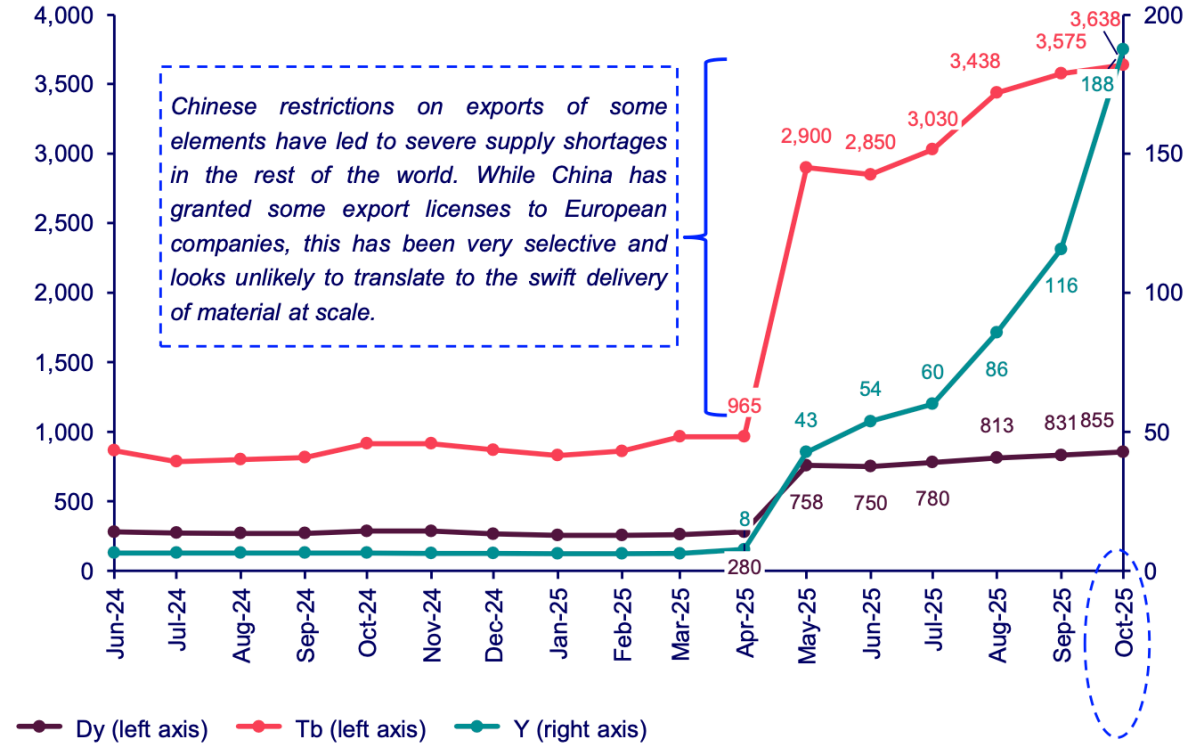


1. Makuutu Feasibility Study announced 20 March 2023, based upon 100% Project basis.
2. Updated Makuutu Mineral Resource Estimate announced 15 May 2024.

Rare Earth Prices – Makuutu's 45% Heavy REO basket getting a bump

- Post implementation of Chinese export restrictions on heavy rare earths in April 2025, major disconnect in pricing in western markets
- Western heavy REO prices increased dramatically over the past 6 months
- EU / US prices[1] for trading 4x Chinese prices[2];
  - Dy_2O_3 (US$950/kg vs US$184/kg); and
  - Tb_4O_7 (US$3,550/kg vs US$813/kg)
- Y_2O_3 recently trading at US$270/kg[3], up 4400% from the start of 2025 and 45x current Chinese prices
- Opaque pricing for other heavy REOs in the west with all heavy REO production typically coming from China
- Makuutu basket value in West now trading at 4-5x Chinese value
- Based upon 5 REOs only – Nd, Pr, Dy, Tb and Y – western basket value is +32% compared to 2023 DFS pricing[4] estimates

CIF Europe prices for Dy, Tb & Y (US$ / kg REO nominal)



Source: Wood Mackenzie

1. Benchmark Mineral Intelligence 2. https://www.metal.com/Rare-Earth-Oxides 3. https://www.reuters.com/business/aerospace-defense/new-rare-earth-crisis-is-brewing-yttrium-shortages-spread-2025-11-14/
4. Makuutu Feasibility Study announced 20 March 2023, based upon 100% Project basis.

ionic rare earths

VIRIDIS MINING & MINERALS

50% 50%

VIRIDION rare earths

Leveraging Company's RE Separation & Refining Technology

- **Brazil – RE Refinery and Magnet Recycling**
- **USA – RE Refinery**

VIRIDION
rare earths

First delivery of recycled magnet Rare Earth Oxides (REOs) from End-of-Life magnets sourced from Brazil and recycled at Ionic Technologies' Belfast, UK facility

Key Takeaways

1

Validated Technology Platform

Successfully operating demonstration plant in Belfast, UK, showcasing continuous high purity rare earth oxide production and validating commercial scalability of magnet recycling

2

Positive Sector Momentum

Strong growth forecast in REO demand and western governments rapidly incentivising ex-China recycling, refining and magnet supply chains to reduce reliance on China

3

Compelling Economic Profile

DFS completed for Belfast Commercial scale plant, confirming robust project economics and underpinning future plant expansion and global scaling opportunities

4

Established Strategic Partnerships

Established strategic partnerships with leading OEMs and supply chain partners, enhanced market access and validating demand for recycled rare earth materials

5

Clear Growth Roadmap

Three phase growth roadmap centred on validating an exportable recycling platform and circular supply chain model and scaling multiple geographies

6

Proven Leadership Team

Led by highly experienced Board and Management team with proven execution skills and demonstrated track record of building shareholder value

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