



ASX: IXR

**ASX Announcement**

30 April 2025

# Quarterly Activities Report

**For the period ended 31 March 2025**



## HIGHLIGHTS

### IONIC TECHNOLOGIES, BELFAST (100% IONICRE)

- Peer reviewed Life Cycle Analysis (LCA) by Minviro confirms up to 61% lower CO<sub>2</sub> emissions from Ionic Technologies' magnet recycling process, compared to existing REO supply chain. Translating to a significant step change in CO<sub>2</sub> and Scope 3 emissions for OEMs;
- Launch of MagNetZero™ supply chain initiative, a collaborative platform for qualifying and controlling embedded carbon within magnet supply chains;
- MOU signed with South Korea's DNA Link in collaboration on recycling to feed Korean magnet plant in world's third-largest magnet market;
- Discussions continuing with Advanced Propulsion Centre (APC) and UK Government stakeholders to support commercial plant capital requirements for the Belfast magnet recycling facility;
- Opportunities for global roll out in key target markets, including the USA, progressing based on requirements for local manufacturing of strategic products, such as those produced by Ionic Technologies' magnet recycling process.

### MAKUUTU HEAVY RARE EARTHS PROJECT, UGANDA (60% IONICRE)

- China's move to restrict exports of medium and heavy rare earths puts spotlight on need for new supply sources;
- Makuutu's MREC project basket is one of the highest heavy rare earth content identified to date, being around 45% medium and heavy rare earths;
- Discussions continuing with members of Mineral Security Partnership (notably the US and UK) and off-takers on speeding development of shovel-ready project.

### BRAZILIAN REFINING AND RECYCLING JOINT VENTURE (50% IONICRE)

- Talks continuing to secure site for pilot plants for both REO refinery and magnet recycling facilities near existing Viridis operations;

### CORPORATE

- General Meeting of shareholders to be held from 10am Melbourne time Friday, 16 May 2025 in Melbourne;
- Half Year Financial Report released for six months to 31 December 2024; net loss reported of \$4,758,991 (31 December 2023: net loss of \$15,159,289).

**Ionic Rare Earths Limited ("IonicRE" or "the Company") (ASX: IXR) has further advanced its magnet recycling and heavy rare earths projects key for the global energy transition, advanced manufacturing and defence, amid heightened ex-China demand for rare earths, as highlighted by the Company's Quarterly Activities Report for the period ending 31 March 2025.**

This report includes development activities at the Company's 100% owned magnet recycling subsidiary in the UK, Ionic Technologies International Limited ("Ionic Technologies"), and at the 60% owned Makuutu Heavy

Rare Earths Project (“Makuutu” or “the Project”) in Uganda, together with its Viridion Joint Venture in Brazil (50% interest) with Viridis Mining and Minerals Ltd (ASX: VMM).

IonicRE made substantial progress across its international operations during the March 2025 quarter, amid a growing focus on securing secure and sustainable Western rare earths supply chains following the imposition of additional export controls by dominant producer China.

## IONIC TECHNOLOGIES (100% IONICRE)

### Life Cycle Analysis

At Ionic Technologies in Belfast, a peer-reviewed, independent Life Cycle Analysis (LCA) study by leading industry researcher Minviro showed the dramatic carbon emission reductions possible using Ionic Technologies’ patented magnet recycling process, compared to the existing REO supply chain sourced from primary (mine supply). The Product Carbon Footprint analysis showed the following benefits of the ‘made-in-Belfast’ technology:

- Up to 53% reduction in CO<sub>2</sub> emissions for Didymium oxide ((NdPr)<sub>2</sub>O<sub>3</sub>);
- Up to 61% reduction in CO<sub>2</sub> emissions for Dysprosium oxide (Dy<sub>2</sub>O<sub>3</sub>);
- Up to 61% reduction in CO<sub>2</sub> emissions per MW Direct Drive (in wind turbines using Rare Earth Permanent Magnets).

This demonstrates the technology’s ability to dramatically lower scope 3 emissions for OEMs which adopt this technology in their rare earth supply chains. These results are a major boost for a more sustainable REE supply chain for the UK/Europe and global ex-China market, positioning Ionic Technologies as a global leader in reducing the CO<sub>2</sub> emission impact of goods containing REOs.

Importantly, the LCA exercise allows REO consumers to make a like-for-like CO<sub>2</sub> emission impact, simply by selecting material manufactured by Ionic Technologies due to its capability in separating REOs.

The study was based on LCA methodology and was in compliance with ISO-14040:2006-07 and ISO-14067:2018-08 standards. It followed a successful Feasibility Study announced in November 2024 that demonstrated the financial and environmental sustainability of a commercial REO manufacturing facility in Belfast, UK.

With the completion of the Product Carbon Footprint, Ionic Technologies is now able to quantify the impact on REE supply chains that its technology can deliver. Based on this achievement, the Company has launched its MagNetZero™ brand, a collaborative platform for quantifying and controlling embedded carbon within magnet supply chains.

IonicRE will further develop this new brand in collaboration with stakeholders, supporting knowledge sharing and sustainability across this key critical minerals industry.

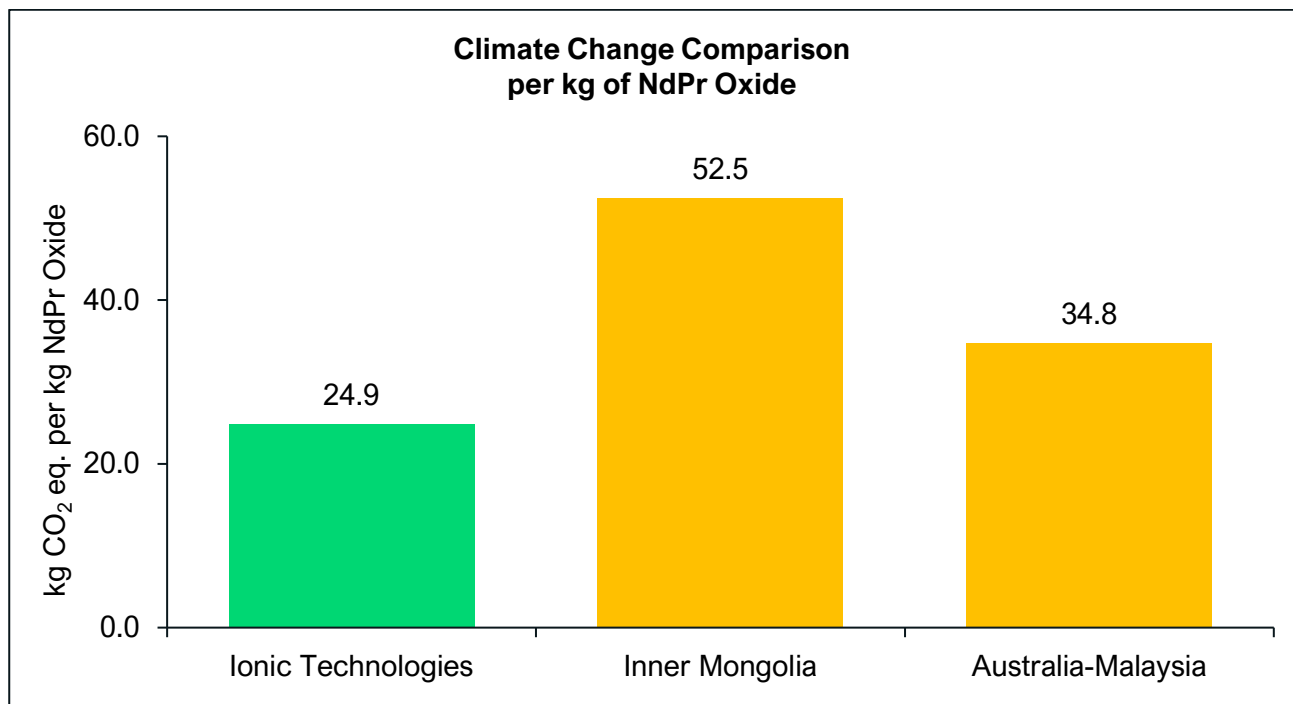


Figure 1: Climate Change Comparison per kg of Didymium Oxide, ((NdPr)<sub>2</sub>O<sub>3</sub>).

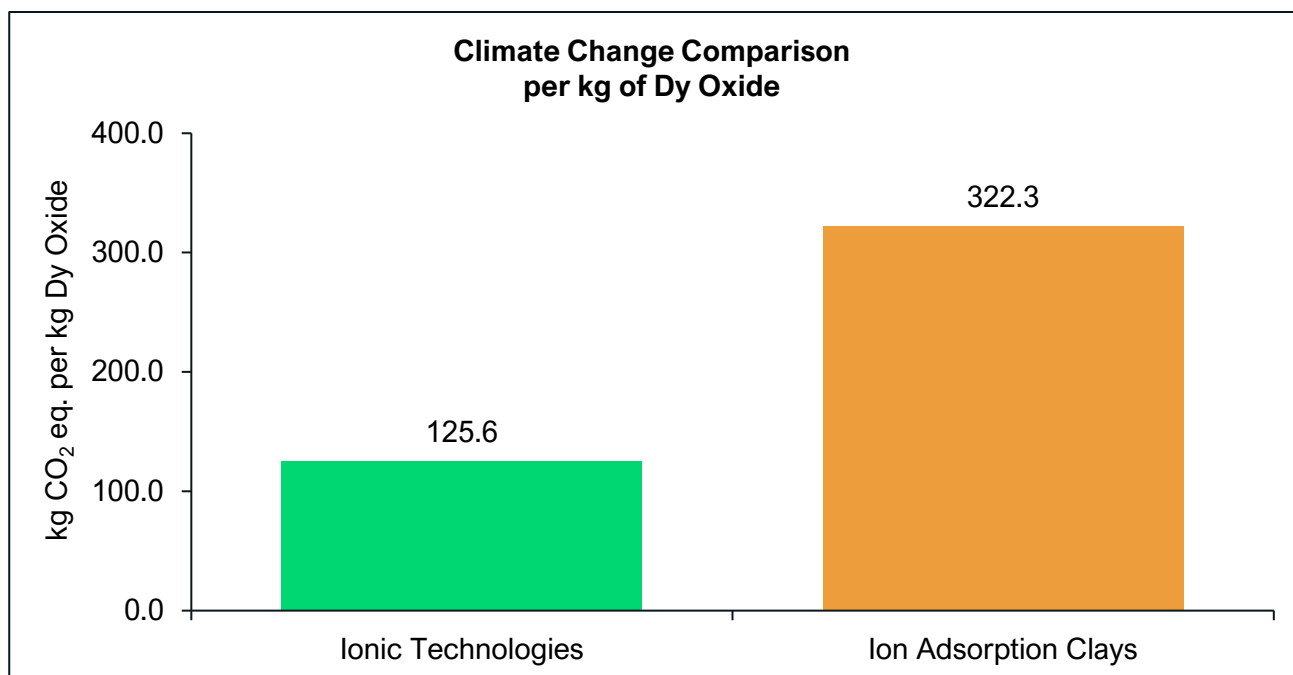


Figure 2: Climate Change Comparison per kg of Dysprosium Oxide, Dy<sub>2</sub>O<sub>3</sub>.

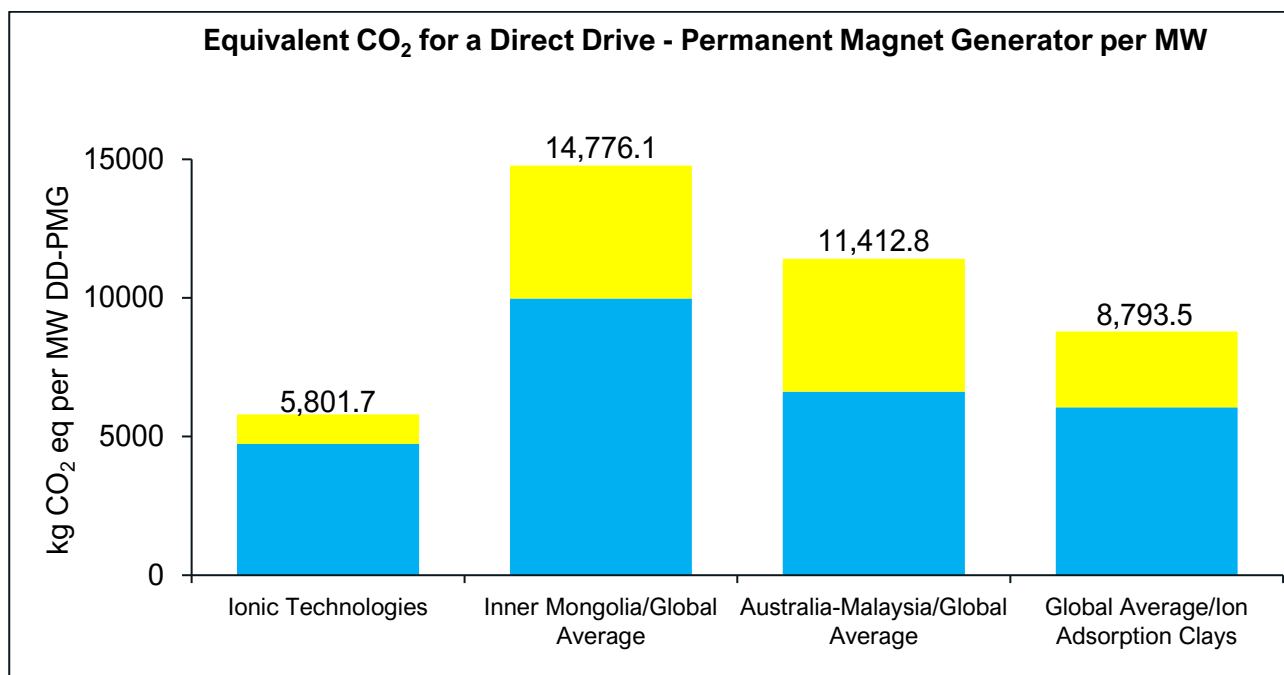


Figure 3: Climate Change Comparison for Didymium Oxide and Dysprosium Oxide deployed per MW of Direct Drive power in a wind turbine utilising Rare Earth Permanent Magnet Technology.

## MOU signed with Korea's DNA Link

IonicRE boosted its international expansion strategy with the signing of a non-binding Memorandum of Understanding (MOU) with South Korea's DNA Link, Inc. (KOSDAQ: 127120), concerning collaboration on the recycling of rare earth permanent magnets and magnet REO supply.

Under the agreement, the two companies including Ionic Technologies will collaborate to help build a secure, sustainable and traceable ex-China rare earths supply chain in South Korea, the world's third-largest magnet market. The agreement includes potential collaboration with the South Korean government and other international entities to establish sovereign capability in rare earths supply.

South Korea trails only the United States and Germany as an importer of permanent magnets, importing more than 5,400 tonnes of permanent magnets from China in 2021. The automotive industry is a key driver of permanent magnet demand, with demand from electric vehicles set to continue rising as the shift from internal combustion engine vehicles to EVs picks up speed.

DNA Link aims to build an international permanent magnet production belt spanning South Korea and the United States, leveraging its world-class expertise in permanent magnet manufacturing technology. The Seoul-based company is establishing a permanent magnet manufacturing facility in Yesan, South Korea, with capacity for 1,000 tonnes per annum NdFeB production, targeting first production in late 2025. This aligns with production planning for Ionic Technologies' Belfast magnet recycling plant and has the potential to underwrite a portion of both the feed and product requirements for the new plant.

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

1. Potential to recycle swarf from DNA Link's Korean plant back through Ionic Technologies facilities.

2. Potential magnet REO offtake from Ionic Technologies' Belfast magnet recycling facility to feed into DNA Link's new NdFeB permanent magnet capacity in South Korea.
3. Collaboration on further value addition and supply chain initiatives, including the conversion of REOs to metal, as per specifications provided by DNA Link.
4. Co-operation on establishing U.S.-based NdFeB permanent magnet capacity, including the supply of recycled magnet REOs.
5. Potential to integrate magnet recycling via a joint venture with DNA Link in the Korean market.
6. Collaboration with DNA Link on Korean end-of-life (EOL) magnet sourcing to build scale for potential domestic Korean magnet REO capability, including securing government support.
7. Work together to develop a transparent pricing basis for customer engagement on new, alternative supply chains.

Adamas Intelligence predicts from 2024 through 2040 that the global forecast demand for NdFeB magnets will increase at a compound annual growth rate (CAGR) of 8.7%, bolstered by double-digit growth for robotics, advanced air mobility and electric vehicle sectors, translating to comparable demand growth for the magnet rare earth elements (neodymium, praseodymium, dysprosium and terbium) used in the production of NdFeB magnets.

Significant growth is anticipated in the United States, which has banned Chinese REOs in its defence industry from early 2027, while the European Union's Critical Raw Materials Act mandates that 25% of magnet REOs (strategic raw materials) used in the EU must be from recycling, and 40% processed and refined in the EU by the end of this decade.

## UK stakeholder engagement

Ionic Technologies continued its engagement with key UK stakeholders during the March quarter, both in Belfast and London. This included hosting a number of visitors to its Belfast Demonstration Plant including from the Advanced Propulsion Centre (APC), the UK Department of Business and Trade, the Canadian Trade Commissioner and Investissement Québec, among many other industry and government delegations.

Ionic Technologies joined a meeting of the All Party Parliamentary Group for Critical Minerals held at the UK House of Commons, with Ionic Technologies referred to as part of the UK rare earth permanent magnet (REPM) powerhouse for the growing UK circular economy in rare earths.

IonicRE Chairman, Brett Lynch and Managing Director, Tim Harrison also attended the first Interministerial Group Meeting to be held outside Great Britain, hosted at Belfast Harbour and including representatives from the UK Department of Agriculture and Rural Development, the Department for the Economy, the Northern Ireland Government and other government departments and dignitaries.





Figure 4: Left to right: IonicRE Chairman Brett Lynch and Managing Director Tim Harrison, Parliamentary Under-Secretary of State for Energy Michael Shanks MP, Department of Agriculture and Rural development, NI Minister Andrew Muir MLA, Department for the Economy NI Minister Caoimhe Archibald MLA, and Huw Irranca-Davies MS, Deputy First Minister of Wales and Cabinet Secretary for Climate Change and Rural Affairs, and Ionic Technologies Director of Operations Thomas Kelly, at an Interministerial Group Meeting held at Belfast Harbour.



Figure 5: Helen Hunter-Hayes, UK Department of Business and Trade (right) with Ionic Technologies' Curtiss Danks (Demonstration Plant Manager) at the Belfast Demonstration Plant facility.



*Figure 6: Ionic Technologies Director of Operations Thomas Kelly (centre) at an APC-led visit to the Queen's Island site, Titanic Quarter, Belfast Harbour, the planned location of the Company's commercial magnet recycling facility.*

## Next Steps

IonicRE continues to appraise commercial options to progress to Front End Engineering Design (FEED) with an appropriate Engineering, Procurement and Construction Management (EPCM) partner, while also engaging with local stakeholders to expedite delivery of its landmark Belfast facility.

The Company is progressing approvals for the commercial site located on Queens Island in Belfast Harbour and expects to finalise permitting this calendar year.

Ionic Technologies' commercial partnerships will support the commercial plant's development, including those with UK-based metal and alloys manufacturer Less Common Metals (LCM) and Germany-based magnet manufacturer Vacuumschmelze (VAC) to produce magnets containing 100% recycled HREEs and LREEs.

The Feasibility Study has facilitated further engagement with the UK Government, project partners and investors, with IonicRE targeting a Final Investment Decision in 2025 and first production in early 2027, based on regulatory approvals and project funding.

The Company is awaiting the outcome of its application for a substantial capital grant from the UK Government via the Automotive Transformation Fund (ATF), administered by the Advanced Propulsion Centre (APC), with this potential cornerstone funding set to provide the UK with sovereign magnet REO capability for the first time. The Company has conducted several discussions and provided additional information to the assessment team including the UK Department of Business and Trade (DBT) which has received positive feedback to date. A decision is expected during the second quarter of calendar 2025.



Additionally, IonicRE has appointed a financial adviser for the UK facility and is in discussions with both strategic investors and debt financiers to secure the total investment required to progress towards final investment decision (FID).

The development of a commercial magnet recycling plant would give Ionic Technologies “first mover” advantage, with the plant capable of being replicated in other international markets including in Asia, Europe, North and South America.

## **BRAZILIAN REFINING AND RECYCLING JOINT VENTURE (VIRIDION)**

The Viridion Joint Venture (50:50) between IonicRE and Viridis Mining and Minerals Limited (ASX: VMM) is an outstanding opportunity for IonicRE to advance the Company’s strategy to become a leading supplier to the Western world of high quality, secure and dependable magnet and heavy rare earths, critical to the multitude of dependent industries and energy transition affecting billions of people around the globe.

Viridion advances the growth strategy for both JV partners by several years and draws on the support and alignment of several state agencies of Brazil, a nation that is both rich in rare earths and aims to become a global leader in rare earth production and supply.

In November 2024, IonicRE announced Viridion’s signing of a five-year Memorandum of Understanding with SENAI FIEMG Innovation and Technology Centre, owner of Lab Fab, South America’s first rare earth magnet laboratory. The agreement established a basis for cooperation between Viridion and SENAI Regional Department, with a view to jointly develop and produce rare earth magnets at Lab Fab, in the Brazilian state of Minas Gerais.

In December 2024, Viridion received support from Minas Gerais investment promotion agency, Invest Minas, for IonicRE to replicate its UK magnet recycling technology in the Brazilian state. There is potential for substantially lower operating costs in converting alloy feedstock to REO product, compared to other markets.

Viridion holds exclusive rights in Brazil to monetise, implement and commercialise Ionic Technologies’ magnet recycling IP. The production of magnet REOs within Brazil will enable the ramp up of magnet production capability at CIT SENAI’s Lab Fab facility, which is targeting a ramp up in NdFeB production to 100 tonnes per annum by the end of 2026.

The Company also plans to recycle waste streams produced in the ramp up of activities, enabling the development of a truly insulated and secure NdFeB supply chain in Brazil that can support significant advanced manufacturing activities.

Brazil is currently the world’s seventh largest wind energy market, growing at 29% CAGR over the past decade, while the establishment of EV production capacity in Brazil along with existing and growing advanced manufacturing capacity will drive further demand for REO’s in the world’s 10th largest economy.

Highlighting its commitment to the sector, in January 2025 the Brazilian government announced US\$815 million in financing for projects aimed at boosting the development of strategic minerals, including rare earths.

In February 2025, Viridis announced a Scoping Study for its Colossus project, with the results confirming the potential for a new, long life mining operation (refer VMM announcement, 25 February 2025).

Viridion is continuing talks with the Minas Gerais authorities on the location of pilot plants for both a potential REO refinery and magnet recycling facilities, near existing Viridis operations in Minas Gerais.

## MAKUUTU HEAVY RARE EARTHS PROJECT (60% IONICRE)

Makuutu currently ranks amongst the world's largest and most advanced ionic adsorption clay (IAC) deposits, and as such, is a globally strategic resource for near term, low capital development, facilitating long-term security of magnet and heavy REO supply. The project's strategic nature in the development of an ex-China medium and heavy rare earths supply chain has come into added focus following Beijing's recent imposition of additional rare earth export controls.

On 4 April 2025, China's Ministry of Commerce and General Administration of Customs announced new export controls 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 7 below) demonstrated a basket rich in medium and heavy REOs, notably able to help offset the elements targeted in the control ban.

China produces around 90% of the world's refined rare earths, and approximately 98% of the world's medium and heavy rare earths. Its latest export controls 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 announced on 20 March 2025 an Executive Order – "[Immediate Measures to Increase American Mineral Production](#)" – 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.

Post quarter-end, an additional Executive Order was announced on 15 April 2025 – "[Ensuring National Security and Economic Resilience Through Section 232 Actions on Processed Critical Minerals and Derivative Products](#)" –directing the US Department of Commerce to investigate potential national security risks from imports of processed critical minerals and their derivative products.

This sets out a wide scope for the investigation, encompassing various processed critical minerals (including rare earth elements and uranium), as well as derivative products and manufactured goods that incorporate rare earth minerals. It also establishes an extensive industrial planning agenda intended to both ensure ready access to an affordable, resilient, and sustainable supply of processed critical minerals and create a resilient and sustainable manufacturing base for rare earth derivative products, providing a stable demand base for processed critical minerals that must coexist to ensure economic stability and national security.

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, while U.S. officials, including Mr Massad Boulos, Senior Advisor for Africa to the President of the United States, have also visited Uganda.

## Makuutu Stage 1 Product Basket, by composition

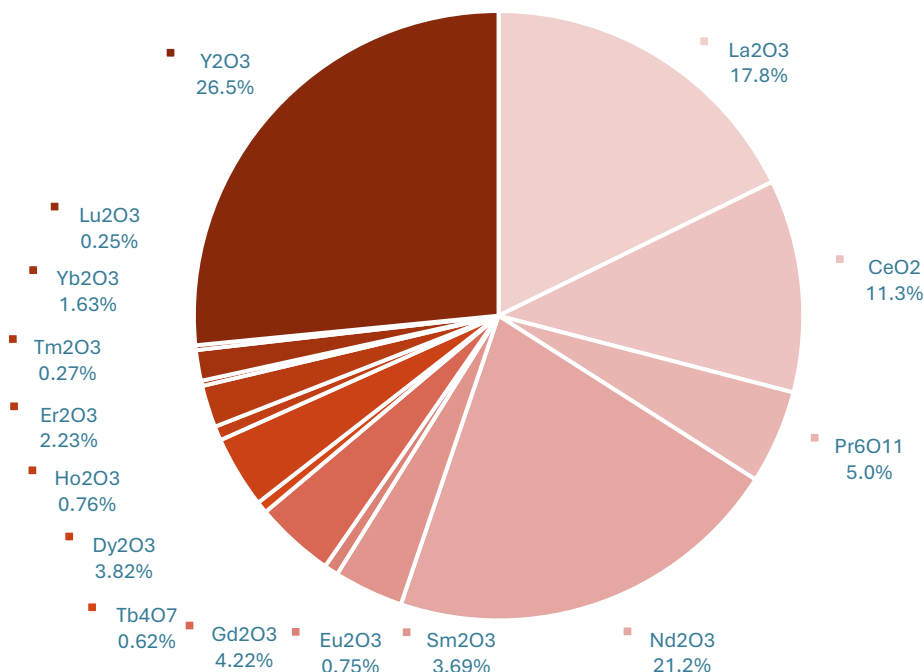


Figure 7: Makuutu Stage 1 REO product basket, excluding Sc<sub>2</sub>O<sub>3</sub> (note rounding applied).

Added to the Mineral Security Partnership (MSP) in 2023, IonicRE has continued financing discussions with members of the MSP and potential off-takers on the project's development.

The opportunity for Makuutu is underscored 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, with the project having the added benefit of being fully permitted, 'shovel-ready' for production.

The Makuutu deposit comprises nine licences covering around 300 square kilometres, located 120 km east of Kampala, Uganda. 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 off-takers and strategic 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.

## Makuutu Tenement Update

During the March quarter, the Rwenzori Rare Metals (RRM) team continued to progress with the submission of the next Mining Licence Application, TN04741 over the mineralised selection of Retention Licence (RL) 00007 (see Figure 8).

During the quarter, RRM received approval on the application for Exploration Licence EL00450 (previously TN4452). This application is due to the amended 2022 Mining Act and 2023 Mining Regulations, which required submitted applications TN4445, TN4447 and TN4452 to retain portions of affected tenements not covered by the Ugandan cadastre system. These applications have been made in order for RRM to fully retain these tenement areas.

Additionally, RRM progressed renewal applications over additional tenements RL00234 and EL00257. Full details are also provided in Table 1.

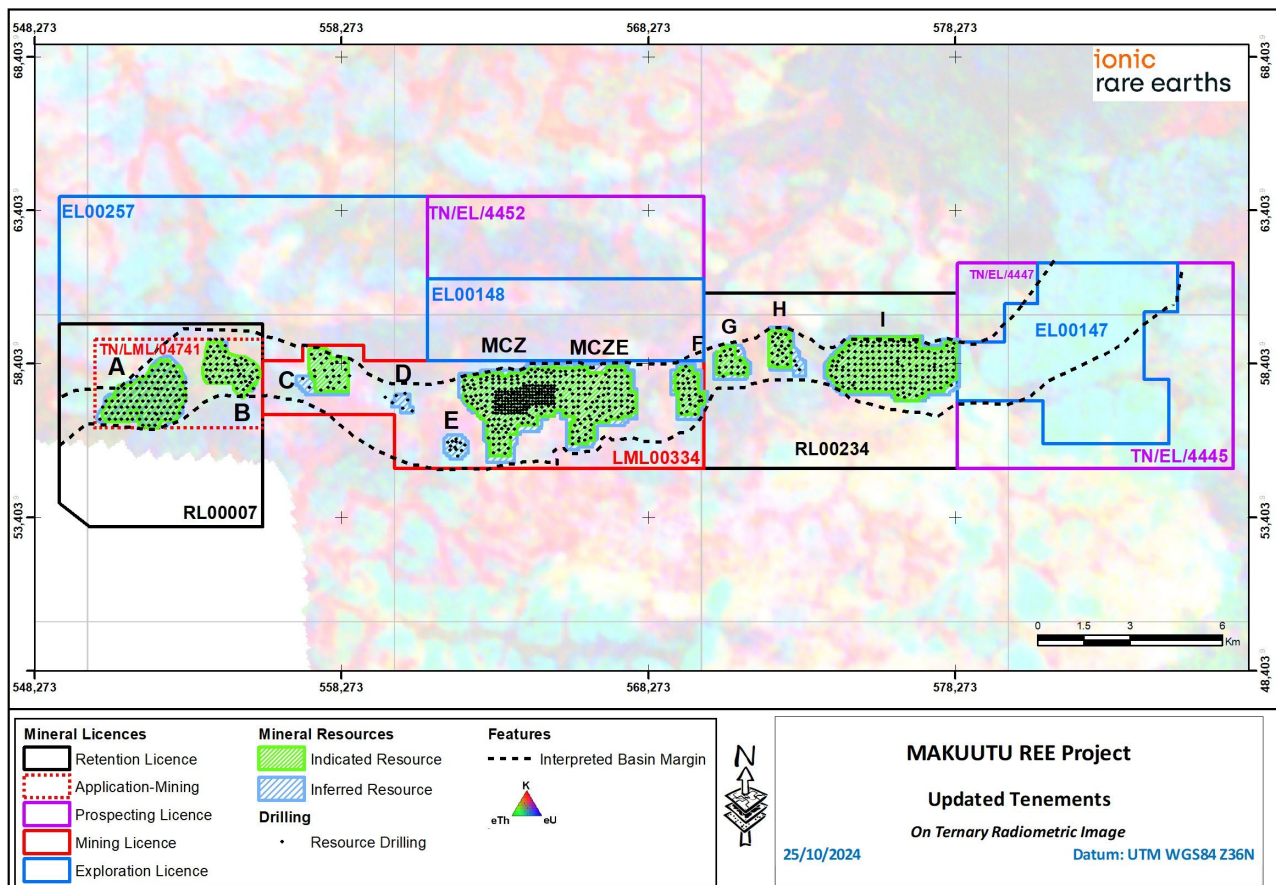


Figure 8: Makuutu Rare Earths Project mineral tenements including new MLA over a selection of RL00007, TN04741 (red dashed border).



## Mineral Concessions Held

IonicRE advises the following information, pursuant to ASX Listing Rule 5.3.3, for the quarter ended 31 March 2025, and to the date of this announcement.

1. No mineral exploration tenements were acquired or disposed of during the period;
2. Mineral exploration tenements held are set out below in Table 1; and
3. No farm-in or farm-out agreements were entered into during the period.

**Table 1: Makutu Rare Earths Project Tenement Details.**

Licence ID	Licence Type	Application Date	Granted Date	Expiry / Renewal Date	Area (km <sup>2</sup> )
LML00334	Mining	01/09/2022	28/12/2023	27/12/2044	43.78
RL00234	Retention	20/06/2021	06/07/2021	05/07/2024 - Renewal Pending	47.03
EL00257	Exploration	15/07/2021	21/10/2021	20/10/2024 - Renewal Pending	55.51
EL00147	Exploration	19/10/2020	28/12/2020	27/12/2025	30.07
EL00148	Exploration	20/10/2020	28/12/2020	27/12/2025	24.08
EL00450	Exploration	07/05/2024	24/03/2025	23/03/2029	24.08
TN/04741	Mining	23/09/2024	Approval pending	Approval pending	15.37
TN04445	Exploration	03/05/2024	Approval pending <sup>a</sup>	Approval pending	24.79
TN04447	Exploration	03/05/2024	Approval pending <sup>a</sup>	Approval pending	5.44

a. The Ugandan cadastre system requires amendment to no longer relinquish 50% of EL upon renewal – TN relates to EL00147, which RRM retains in full

**Table 2: Makuutu Resource above 200ppm TREO-CeO<sub>2</sub> Cut-off Grade (ASX: 15 May 2024).**

Resource Classification	Tonnes (millions)	TREO (ppm)	TREO- CeO <sub>2</sub> (ppm)	LREO (ppm)	HREO (ppm)	CREO (ppm)	Sc <sub>2</sub> O <sub>3</sub> (ppm)
Indicated	517	650	440	470	170	220	30
Inferred	99	560	380	420	140	190	30
<b>Total</b>	<b>617</b>	<b>630</b>	<b>430</b>	<b>460</b>	<b>160</b>	<b>210</b>	<b>30</b>

Rounding has been applied to 1Mt and 10ppm which may influence averaging calculation.

All REO are tabulated in ASX announcement 15<sup>th</sup> May 2024 with formulas defining composition of (Light Rare Earth Oxides ("LREO"), Heavy Rare Earth Oxides ("HREO") and Critical Rare Earth Oxides ("CREO")).

## CORPORATE

### Half Year Financial Report

IonicRE released in March 2025 its Half Year Financial Report for the six months ending 31 December 2024. The report showed the Company's continued progress including the completion of a Feasibility Study for a commercial magnet recycling plant in Belfast, UK.

The Company reported a net loss for the half year of A\$4,758,991, substantially lower than the previous half year (net loss of \$15,159,289 for the period ending 31 December 2023).

IonicRE thanks shareholders and investors for their continued support as the Company builds its global operations focused on increasing shareholder value.

## General Meeting

Post-quarter, on 16 April 2025 IonicRE issued a Notice of General Meeting and Explanatory Memorandum. The general meeting of shareholders will be held from 10am (Melbourne time) on Friday, 16 May 2025 at Baker McKenzie, Level 19, 181 William St, Melbourne and the Company invites shareholders to attend.

## Investor Newsletter

IonicRE launched in September 2024 a new investor newsletter, “The Short Circuit,” featuring the latest industry information, investor analysis and recent updates on Company activities. The third issue released in April 2025 highlights Belfast’s increasing importance as a defence industry hub for the UK, the latest geopolitical factors regarding rare earths including China’s latest export controls, and an investor and media update including coverage in leading UK financial newspaper, the *Financial Times*.

The newsletters are available on IonicRE’s website at <https://ionicre.com/investors/investor-newsletters/>

## Corporate costs

During the quarter, the Company expended approximately A\$406,971 on Ionic Technologies demonstration and study activities, and A\$256,616 on Makuutu exploration, demonstration plant and study activities reported above.

Payments to related parties of the entity and their associates totalled A\$115,445 and consisted solely of Executive Director fees.

## Forward Outlook

In 2025, IonicRE will seek to capitalise on the robust infrastructure and supportive policy environment for Ionic Technologies’ Magnet Recycling facility in Belfast, UK. Pending the outcome of its APC grant application, the Company aims to advance development of a commercial REO manufacturing facility, representing a significant milestone not only for the Company but also for the development of an ex-China rare earths supply chain.

IonicRE will also continue discussions with potential project partners and investors, seeking to cement a Western supply chain for its ‘made in Belfast’ product.

Elsewhere, the Company will continue the expansion of the technology to other key target markets in North and South America, Europe and Asia.

The Makuutu Rare Earths Project has also become an increasingly strategic asset following China’s rare earth export controls and IonicRE will continue discussions with potential project financiers and off-takers to advance the project’s development.

For more information about IonicRE and its operations, please visit [www.ionicre.com](http://www.ionicre.com).

Authorised for release by the Board.

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## About Ionic Rare Earths Limited

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 magnets and waste (swarf) to high value, separated and traceable magnet rare earth products with grades exceeding 99.9% 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](http://www.ionicre.com).

## Competent Persons Statement

*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](http://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 for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2023 and is available to view on [www.asx.com.au](http://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 Production Targets or forecast financial information derived from production the production target for the Makuutu Rare Earths deposit was first released to the ASX on 20 March 2023 and is available to view on [www.asx.com.au](http://www.asx.com.au). Ionic Rare Earths Limited confirms that all material assumptions and technical parameters underpinning the Production Targets or forecast financial estimates in the announcement continue to apply and have not materially changed.*

## 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 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.*

## ASX Announcements

- 16 April 2025 Notice of General Meeting and Proxy Form
- 9 April 2025 China HRE export ban puts spotlight on Makuutu
- 13 March 2025 Ionic Technologies' LCA confirms 60% lower CO<sub>2</sub> for REO supply chain
- 12 March 2025 Half Yearly Financial Report
- 18 February 2025 Ionic Technologies LCA indicates 30-50% less CO<sub>2</sub> footprint
- 13 February 2025 IXR and DNA Link sign MOU on RE supply chain collaboration
- 5 February 2025 LCA to show Ionic Technologies' CO<sub>2</sub> footprint benefit
- 21 January 2025 Director Resignation



## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Ionic Rare Earths Limited

ABN

84 083 646 477

Quarter ended ("current quarter")

31 March 2025

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(315)	(1,924)
	(b) development	-	-
	(c) production	-	(45)
	(d) staff costs	(527)	(1,824)
	(e) administration and corporate costs	(1,319)	(2,008)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	7	17
1.5	Interest and other costs of finance paid	(4)	(23)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	469	2,710
1.8	Other	630	(1,341)
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(1,059)</b>	<b>(4,438)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	(101)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	(62)

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	141
	(d) investments	-	1385
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>1,363</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2,877
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(93)	(100)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>(93)</b>	<b>2,777</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	2,646	2,028
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,059)	(4,438)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	1,363
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(93)	2,777

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	(30)	(266)
4.6	<b>Cash and cash equivalents at end of period</b>	<b>1,464</b>	<b>1,464</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	1,308	2,455
5.2 Call deposits	156	191
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,464</b>	<b>2,646</b>

<b>6. Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to related parties and their associates included in item 1	115
6.2 Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>	

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	<b>Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<p><i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i></p> <p><i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i></p>			
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	<p>Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.</p>		

8.	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,059)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,059)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,464
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,464
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	1.38
<p><i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i></p>		
8.8	<p>If item 8.7 is less than 2 quarters, please provide answers to the following questions:</p>	
8.8.1	<p>Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?</p>	
	<p>Answer: No, cost reduction initiatives across corporate, Makuutu and Ionic Technologies continue to flow through the business, which are expected to continue to reduce over the next quarter into Q4 FY2025.</p>	
8.8.2	<p>Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?</p>	
	<p>Answer: The business is actively engaging trade partners to contribute to the development funding of its current projects. We expect a positive outcome on these discussions failing which we will continue to evaluate opportunities to raise funds through a placement.</p>	



8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes, for reasons stated in 8.8.2 above

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 30 April 2025

Authorised by: By the Board of Ionic Rare Earths Limited  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.