



**ASX: IXR** 

#### **ASX Announcement**

31 October 2024

# Quarterly Activities Report

September 2024

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## **HIGHLIGHTS**

# IONIC TECHNOLOGIES, BELFAST (100% IONICRE)

- Ionic Technologies secures additional \$2.46M grant funding for recycled rare earth permanent magnets partnerships from UK Government;
- Partnership with LCM, VAC to advance UK/Europe supply chain;
- Magnet Rare Earth Oxide (REO) production continues at Belfast Demonstration Facility amid strong interest from potential partners;
- Magnet Recycling Feasibility study nearing completion, highlighting potential for low-cost operation producing high-margin heavy REOs for Western market;
- Site identified in Belfast Harbour for commercial-scale facility with permitting advancing with the support of local stakeholders:
- Successful analyst and strategics' day hosted at Belfast facility in July;
- New research published on IXR following analysts' visit to Belfast Demonstration Plant.

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

- Mixed rare earth carbonate (MREC) samples sent from Makuutu Demonstration Plant for analysis and offtake negotiations with potential customers;
- Ongoing discussions with the Mineral Security Partnership (MSP) regarding financing activities for Makuutu.

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

 50:50 JV with Viridis Mining and Metals Limited (VMM) further advanced, aimed at establishing magnet recycling and rare earth refinery for upgrading MREC to REO in fast-growing Brazilian market.

#### **CORPORATE**

- Cost cuts implemented to reduce operational expenses by up to 60% per month, extending financial runway;
- R&D Tax Incentive rebate received of \$1.2M, with additional \$0.5M pending.

lonic Rare Earths Limited ("lonicRE" or "the Company") (ASX: IXR) has continued to advance its magnet recycling and heavy rare earths projects key for the global energy transition, advanced manufacturing and defence, as highlighted by its Quarterly Activities Report for the period ending 30 September 2024.

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.

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During the September quarter 2024, IonicRE made substantial progress across project development and operational capabilities encompassing all its international operations.

At lonic Technologies in Belfast, most notably it was successful in securing additional UK government funding for the recycled rare earth permanent magnets partnership with Less Common Metals (LCM) and Vacuumschmelze (VAC). Further, the feasibility study is nearing completion, demonstrating the potential for low-cost operations to produce separated rare earth oxides for the Western supply chain.

At Makuutu, work continued on processing ionic adsorption clay (IAC) mineralisation at the Company's demonstration plant in Uganda, with mixed rare earth carbonate (MREC) production being sent to Australia for analysis and onwards to potential offtake partners to support commercial discussions.

The joint venture with Viridis Mining and Minerals Limited (ASX: VMM) continues to leverage the Company's technology into the Brazilian rare earth market through both magnet recycling and rare earth refining. During the quarter there has been continued supply chain engagement as the entity strives to facilitate REE production and ex-China supply.

Additionally, at a corporate level, the Company is extremely conscious of the need to protect and preserve shareholder capital in a volatile and challenging market for small cap companies. The Board has now identified various cost efficiencies which have been implemented to reduce operating expenditure by 60% per month. The measures implemented included reduction in executive remuneration, headcount reduction, and lower operating and capital costs after the completion of demonstration plant trials at lonic Technologies and the Makuutu Heavy Rare Earths Project.

The following report outlines the critical operations, developments, and outlook as the Company moves closer to its goal of becoming an alternative supplier of magnet and heavy rare earths critical for the energy transition, advanced manufacturing, and defence.

#### **IONIC TECHNOLOGIES (100% IONICRE)**

lonic Technologies continues to pioneer the recycling of Neodymium-Iron-Boron (NdFeB) permanent magnets to high purity separated magnet rare earth oxides (REOs), enabling the creation of sustainable, traceable, and sovereign rare earth supply chains.

#### Partnership with LCM, VAC to advance UK/Europe supply chain

In the September quarter, Ionic Technologies secured significant new grant funding from the UK Government, facilitating new partnerships aimed at developing collaborative rare earth element (REE) supply chains within the UK and Europe. The partnerships will advance the production of high purity, recycled magnet rare earth oxides (REOs) at Ionic Technologies' Demonstration Plant in Belfast, UK. Two grants have been awarded to Ionic Technologies, a wholly owned subsidiary, under a second round of funding through Innovate UK's 'CLIMATES II' program. The first grant is for the groundbreaking 'REEValuate' Project, under which Ionic Technologies will partner 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.

Having previously received UK Government support via Innovate UK, as part of the first round of CLIMATES I program funding for circular critical materials supply chains announced 12 months ago, Ionic Technologies will

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benefit from an additional £292k of grant funding for the REEValuate Project, as part of UK Government support totalling £843k for the overall Project.

In a second successful grant, the UK Government selected the lonic Technologies-led 'MAGNOSTIC' collaboration to deliver an advanced, demagnetisation solution for end-of-life permanent magnets. Ionic Technologies is working in partnership with the Materials Processing Institute (MPI), a leading research and technology organisation specialising in critical materials, powder metallurgy and other materials processing, as well as Swansea University, a centre of excellence for metal processing and handling.

The MAGNOSTIC Project is valued at £422k, with Ionic Technologies also set to directly benefit from £178k of UK Government funding, also part of Innovate UK's 'CLIMATES II' funding.

With the new grants awarded, this increases total support from the UK Government's Innovate UK and Advanced Propulsion Centre (APC) to approximately £5 million combined since mid-2022. Ionic Technologies welcomes this invaluable support from the UK Government, which will help ensure the UK is at the forefront of the development of leading-edge magnet recycling technology and strengthen its role in the circular economy for critical raw materials.

#### **REEValuate Project – Supply chain collaboration**

The REEValuate Project, in collaboration with supply chain partners LCM and VAC, aims to establish a sustainable, Western supply chain for rare earth magnets. This initiative focuses on utilising both light and heavy rare earths, particularly in the context of energy transition, advanced manufacturing, and defence. The project also emphasises the significance of lonicRE's recycling technology, showcased at the Belfast Demonstration Plant, which plays a key role in producing recycled rare earth oxides (REOs).

The partners aim to meet growing demand for secondary REOs, driven by global policies like the European Union's Critical Raw Materials Act (CRMA) and the US Inflation Reduction Act (IRA). The EU CRMA has established a target for 25% of the magnet REO supply chain to come from recycling by 2030, perfectly positioning lonicRE to be a net beneficiary of policy and demand for recycled magnet REOs.

The REEValuate Project specifically targets converting industrial NdFeB scrap (swarf) into valuable rare earth oxides for magnets by combining Ionic Technologies' hydrometallurgical processes with LCM's metallothermic and electrolysis techniques. This closed-loop recycling approach will foster a traceable and transparent supply chain, reduce costs and waste, and ensure compliance with regulatory standards. By advancing this circular supply chain, the partnership not only addresses the increasing demand for rare earths in clean energy technologies but also enhances the sustainability and security of rare earth supply in Western markets.

Presently swarf and waste generated in the magnet manufacturing processes can account for up to 40% of feed materials into the magnet manufacturing process, providing a major opportunity for lonicRE's technology. As magnet manufacturing increases in scale in the West, so too will the amount of swarf generated in the process, providing immediate and compounding growth for the recycling supply chain.

#### **Demagnetisation Technology Development – MAGNOSTIC Project**

The MAGNOSTIC Project focuses on developing efficient methods for demagnetising end-of-life rare earth permanent magnets (REPMs), which can be integrated into Ionic Technologies' existing patented magnet recycling process. Collaborating with MPI and Swansea University, the project aims to pilot and scale up novel practices for rapid demagnetisation, reducing handling challenges and costs associated with high-specification

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REPMs. This initiative positions Ionic Technologies to address the growing global need for magnet recycling, particularly as significant volumes of REPMs are expected to require recycling in the coming years.

The project partners bring significant expertise, with MPI optimising material processing technologies at its Teesside facilities, and Swansea University providing scientific expertise in metals technology. The collaboration aims to enhance process efficiency and scale the technology for commercial use.

The UK Government's support underscores its commitment to advancing the country's leadership in magnet recycling and building a sustainable, ex-China supply chain for critical materials. This initiative supports Ionic Technologies' vision of commercialising magnet recycling and strengthening the UK's role in the circular economy for critical raw materials.



Figure 1: IonicRE Managing Director Tim Harrison (right) with Sarah Jones MP, Minister of State at both the Department for Energy Security and Net Zero, and the Department for Business and Trade, during a recent meeting in London, UK.

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#### **Magnet Recycling Feasibility Study**

A Feasibility Study for magnet recycling at Ionic Technologies' Belfast plant is in its final stages, with IonicRE targeting development of a plant capable of processing 1,200 tonnes of magnet feed material, producing around 400 tonnes of separated magnet REOs.

The magnet feed material will consist of end-of-life magnets from industrial use and waste materials generated in the magnet production cycle (swarf). Significantly, Ionic Technologies has access to considerable quantities of this material in Belfast.

The Feasibility Study has identified a potential processing cost range of around US\$25-30 per kilogram REO for recycling and selling prices in the forecast range of US\$80-\$100/kg for NdPr oxide, US\$500-\$600/kg for Dy oxide and \$1,200-\$1,500/kg for Tb oxide by 2030 to be produced by Ionic Technologies.



Figure 2: Render of the commercial plant design as part of the Feasibility Study and planning application underway in Belfast, UK.

#### Site identified in Belfast Harbour for commercial-scale facility

A site for the new commercial magnet recycling plant has already been identified in Belfast Harbour, with the planning permission and environmental permitting processes well advanced. Notably, there are around 8.7 GW of installed wind turbines located within 240 kilometres of Belfast, with the local government focused on developing a clean energy hub.

#### **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.

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Makuutu is being developed by Rwenzori Rare Metals Limited ("Rwenzori" or "RRM"), a Ugandan private company which owns 100% of the Makuutu Project. IonicRE is a 60% owner of Rwenzori, and has 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.

IonicRE welcomes the increased ownership stake, which will facilitate long-term development of this increasingly strategic asset, while supporting several financing discussions presently underway with partners of the Mineral Security Partnership (MSP), of which Makuutu has been added given its strategic heavy REO potential. **Makuutu Demonstration Plant Update** 

Makuutu 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.

During the September quarter, the RRM team continued demonstration plant activities, with MREC production in Uganda being used to support ongoing offtake negotiations for Makuutu's magnet and heavy rare earth-rich basket. The first shipment of samples has since left Uganda and is currently being analysed in Australia before being dispatched to potential offtake partners.



Figure 3: Demonstration plant precipitation circuit and inventory of MREC samples dispatched to Australia for analysis.

#### **Makuutu Tenement Update**

During the September quarter, the RRM team progressed with the submission on the next Mining Licence Application, TN04741 over the mineralised selection of Retention Licence (RL) 00007 (see Figure 3).

During the quarter, RRM also received approval on the renewal of Exploration Licences (EL) 00147 and EL00148, and due to the amended 2022 Mining Act and 2023 Mining Regulations, has submitted applications TN4445, TN4447 and TN4452) for portions of affected tenements to acquire areas not covered by the Ugandan cadastre system, which has been changed in order for RRM to fully retain these tenement areas.

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

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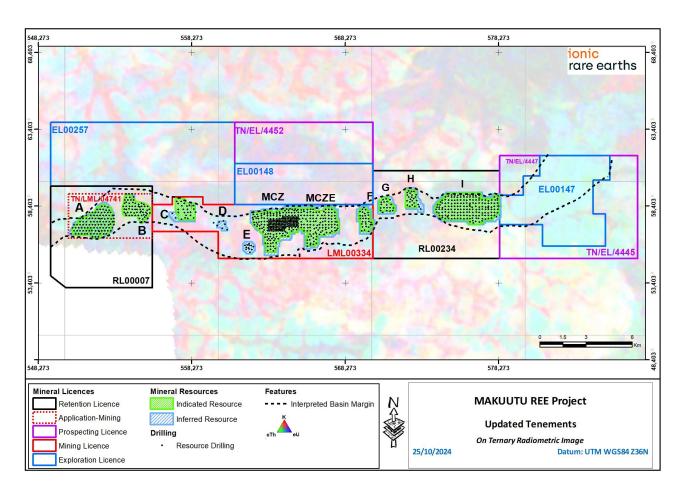


Figure 4: Makuutu Rare Earths Project mineral tenements including new MLA over a selection of RL00007, TN04741 (red dashed border).

#### **BRAZILIAN REFINING AND RECYCLING JOINT VENTURE**

The joint venture agreement between lonicRE and Viridis Mining and Minerals Limited (ASX: VMM) is seen as an outstanding opportunity for lonicRE 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.

The 50/50 joint venture, named Viridion, enables IonicRE to secure a strategic opportunity leveraging its technology and intellectual property to ensure successful outcomes for both companies and for all stakeholders. Viridion advances the growth strategy for both companies 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.

Both companies will co-fund the Viridion and the proposed Brazilian production facility on a 50:50 basis. Given challenging market conditions, the timeline for the scoping study, targeted for completion by the end of 2024, is being revised as near-term opportunities on magnet recycling in Brazil have elevated in importance from key potential stakeholders.

Support from Brazilian government entities was highlighted by a recent site visit from Invest Minas to Ionic Technologies' Belfast Demonstration Plant, discussing magnet recycling, REE refining and progress regarding

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the joint venture. Invest Minas is an international investment and trade promotion agency set up by the Minas Gerais State Government to attract and develop investments in the state.



Figure 5: Representatives of Invest Minas recently visiting Ionic Technologies' Belfast Demonstration Plant.

#### **CORPORATE**

#### **Cost Reductions Implemented**

lonicRE is extremely conscious of the need to protect and preserve shareholder capital in a volatile and challenging market for small cap companies. The Executive and Board has now identified and implemented various cost efficiencies which will reduce operating expenditure by 60% per month.

These include a reduction in executive remuneration, headcount reduction, and lower operating and capital costs after the completion of demonstration plant trials at lonic Technologies and Makuutu. These cost efficiencies will ensure lonicRE is in the best possible position to advance key project development activities to increase shareholder value, positioning the Company to benefit significantly from the achievement of further milestones.

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#### Research & Development Tax Incentive Rebate

IonicRE has also secured an R&D Tax Incentive Rebate payment of \$1.2 million during the quarter, with another \$500,000 pending for a total of \$1.7 million, which together with the identified cost savings ensures the Company has sufficient funding for its near-term objectives.

#### **Annual General Meeting**

IonicRE's Annual General Meeting will be held from 1pm (AEDT) Wednesday, 27 November 2024 at Baker McKenzie, Level 19, 181 William St, Melbourne, VIC, 3000. Further information regarding the AGM is available from the ASX announcement released on 25 October 2024.

#### **Investor Newsletter**

IonicRE has launched a new investor newsletter, "The Short Circuit," featuring the latest industry information, investor analysis and recent updates on Company activities. The first issue was released in September 2024 with further updates planned on a quarterly basis.

The newsletters are available on lonicRE's website at <a href="https://ionicre.com/investors/investor-newsletters/">https://ionicre.com/investors/investor-newsletters/</a>

#### **Forward Outlook**

Looking ahead, lonicRE is set to capitalise on the robust infrastructure and supportive policy environment for its Ionic Technologies' Magnet Recycling facility in Belfast, UK. With continuous production now achieved, and maiden delivery of separated magnet REOs to LCM expected within days and further commercial partnerships announced and pending, the focus remains on production delivery and demonstrating product quality to potential partners.

The commercial plant feasibility study is nearing completion and is presently being used in key discussions with key stakeholders across government and industry to negotiate further support in the UK for sovereign capability on separated magnet REOs, plus the potential expansion of the technology to other key target markets in North America, Europe and Asia.

#### Corporate

During the quarter, the Company expended approximately \$1,548,000 on Ionic Technologies demonstration and study activities, and \$1,018,000 on Makuutu exploration, demonstration plant and study activities reported above.

Payments to related parties of the entity and their associates totalled \$196,173 and consisted of \$26,373 Nonexecutive Director fees and \$169,800 Executive Director fees.

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#### **Mineral Concessions Held**

lonicRE advises the following information, pursuant to ASX Listing Rule 5.3.3, for the quarter ended 30 September 2024, 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 (km²)
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
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
EL00148	Exploration	20/10/2020	28/12/2020	27/12/2025*	24.08
TN04452	Exploration	07/05/2024	Approval pending <sup>b</sup>	Approval pending	24.08

<sup>\*</sup> Renewal approved

Table 2: Makuutu Resource above 200ppm TREO-CeO2 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)	Sc₂O₃ (ppm)
Indicated	517	650	440	470	170	220	30
Inferred	99	560	380	420	140	190	30
Total	617	630	430	460	160	210	30

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").

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

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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

b. The Ugandan cadastre system requires amendment to no longer relinquish 50% of EL upon renewal – TN relates to EL00148, which RRM retains in full



Authorised for release by the Board.

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#### **About Ionic Rare Earths Limited**

lonic Rare Earths Limited (ASX: IXR or lonicRE) is set to become a miner, refiner and recycler of sustainable and traceable magnet and heavy rare earths needed to develop net-zero carbon technologies.

lonic 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 has 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. In October 2024, IonicRE announced further collaboration with supply chain partners Less Common Metals (LCM) and VAC, in aims to establish a sustainable, Western supply chain for rare earth magnets.



Figure 6: Ionic Technologies' long loop recycling feed opportunities back to magnet REOs, and key supply chain partnerships announced to date.

The Makuutu Rare Earths Project in Uganda, (60% owned) 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, lonicRE 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 December 2023. Makuutu has produced mixed rare earth carbonate (MREC) from a Demonstration Plant on site to advance offtake negotiations.

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lonicRE has also executed a transformational 50/50 joint venture, named Viridion, to develop both magnet recycling and REE refinery facilities 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.

lonicRE is a Participant of the UN Global Compact and adheres to its principles-based approach to responsible business.

#### **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 <a href="www.asx.com.au">www.asx.com.au</a>. 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 <a href="www.asx.com.au">www.asx.com.au</a>. 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 <a href="www.asx.com.au">www.asx.com.au</a>. 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 lonic 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 lonic 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, lonic 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**

• 25 October 2024 2024 AGM Notice and Proxy meeting materials

• 1 October 2024 IXR awarded grants with LCM, VAC for UK-EU REPM partnership

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• 16 September 2024 Company Update

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### Appendix 5B

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

#### Name of entity

Ionic Rare Earths Limited				
ABN Quarter ended ("current quarter")				
84 083 646 477	30 September 2024			

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(1,018)	(1,018)
	(b) development	-	-
	(c) production	(45)	(45)
	(d) staff costs	(535)	(535)
	(e) administration and corporate costs	(18)	(18)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	5	5
1.5	Interest and other costs of finance paid	(10)	(10)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	1,363	1,363
1.8	Other – Ionic Technologies	(1,548)	(1,548)
1.9	Net cash from / (used in) operating activities	(1,806)	(1,806)

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

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	512	512
	(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)	-	-
2.6	Net cash from / (used in) investing activities	349	349

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	500	500
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	(9)	(9)
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)	-	-
3.10	Net cash from / (used in) financing activities	491	491

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,028	2,028
4.2	Net cash from / (used in) operating activities (item 1.9 above)	-1,806	-1,806
4.3	Net cash from / (used in) investing activities (item 2.6 above)	349	349
4.4	Net cash from / (used in) financing activities (item 3.10 above)	491	491

Page 2

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(364)	(364)
4.6	Cash and cash equivalents at end of period	698	698

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	509	1,839
5.2	Call deposits	189	189
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	698	2,028

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	212
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include	le a description of, and an

explanation for, such payments.

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000	
7.1	Loan facilities	-	-	
7.2	Credit standby arrangements	-	-	
7.3	Other (please specify)	-	-	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at qu	uarter end	-	
7.6	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.			

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,806)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	0
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,806)
8.4	Cash and cash equivalents at quarter end (item 4.6)	698
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	698
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	0.39

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.

- 8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:
  - 8.8.1 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?

Answer: No, significant cost reduction initiatives across corporate, Makuutu and Ionic Technologies continue, and in addition to the completion of the Ionic Technologies feasibility study works, costs are expected to continue to reduce over the next quarter into H1 2025.

8.8.2 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?

Answer: Yes, we expect to receive funds from research and development tax incentive claims. In addition, the Company has liquidated its entire investment in an ASX listed company to continue funding current operations and continues to evaluate opportunities to raise funds and through a placement.

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

- 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: 31 October 2024

Authorised by: By the Board of Ionic Rare Earths Limited

(Name of body or officer authorising release – see note 4)

#### Notes

- 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.
- 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.