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ASX Announcement

13 June 2025

IXR's BRAZILIAN SUBSIDIARY VIRIDION SELECTED FOR FUNDING TO ACCELERATE RARE EARTH RECYCLING AND REFINERY

IonicRE's Brazil JV to progress government negotiations on financial package structure

- **IonicRE's Brazilian joint venture, Viridion, has been selected by the Brazilian National Bank for Economic and Social Development ('BNDES') and the Federal Agency for Funding Authority for Studies and Projects in Brazil ('FINEP'), as one of the successful applicants to receive significant funding to progress its downstream rare earth refining and recycling facilities;**
- **FINEP and BNDES launched an initial call in January 2025 for R$5 billion (~US$900 million) to support businesses focused on transforming strategic minerals in Brazil;**
- **In February 2025, FINEP and BNDES launched a second call allocating R$3 billion (~US$540 million) specifically to support companies progressing further down the value chain with technology development and innovation centres; and**
- **Viridion is well placed following the first delivery of high-purity Neodymium ('Nd'), Praseodymium ('Pr'), Dysprosium ('Dy') and Terbium ('Tb') oxides to CIT SENAI in May 2025, and to capitalise on this significant opportunity and the potential to receive further funding from the Brazilian government, amid a global push for secure and sustainable ex-China rare earths supply chains.**

Ionic Rare Earths Limited ("IonicRE" or the "Company") (ASX: IXR) has secured a significant advance in the development of a Brazilian downstream rare earths supply chain, with its joint venture Viridion (IXR: 50%; Viridis Mining and Minerals Ltd: 50%) selected by BNDES (Brazilian National Bank for Economic and Social Development) and FINEP (Federal Agency for Funding Authority for Studies and Projects in Brazil) as one of the successful companies to receive significant funding to progress downstream rare earth refining and magnet recycling facilities in Brazil. Economic feasibility during commercial production was a key factor in the selection process.

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This selection success follows the joint Public Call launched by BNDES / FINEP on 7 January 2025, to invest in companies engaged in the value chain for strategic minerals linked to the energy transition and decarbonisation, with rare earths and permanent magnets at the forefront.

As per the proposal submitted by Viridion, the funding will be used to progress:

- Development of pilot rare earth refining and Demonstration magnet recycling plants;
- Metallurgical testing and associated research and development activities;
- Engineering Feasibility Studies; and
- Capacity building in Brazil.

This major development comes at a pivotal moment, amongst China's increasing rare earth export controls and the growing necessity for a diversified supply chain, highlighted by the recent disruption created to advanced manufacturing businesses worldwide including the global automotive industry. Viridion will play a strategic role in near-term substitution for disrupted critical minerals, with the Company on track to progress the development of a fully integrated rare earth supply chain, based on recycling end-of-life (EOL) magnets and swarf into high purity separated rare earth oxides (REOs) as the early facilitator of supply.

The selection from BNDES / FINEP is well timed given May's delivery of the first recycled magnet rare earth oxides to the Company's Brazilian magnet manufacturing partners CIT SENAI - Lab Fab (Center of Innovation and Technology) facility in Lagoa Santa, Minas Gerais, Brazil, constituting the first locally sourced range of REOs recycled in Brazil, sourced from Brazilian EOL magnets.

IonicRE Managing Director, Mr Tim Harrison commented: *"We welcome this selection from BNDES and FINEP, which was based on a competitive bidding process and represents an enormous vote of confidence in Viridion and the future of our Brazilian downstream rare earth business.*

"Viridion is picking up speed with last month's delivery of the nation's first locally sourced REOs, a major milestone in the development of a Brazilian rare earth permanent magnet supply chain."

"Now with the support of the Brazilian Government, the state of Minas Gerais and our joint venture partner, Viridion is set to progress the next steps, including building pilot plants for rare earth refining and magnet recycling, along with metallurgical testing and engineering feasibility studies."

"We are now progressing talks aimed at finalising the funding package and look forward to delivering on Brazil's ambitions to become a leader in this key industry in the 21st century for advanced manufacturing and renewables."

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

In December 2024, Viridion received support from the 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.

Talks are continuing with the Minas Gerais authorities on the location of pilot plants for both a potential REO refinery and magnet recycling facilities, near existing Viridis Colossus Project operations in Minas Gerais, with the securing of funding set to drive this milestone faster.

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.

IonicRE Executive Chairman, Brett Lynch commented: *"IonicRE is developing a global business based on magnet recycling and we are hugely excited by the potential in Brazil, one of the world's major markets for rare earths.*

"Funding is crucial to fast-tracking our development plans and this government support will help ensure Viridion is on the front foot with potential partners, offtakers and suppliers in building this new industry in South America.

"The latest reports of global automakers shutting production lines due to insufficient rare earth supplies only further demonstrates the urgent need for an ex-China, secure and sustainable rare earths supply chain.

"Our 'made in Belfast' technology is now set to play a major role in delivering this supply chain, offering a low capex, low emission and rapid pathway to market for an industry of critical geopolitical importance."

FINEP/BNDES Public Calls: Funding for Critical Mineral Projects in Brazil

The FINEP / BNDES first Public Call (Notice Nº 001/2025), launched in January 2025, announced it would allocate R$5 billion (~US $900 million) to support business plans focused on transforming strategic minerals in Brazil.

The program aims to develop sustainable supply chains for critical minerals, such as rare earths, essential to the energy transition and decarbonisation efforts. The funding encompasses various forms of financial support to invest in a range of projects, including industrial-scale plants, pilot facilities, demonstration projects and necessary research studies, depending on the stage of the projects and technologies involved.

In addition to the R$5 billion Public Call for strategic minerals, FINEP / BNDES launched a second public call in February 2025, allocating a further R$3 billion (~US $540 million) specifically to support the establishment of Research, Development and Innovation centres across Brazil, such as those planned by Viridion.

The objective is to attract and enhance Brazil's scientific and technological capabilities in alignment with the "New Industry Brazil" (Nova Indústria Brasil) policy, focusing on vertical integration and downstream products.

Viridion's development strategy aligns with the goals of the FINEP / BNDES Public Calls, which seek to advance Brazil's industrial capacity in the critical minerals sector, reduce reliance on foreign suppliers and ensure the country's leadership in the global clean energy supply chain.

The funding being made available will fast-track Viridion's development timelines. Delivering high-purity Nd_2O_3, Pr_6O_{11}, Dy_2O_3, and Tb_4O_7, to Latin America's only magnet manufacturer is a testament to the strategic vision of Viridion.

The combination of local and state government support, coupled with leading refining and recycling technology, and a strong potential feed source from Viridion JV partner, Viridis Mining and Minerals' Colossus Project, makes Viridion well placed to capitalise on the second Public Call from BNDES and FINEP and other significant funding opportunities being made available to leading strategic mineral projects in Brazil.

Viridion Joint Venture

IonicRE and Viridis executed a Binding Agreement in April 2024 (refer ASX announcement 3 April 2024), for the commercialisation of intellectual property developed by IonicRE's 100% owned UK subsidiary, Ionic Technologies, to separate and refine Rare Earth Oxides (REOs) from concentrates and carbonates feed from the Colossus Project, and magnet recycling in Brazil.

The 50/50 JV between Viridis and Ionic Rare Earths aims to commercialise and implement the Separation and Recycling Technology within a separation plant in Brazil and is positioned to become the first major producer of the full suite of refined magnet REOs in South America.

The JV has formed Viridion Pty Ltd ("**Viridion**") in Australia and Viridion Rare Earth Technologies Ltda in Brazil, which holds exclusive global rights (excluding Asia and Uganda) to Ionic Technologies' separation IP to produce REOs from Mixed Rare Earth Carbonate ('MREC') or equivalent intermediate feed streams, and own any new IP developed from the commercialisation process.

Viridion also holds exclusive rights in Brazil to monetise, implement and commercialise Ionic Technologies' magnet recycling. This grants Viridion rights to exclusively commercialise separation technology for other REE producers, with an initial focus on partnering with existing Brazilian rare earth projects before expanding the technology globally.

Ionic Technologies is a global first mover in the recycling of Neodymium-Iron-Boron (NdFeB) permanent magnets to high purity separated magnet REOs – enabling the creation of sustainable, traceable, and sovereign rare earth supply chains.

Technology Overview

Since its founding in 2015, as a spinout from Queens University Belfast (QUB), Ionic Technologies has developed processes for the separation and recovery of REEs from mining ore concentrates and waste permanent magnets.

The technology developed is a step up in efficient, non-hazardous, and economically viable processing with minimal environmental footprint.

Ionic Technologies has demonstrated capability for REEs to achieve near complete extraction of REO's from lower quality spent magnets and waste (swarf) to a recovery of high value magnet REO product quality exceeding 99.9% REO.

Ionic Technologies now has "first mover" advantage in the industrial elemental extraction of separated REOs from spent magnets and waste, enabling near term magnet REO production capability to satisfy growing demand from the energy transition, advanced manufacturing, and defence.

Ionic Technologies' proprietary technology provides a universal method for the recovery of high purity REEs from lower quality and variable grade magnets, to be used in the manufacture of modern, high-performance and high specification REPMs required to support substantial growth in both electric vehicle (EV) and wind turbine deployment.

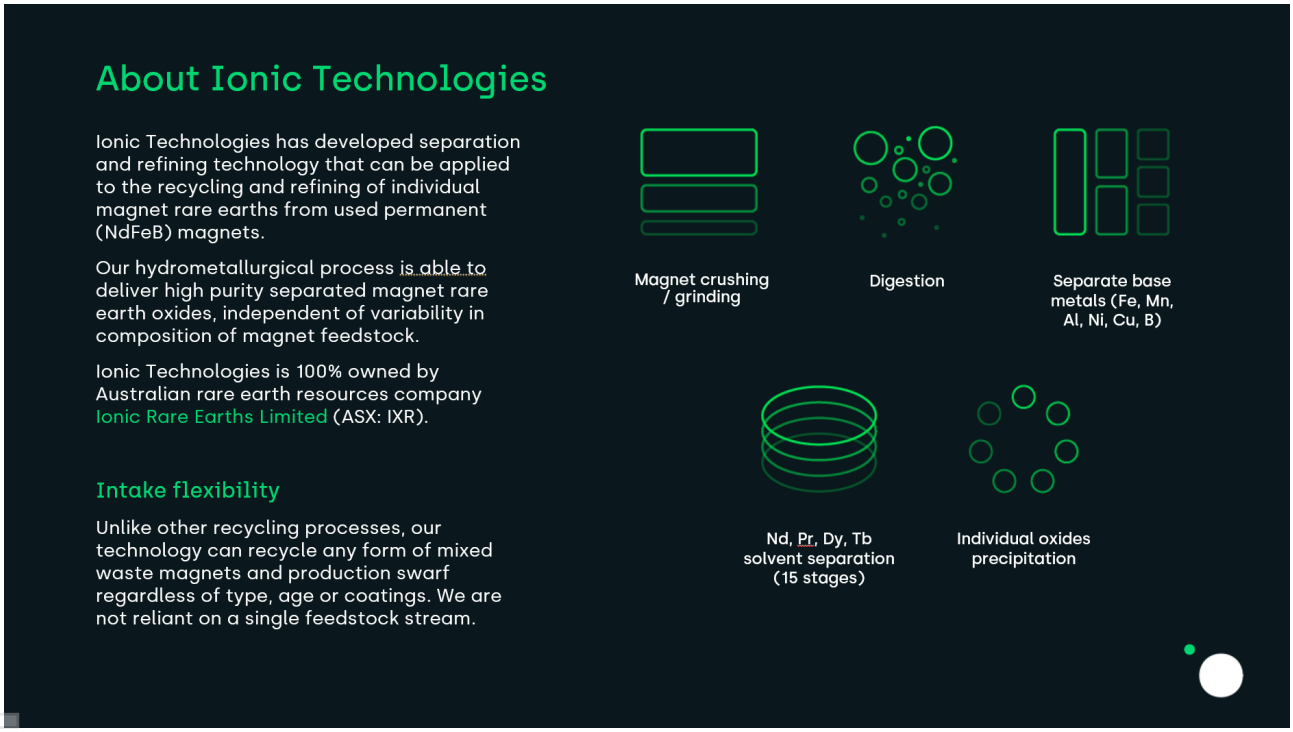

Figure 1: Ionic Technologies technology overview.

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

Authorised for release by the Board.

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About Ionic Rare Earths Ltd

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

Ionic Technologies International Limited ("Ionic Technologies"), a 100% owned UK subsidiary, has developed processes for the separation and recovery of rare earth elements (REE) from mining ore concentrates and recycled permanent magnets. Ionic Technologies is focusing on the commercialisation of the technology to achieve near complete extraction from end-of-life / spent magnets and waste (swarf) to high value, separated and traceable magnet rare earth products with grades exceeding 99.5% rare earth oxide (REO).

The Makuutu Rare Earths Project in Uganda, 60% owned by IonicRE, 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.

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

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

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

Forward Looking Statements

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

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References to Previous ASX Releases

- *Viridion delivers first recycled magnet REO feed to Brazilian magnet manufacturer – 27 May 2025*
- *IonicRE inks MOU with EMR to create game-changing circular supply chain for rare earth magnets – 26 May 2025*
- *March Quarterly Activities Report – 30 April 2025*
- *China export controls put spotlight on Makuutu heavy rare earths – 9 April 2025*
- *Peer review confirms up to 61% lower CO_2 emissions from Ionic Technologies' magnet recycling process – 13 March 2025*
- *Magnet recycling life cycle assessment indicates revolutionary 30-50% lower CO_2 footprint compared with existing global primary REO producers – 18 February 2025*
- *IonicRE signs MOU with Korea's DNA Link to spur international expansion – 13 February 2025*
- *LCA to show Ionic Technologies CO2 footprint benefit – 5 February 2025*
- *Viridion backed to build Brazilian magnet supply chain – 9 December 2024*
- *UK government grant application lodged for magnet recycling plant – 5 December 2024*
- *FS demonstrates profitable magnet REO business case – 18 November 2024*
- *IonicRE and Viridis execute transformational joint venture for separation, refining and recycling of rare earths in Brazil – 3 April 2024*

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

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