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ASX Announcement

23 June 2025

IXR EYEING MULTIPLE MAGNET RECYCLING PLANTS IN USA

Talks progressing with US partners to deliver REOs amid drive for sovereign supply

- **IonicRE is progressing talks with several US-based parties regarding multiple potential magnet recycling plants in the USA;**
- **US market could sustain multiple domestic recycling facilities utilising Ionic Technologies' patented IP, capable of processing both US domestic swarf and end-of-life (EOL) magnets back to high purity rare earth oxides (REOs) to sustain near term requirements for US magnet REO production; and**
- **U.S. Department of Defense aims to completely remove Chinese rare earth materials from weapon systems by 2027, targeting strategic independence from China's near-monopoly on critical minerals.**

Ionic Rare Earths Limited ("IonicRE" or the "Company") (ASX: IXR) is further advancing its US rare earths market engagement, progressing discussions with several US-based groups to deliver a national solution to near term pressures on the supply of both magnet and heavy rare earth oxides (REOs). This could potentially involve multiple magnet recycling plants across the United States, leveraging the Company's rare earth separation and refining intellectual property developed by 100% owned UK subsidiary Ionic Technologies, as well as an expansion of the Viridion Joint Venture (IXR: 50%; Viridis Mining and Minerals Ltd: 50%) to potentially develop a US-based rare earth refinery (ASX: 18 June 2025).

Building on its international expansion to the UK/Europe, Asia and South America, IonicRE has been working with potential partners in the United States to develop a domestic US rare earths supply chain, as sought by official US government policy.

IonicRE is currently evaluating several opportunities to establish rare earth permanent magnet recycling plants in various states of the United States, working closely with US-based partners and supporting Trump administration policy.

The Company has dispatched samples of separated, high purity magnet rare earth oxides (REOs) from our Belfast, UK, magnet recycling Demonstration plant to potential US partners, along with

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engineering deliverables to help with infrastructure and site early works planning. Additionally, the Company has hosted visits to the Belfast Demonstration plant to progress technical, construction and investment due diligence.

As part of these discussions, IonicRE is also evaluating use of its technology beyond NdFeB recycling, to scale out additional USA capability for domestic production though recycling across other rare earth elements listed in China's April 2025 rare earth export restrictions, specifically samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium.

IonicRE Managing Director, Mr Tim Harrison commented: *"IonicRE has been working through several iterations of supply chain resilience with US-based parties for some time now, and recent discussions have focused on immediate activities to address near term shortages in access to these critical elements for advanced manufacturing and defence.*

"We believe that our patented magnet recycling technology delivering separated magnet rare earth oxides (REOs) provides a strategic foil and first step solution to a much larger primary supply chain solution that will require substantial capital and time investment to resolve.

"During this window, we can envisage several recycling facilities providing supply chain relief for key applications in the US and other closely aligned markets, adding to our existing partnerships in the UK, Europe, South Korea and Brazil."

This would potentially address a critical gap in US rare earths supply, with the US currently obtaining 70% of its rare earth imports from China. As stated in the Executive Order signed by US President Donald J. Trump on 20 March 2025: "Critical minerals are essential for U.S. military readiness, as they are key components in fighter jets, satellites, submarines, smart bombs, and missile guidance systems"[1].

The Order noted that demand for critical minerals has been dubbed "the gold rush of the 21st century," due to their importance in emerging technologies, yet the US currently imports the bulk of such minerals, "creating economic and security risks," despite possessing its own supply sources.

President Trump has also signed an Executive Order to make the US "the leading producer and processor of non-fuel minerals, including rare earth minerals"[2].

Recent rare earth permanent magnet shortages following China's April 2025 restrictions have had a significant impact on US, European and Asian companies, particularly automakers, who rely on rare earths for manufacturing both internal combustion engines (ICE) and electric vehicles (EV). The restricted elements are essential within ICE vehicles to a wide range of automotive components, such as automatic transmissions, throttle bodies, alternators, electric motors, sensors, seat belts, speakers, lighting systems, power steering units, and cameras, and critical to the electric drives in EVs.

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[1] Refer https://www.whitehouse.gov/fact-sheets/2025/03/fact-sheet-president-donald-j-trump-takes-immediate-action-to-increase-american-mineral-production/
[2] Refer https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/

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USA Independence in Rare Earth Supply by 2027

Both the former Biden administration and Trump administration have sought to expand US domestic production of rare earths and other critical minerals to reduce the reliance of the world's biggest economy on imports, primarily from China.

In 2022, Congress and the White House began moving to ban Chinese-origin rare earth magnets and products in U.S. defence platforms, with the National Defense Authorization Act (NDAA) for FY2023 and FY2024 including provisions tightening restrictions on sourcing of magnets. The Biden administration also increased transparency requirements, requiring contractors to disclose the country of origin for any REE permanent magnets used in weapon systems.

The Defense Federal Acquisition Regulation Supplement (DFARS) was subsequently updated to reflect a two-stage ban. By 2027, the US Department of Defense (DoD) must completely remove Chinese rare earth content from its weapon systems:

- Phase 1 (through 2026): Per Acquisition.gov, contractors cannot deliver any end item containing NdFeB or samarium-cobalt magnets melted or produced in China (or other adversarial countries like Russia, Iran, or North Korea). However, during this phase, magnets made elsewhere could use Chinese-origin feedstock; and
- Phase 2 (effective 1 January 2027): The restriction expands to cover the entire magnet supply chain. Contractors will be prohibited from delivering any end item containing an NdFeB or SmCo magnet if any stage of its production – from rare earth ore mining to refining, alloying, and magnet manufacturing – occurred in China or other covered countries.

As a result of these policies, the Company is now engaged with customers looking to source separated magnet REOs, including neodymium, praseodymium, dysprosium and terbium for the development of NdFeB permanent magnets and other applications, along with samarium for strategic SmCo applications.

This looming deadline signals that defence suppliers must domesticate their rare earth supply chains within the next 18 months. The US policy reflects a broad bipartisan consensus on reducing dependence on an adversary for mission-critical materials.

Despite the recent US-China 90-day "truce," the global rare earths supply situation remains uncertain, with European and Asian companies unable to obtain supply and the US continuing to seek a long-term solution to its current supply dependence on China[3].

IonicRE's Executive Chairman, Brett Lynch commented: *"The US is demanding 'independence day' in rare earths supply, without which both its economy and defence industry are critically exposed. Solving this issue will require time and investment, however Ionic Rare Earths via our magnet recycling technology is capable of playing a vital role as a low capex, low emission and rapid potential source of domestic rare earths supply.*

[3] Refer https://www.csis.org/analysis/trump-strikes-deal-restore-rare-earths-access

"Our talks with potential US partners continue to ramp up amid current supply uncertainties and we look forward to progressing these into binding agreements, with the backing of both the US private sector and government.

"IonicRE's international expansion is accelerating, and we are working as fast as possible with our overseas partners to realise the benefits of our 'made-in-Belfast' technology for the global rare earths market, building a genuine ex-China supply chain solution."

IonicRE's latest US advancement follows its announcement of plans for a potential US-based rare earth refinery via its Viridion Joint Venture, in addition to a proposed Brazilian based rare earth refinery and magnet recycling facility.

Technology Overview

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.

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.

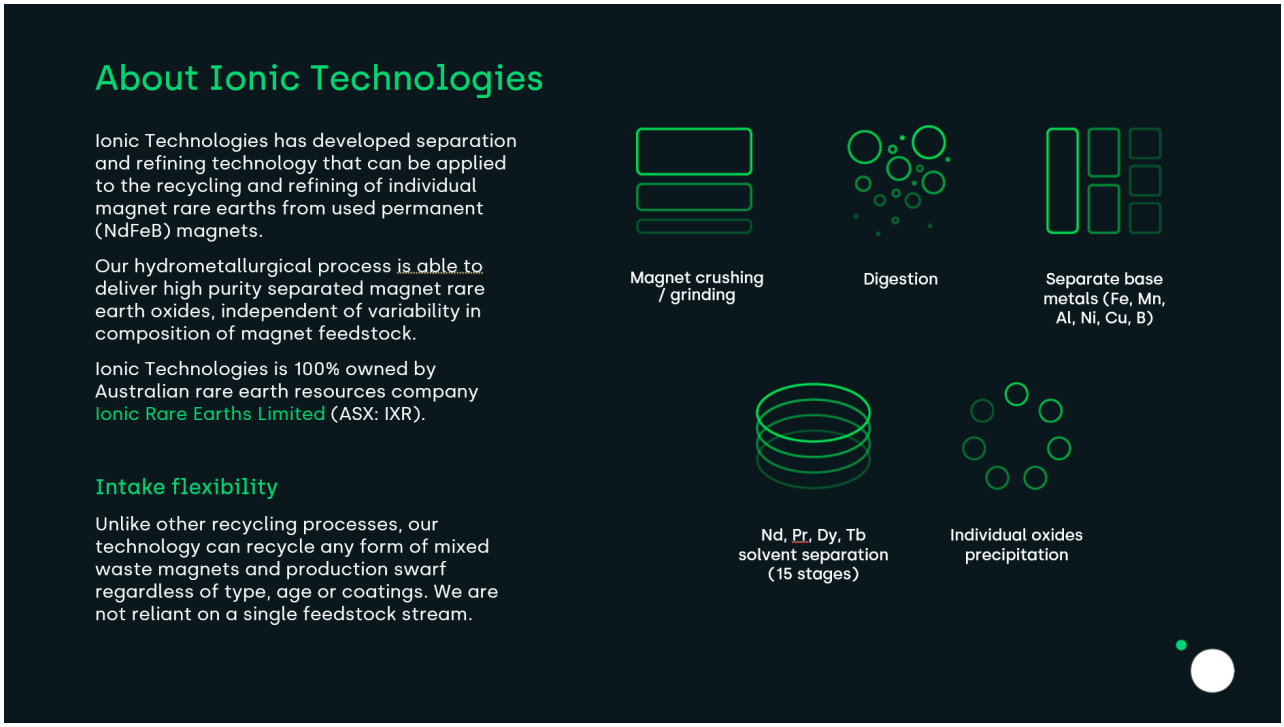

Figure 1: Ionic Technologies technology overview.

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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.

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.

References to Previous ASX Releases

- *IXR's Viridion JV targets expansion into USA with Rare Earth Refinery – 18 June 2025*
- *IXR's Brazilian JV Viridion selected for funding to accelerate rare earth recycling and refinery – 13 June 2025*
- *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.