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ASX Announcement

11 May 2026

IXR-LED EUROPEAN COLLABORATION DEMONSTRATES WESTERN WORLD FIRST RECYCLED REO SUPPLY CHAIN FOR FORD E-MOTOR MAGNETS

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- **Collaboration led by IonicRE's 100% owned subsidiary, Ionic Technologies, and including Less Common Metals (LCM), GKN and Ford UK, successfully demonstrates a first of kind supply chain for e-motor magnets, enabled by Ionic Technologies' long-loop recycling process;**
- **Ionic Technologies produces Neodymium Oxide (Nd_2O_3), Dysprosium Oxide (Dy_2O_3) and Terbium Oxide (Tb_4O_7) at target purity (> 99.5% grade), via recycling of magnets and secondary materials from within the magnet supply chain;**
- **Recycled rare earth oxides (REOs) converted to metal and strip cast alloy to magnet specification by LCM, prior to GKN making the magnets to Ford's specifications, tested at Ford in Dunton UK;**
- **Rotor produced with the recycled material magnets passes a durability test cycle, with results equivalent to rotors manufactured with production magnets;**
- **Successful testing completes the ground-breaking CLIMATES project, supported by the UK Government, via the Department for Business and Trade (DBT) and InnovateUK, demonstrating circular supply chain initiatives for Rare Earth Elements in the UK; and**
- **Significant advance in developing a sovereign, secure and sustainable UK rare earth permanent magnet supply chain for advanced manufacturing, defence and renewables.**

Ionic Rare Earths Limited ("IonicRE" or the "Company") (ASX: IXR) has made a major advance in building a sovereign and sustainable UK rare earth supply chain, with wholly owned subsidiary Ionic Technologies successfully leading a ground-breaking project to demonstrate a circular supply chain for high-performance electric motor Rare Earth Permanent Magnets (REPM).

The supply chain encompassing Ionic Technologies, Less Common Metals and GKN successfully demonstrated full circularity and functionality for magnets used in Ford electric vehicle motors, following testing conducted by Ford at its R&D facility in Dunton, UK.

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The project has provided evidence that rare earth oxides (REOs) produced using Ionic Technologies' proprietary technology are not only appropriate for use in high-specification magnet supply chains, but also that the long-loop recycling method can enable a UK-orientated holistic supply chain that can deliver magnets equivalent to the existing supply chain.

This is a significant breakthrough in achieving the UK Government's goal of reducing the nation's overreliance on foreign imports of critical minerals, protecting the UK from shortages in global shocks and shoring up supply chains. Under the UK's Critical Minerals Strategy announced in November 2025, the UK is targeting producing 10% of its mineral needs domestically and 20% through recycling by 2035, compared to current domestic production which accounts for just 6% of its critical minerals needs.

The project was supported via the UK Government's CLIMATES initiative, which fostered 36 projects supporting circular Rare Earth Elements (REEs) initiatives. The Ionic Technologies-led circular automotive supply chain was a flagship project, providing a fully circular demonstration for high-specification magnets. The project proves that Ionic Technologies' process provides a reliable source of REOs for automotive magnet production, key for the UK's automotive transformation as part of its commitment to a clean energy future.

Acknowledgement of Successful Supply Chain Validation

Welcoming the project's success, IonicRE's Managing Director, Tim Harrison said: "*Congratulations to Ionic Technologies and our CLIMATES Project partners for this hugely significant achievement in demonstrating a first of kind supply chain for e-motor magnets. This represents a technological breakthrough for Western REE supply chains, with the need for sovereign, secure and sustainable supply of these minerals critical to the 21st century economy.*

"Utilising made-in-Belfast technology, Ionic Technologies was the first producer of recycled, individually separated magnet REOs in the Western world and this now proves that its long-loop recycling technology can supply Western supply chains for the most demanding applications.

"We have demonstrated that a circular supply chain is not just a good idea, it is something that we can enable right now from our demonstration plant in Belfast which, thanks to the support of the UK Government and industry partners, can form the basis of a commercial plant. As we work to secure the necessary investment to progress to a Final Investment Decision, it is incredibly exciting to have this validation of the technology, and we look forward to delivering on its potential for the benefit of the UK and all stakeholders."

Mr Harrison also acknowledged the stakeholders who made the project possible: *"We are tremendously appreciative of all those who subscribed to this project, which was conceived before recent export controls were implemented. It took tremendous vision for Ford to participate in the project at a time when global supply chains were more stable, but the decision to do so has proven to be a masterstroke given recent events.*

"Both LCM and GKN were also intuitive enough to recognise that long-loop recycling represents the only realistic medium-term European supply route for REOs, and that the Ionic Technologies process is capable of providing them with materials for their respective specifications.

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"We also acknowledge the forward-thinking DBT and Innovate UK officials from the UK Government who recognised the strategic need for the CLIMATES funding, and backed Ionic Technologies across multiple projects including this one."

Dennis Witt, UK Innovation, Ford of Britain said: *"Ford is proud to have been part of this ground-breaking project for the UK's clean energy future. Electric vehicle motors rely on high quality rare earth permanent magnets and by manufacturing these test rotors at Halewood and validating them at Dunton, we proved that recycled magnets can meet our rigorous commercial standards on the first attempt.*

"While this is currently a testing project rather than mass production, it confirms that a circular supply chain for rare earth elements is a reality, offering a sustainable path forward without compromising vehicle performance."

Mr. Aaron Riley, General Manager, Less Common Metals, said: *"Producing magnet-specification alloy from one hundred percent recycled rare earth oxides, and seeing it perform identically to material made from mined feedstock, is a real technical milestone. Less Common Metals has spent decades perfecting the metallurgy that makes high-performance magnets possible, and this project shows the bar can also be met with recycled inputs.*

"We're proud to have partnered with Ionic Technologies, GKN, and Ford on this circular supply chain demonstration, and we look forward to building on what we've achieved as we move into 'CirculaREEconomy' and the work ahead."

Recycled REOs in new Magnets enabling High Performance Automotive Circular Solution

The collaboration required capability across all the parties involved to produce REOs, metal, alloy and magnets to Ford's standards. Ionic Technologies led the project, and produced high purity separated REOs using its magnet recycling and REE separation technology.

Ionic Technologies produced REOs to greater than 99.5% purity with the product quality outlined in Table 1 below. These REO product purities met typical quality specification for REOs, being suitable for use in all grades of REPMs, with volumes provided to LCM that exceeded minimum batch requirements.

Table 1: Recycled REO product quality and mass produced for program.

REO	REO Purity	Volume	Original Material	Recycled Material
Neodymium Oxide (Nd_2O_3)	99.87%	120 kg	Scrap alloy/magnet	100%
Dysprosium Oxide (Dy_2O_3)	99.56%	10 kg	Scrap alloy	100%
Terbium Oxide (Tb_4O_7)	99.75%	8 kg	Scrap alloy	100%

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Figure 1: Neodymium ingots, after reduction, and Dysprosium (centre) and Terbium ingots (right) after Vacuum remelting (used with permission from LCM).

The recycled material from Ionic Technologies, used to produce alloy by LCM, was made into finished NdFeB magnets at GKN's manufacturing site in Radevormwald, Germany. The recycled material behaved in the same way as flakes made from mined material during manufacture and produced magnets of the same end specification and performance.

Figure 2: Left, representatives from Ionic Technologies meet Dennis Witt, Ford Innovation Manager (third from left) and Aaron Riley, General Manager LCM (far right) at Ford's Halewood e-motor manufacturing plant, UK, and right, e-rotor made using magnets produced via the supply chain, with spare magnets.

Ford provided OEM insight to the project, as well as use of manufacturing and test facilities. The recycled material magnets were built into two rotors at Halewood, before one of the rotors was tested

on a dyno at Dunton. The rotor produced with the recycled material magnets passed a durability test cycle, with results comparable to rotors manufactured with production magnets.

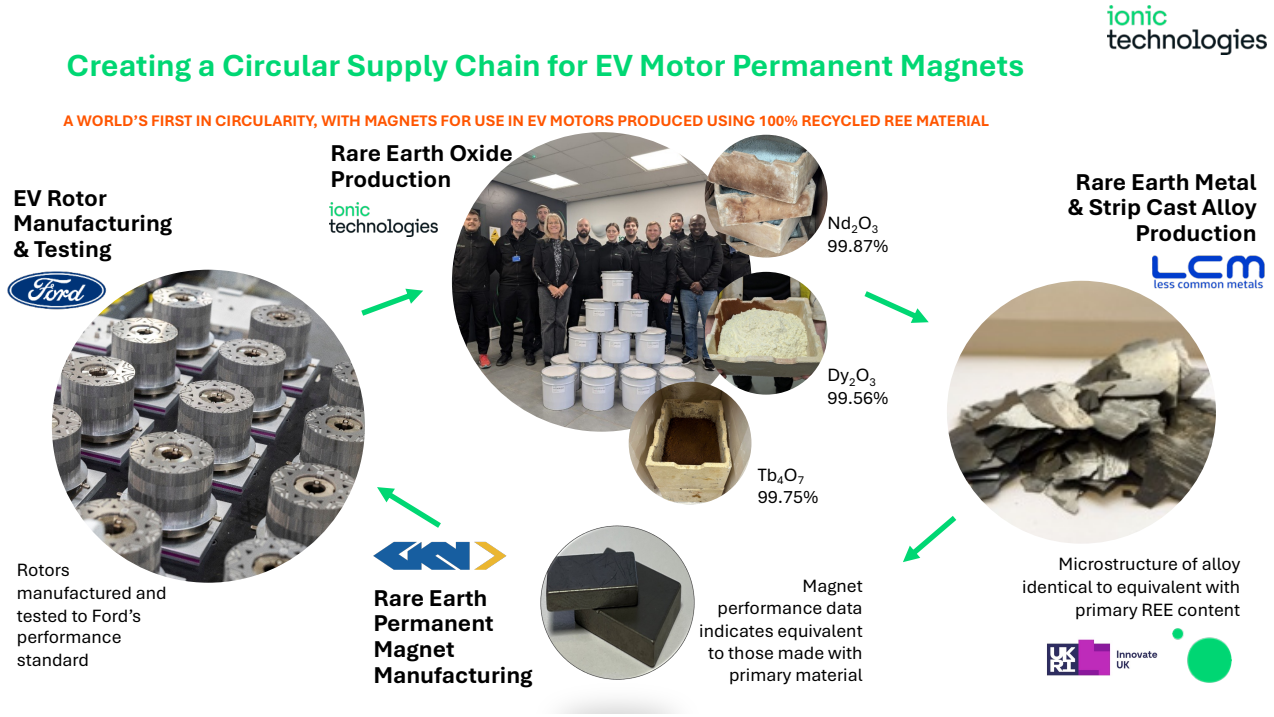

Figure 3: Circular Supply Chain including roles of Ionic Technologies, LCM, GKN and Ford UK.

Prior to the project's conclusion, all parties agreed to extend the collaboration in a subsequent project to develop the supply chain further. The CirculaREEconomy Project, also led by Ionic Technologies, and sponsored by the Advanced Propulsion Centre UK (APC UK), was awarded funding via the £2 billion UK Automotive Sector: DRIVE35 program (refer IXR's ASX release 14 July 2025).

Ionic Technologies subsequently secured an Offer in Principle from APC UK and DBT for a £12 million capital grant to support the delivery of a commercial magnet recycling plant in Belfast, UK, in another major step forward for this made-in-Belfast technology (IXR: ASX 27 January 2026). The grant will support the development of the Company's planned 400 metric tonnes per annum magnet REO capacity plant at Queen's Island within the iconic Belfast Harbour Estate.

Next Steps

IonicRE will continue developing critical supply chain relationships via the CirculaREEconomy Project and other initiatives together with its industry partners.

IonicRE is also continuing to develop commercial feedstock and offtake agreements, and the results of this project provide validation for REO quality and combability with high specification magnets and their supply chains.

The Company is also continuing discussions with potential strategic investors to secure the remaining required equity capital for the £85 million project to support FID for the commercial plant.

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IonicRE Executive Chairman, Brett Lynch commented: *"Ionic Technologies' world-leading technology has proven its ability to deliver and we are delighted by the results. We set out to do something really extraordinary, with capability to be proven at every step of the supply chain, and every participant has risen to the challenge.*

"We must all build on the success of the project, and progress towards delivering our vision for a vertically integrated western REE supply chain, driven by magnet recycling. OEMs and other REE users should take note of Ionic Technologies' ability to serve their material needs with no need to rely on mining or imports. The raw materials are already available, and our technology unlocks its value once again.

"This is another vital step forward in building a global industrial business based on magnet recycling, which can truly deliver a secure, sustainable and sovereign ex-China rare earths supply chain for the industries of the future."

About the production of REOs at Ionic Technologies

Wholly owned by IonicRE, Ionic Technologies has developed rare earth element (REE) separation and refining technology and applied this to the recycling of spent permanent NdFeB magnets.

The process uses a hydrometallurgical process to extract the REEs, then separate the individual magnet REEs within – Neodymium, Praseodymium, Dysprosium and Terbium – and finally refine to high purity individual magnet REO.

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. The Ionic Technologies magnet recycling process is agnostic on magnet quality, can process oxidised magnets, and can also manage coatings and films, to produce individually separated and refined high purity REOs.

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.

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

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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 99.9% rare earth oxide (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.

About Less Common Metals

Less Common Metals, is a wholly owned subsidiary of USA Rare Earth, Inc., and has operated as one of Europe's rare earth metallurgy facilities for decades. It has built a strong track record in converting rare earth oxides into high-purity metals, master alloys, and strip-cast products at commercial scale, including neodymium-praseodymium, dysprosium, terbium, gadolinium and samarium metals; dysprosium-iron, terbium and samarium-cobalt strip-cast alloys; and critical

strategic metals, such as yttrium. In addition, Less Common Metals has the ability to convert recycled magnet oxides/fluorides into new metal products which supports circular value chain objectives.

Find out more at https://lesscommonmetals.com/

About Ford Technologies

Ford Technologies Limited is a subsidiary of the Ford Motor Company. Ford Technologies Limited owns and operate a major Research & Development complex at Dunton, Essex, UK. Ford currently has four drive production facilities globally; the majority of EU production will come from its UK based Halewood facility, which is planning to produce close to half a million units per annum by 2026.

Find out more at https://www.ford.co.uk/experience-ford/about-ford

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Forward Looking Statements

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References to Previous ASX Releases

- *Ionic Technologies secures UK Government Backing with £11m "CirculaREEconomy" Partnership – 14 July 2025*
- *UK Govt provides Offer in Principle for Belfast Rare Earth Magnet Recycling Plant – 27 January 2026*

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.