

Iondrive Advances US-Focused Rare Earth Recycling Technology Toward Commercialisation

US based testwork validates >90% extraction

Highlights

- **Strong rare earth extraction confirmed on commercial samples**
Testwork in the United States delivered recoveries of 93.8% neodymium (Nd) and 95.1% praseodymium (Pr) from commercially sourced samples in the US
- **NdPr focus underpins value**
Magnet rare earths (NdPr) represent ~96% of rare earth elements global market value, with high extraction reinforcing the commercial case¹
- **Testwork exceeds prior techno-economic study assumptions**
The NdPr recoveries achieved exceed assumptions in the prior techno-economic study which indicated ~46% IRR and ~US\$7m NPV for each modular deployment²
- **Improved impurity removal**
Enhanced iron removal performance supports downstream product quality and process efficiency
- **Validation of commercial pathway for IONSolv™**
Results support progression toward a modular process design producing a saleable oxide product
- **US supply chain alignment**
Program supports development of a domestic, recycling-led rare earth supply pathway targeting the United States and supporting applications for US government grants

Iondrive Limited (ASX: ION) (“Iondrive” or “the Company”) is pleased to provide an update on its rare earth recovery program from end-of-life permanent magnet materials.

Recent third party testwork undertaken by a third-party facility, Kingston Process Metallurgy Inc., under the direction of ProProcess Engineering, in the United States, continues to demonstrate strong rare earth extraction and encouraging progress toward a scalable extraction process using the Company’s IONSolv™ deep eutectic solvent (“DES”) technology.

The program includes work on feedstocks relevant to the United States market and is aligned with the growing strategic focus on developing domestic rare earth supply chains outside of traditional processing centres.

Testwork has confirmed consistent high extraction of key magnet rare earths, including neodymium (Nd) and praseodymium (Pr). As part of ongoing optimisation, the process has been refined to improve

¹ Source: IEA (2026), Rare earth elements: Pathways to secure and diversified supply chains, p.22

² ASX Announcement, Positive Techno-Economic Evaluation for REE Recycling, 17 November 2025

iron rejection and feed preparation, which is important for producing a saleable rare-earth product and minimising rare-earth losses to iron-bearing reject streams.

Lewis Utting, CEO commented:

"These results demonstrate that IONSolv™ is delivering consistent high extraction while progressing toward a process that can be deployed at scale.

We are achieving strong extraction of key rare earth elements and continue to refine the process, particularly around iron management and feed preparation, which are critical to maximising overall performance.

Our focus is now on producing a saleable rare earth product and advancing the process toward commercial deployment.

The latest results support the Company's transition from technology validation toward a modular, scalable extraction platform.

We are progressing a modular processing model, where individual units operate as standalone production modules. This approach is intended to enable capital-efficient deployment across multiple locations, including the United States."

The latest results support the Company's transition from technology validation toward commercial deployment of the IONSolv™ platform.

The Company is progressing a modular, scalable processing model, where individual units are designed to operate as standalone production modules. This approach is intended to enable capital-efficient growth and potentially rapid deployment across multiple locations, including the U.S.

Methodology

Testwork was conducted on the Company's IONSolv™ platform by a third-party facility, Kingston Process Metallurgy Inc., under the direction of ProProcess Engineering, in the United States, on magnet feedstock sourced from a commercial recycler (250 kg bulk sample). The Program of Work included kg-scale testing under representative conditions, combined with iterative optimisation, which delivered 93.8% Nd and 95.1% Pr extraction results.

Next Steps

The Company's near-term focus is to progress IONSolv™ from validation toward commercial readiness through a targeted multi-site staged modular deployment. Throughout the next quarter, the Company plans to:

- Finalise the updated Phase 2 program and complete further optimisation of processing conditions, with a focus on iron rejection, product quality and scale-up parameters
- Produce a mixed rare earth oxide product sample to support potential customer, offtake and strategic partner engagement
- Advanced engineering and commercial planning for a modular rare earth recycling pathway, aligned with the U.S market
- Use the outcomes of Phase 2 to develop the Pre-Feasibility Study program.

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This announcement has been approved for release by the Board of Directors

Further Information & Investor Relations

Jane Morgan

Investor and Media Relations

jm@janemorganmanagement.com.au

+61 405 555 618

Lewis Utting

londrive Limited

Chief Executive Officer

info@londrive.com.au

About londrive

londrive is developing IONSolv™, an innovative metal extraction platform for the selective recovery of critical minerals. The technology operates at low temperatures, avoids aggressive acids, and uses tuneable chemistry to enable efficient, closed-loop extraction across a range of feedstocks. While initial deployment is in battery materials, IONSolv™ is designed for broader application in mineral processing and urban mining of e-waste.

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