

Updated IONSolv™ Evaluation Returns US\$243m Post-Tax NPV for a Single US Rare Earth Module

US\$62m annual EBITDA on US\$122m of revenue and US\$11.9m of development capital, modelled on recovery assumptions below independently validated testwork

Highlights

- **Post-tax NPV (10% real) of US\$243 million** for a single 2,400 tpa IONSolv™ module in the United States. Pre-tax NPV (10% real) is US\$348 million.
- **Modelled annual EBITDA of US\$62.1 million** on revenue of US\$121.8 million, an EBITDA margin of 51.0%.
- **Development capital of US\$11.9 million**, with sustaining capital of US\$6.0 million across the ten-year operating life.
- **Approximately 630 tpa of rare earth oxide product** from one module, of which approximately 624 tpa is payable neodymium, praseodymium and dysprosium oxide.
- **The model applies assumed overall flowsheet recoveries of 89.3% for Nd, 88.5% for Pr and 88.8% for Dy.** These are below the independently validated single-pass leach results and incorporate element-specific assumptions for recovery through the downstream flowsheet. Overall recovery through to final MREO product remains to be demonstrated through integrated testwork.
- **Key modelling assumption.** The base case assumes feedstock containing 30.66% REO. Feedstock grade and availability at commercial scale remain subject to qualification and to commercial supply arrangements.
- **Product pricing is a modelling assumption** referenced to published North American benchmark assessments at a 90% realisation. No sales price is contracted.
- **The evaluation supports the planned first commercial module in Oklahoma.** It is a study. It is not a final investment decision.

Iondrive Limited (ASX: ION) ("Iondrive" or "the Company") today releases the results of an updated technical and economic evaluation of its IONSolv™ process applied to the recovery of rare earth elements from end-of-life permanent magnets. The evaluation is based on financial model version 0.7 dated 3 September 2026, prepared by ProProcess Engineering (Pty) Ltd and ModelAnswer Commercial Analytics Pty Ltd and incorporating updated engineering cost estimates dated 31 August 2026. It supersedes the evaluation announced in November 2025.

One IONSolv™ module

Parameter	Updated evaluation (model v0.7)
Feedstock throughput	2,402 tpa
REO head grade (assumed)	30.66%
Contained REO in feed	736 tpa
Modelled recoveries — Nd ₂ O ₃ / Pr ₆ O ₁₁ / Dy ₂ O ₃	89.3% / 88.5% / 88.8%
Rare earth oxide production	~630 tpa, of which ~624 tpa payable Nd, Pr and Dy oxide
Realised product value	US\$193/kg of product
Annual revenue	US\$121.8m
Annual operating cost	US\$59.7m (US\$94.79/kg of product)
— of which feedstock	US\$30.4m (US\$48.30/kg of product)
Annual EBITDA	US\$62.1m
EBITDA margin	51.0%
Development capital	US\$11.9m
Sustaining capital (ten years)	US\$6.0m
Post-tax NPV (10% real)	US\$243m
Pre-tax NPV (10% real)	US\$348m
Post-tax IRR	379%
Post-tax payback	0.24 years from first production
Operating life	10 years following one construction year

The model is ungeared and in real United States dollars, and applies a 10% real discount rate, a 30% corporate tax rate and a valuation date of 31 December 2025. The modelled internal rate of return and payback are a function of the low initial capital estimate together with assumptions of no production ramp, no working capital and full utilisation from first production. They are not comparable with the returns reported for conventional development projects and should not be read as the central measure of the evaluation. The modelled construction and operating periods are indicative and do not represent a construction schedule or timetable.

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Recoveries: modelled and independently validated

Oxide	Independently validated (single pass)	Applied in the economic model
Nd ₂ O ₃	96.5%	89.3%
Pr ₆ O ₁₁	96.5–97.3%	88.5%
Dy ₂ O ₃	93.5–93.6%	88.8%

The results announced on 15 June 2026 are independently validated single-pass leach recovery results; they are not demonstrated recoveries through to final MREO product. The economic model applies assumed overall flowsheet recoveries of 89.3% for Nd₂O₃, 88.5% for Pr₆O₁₁ and 88.8% for Dy₂O₃. These figures incorporate element-specific assumptions for recovery through the downstream stages. The downstream recovery assumptions have not yet been validated through integrated flowsheet testwork. Planned bulk and integrated testwork is intended to test recovery through to final product. The recovery assumptions and economic model will be reviewed and updated to reflect the results of that testwork. Iondrive has not run the model on the validated recovery basis and makes no statement as to what such a case would produce.

Why the economics have changed

The change from the November 2025 evaluation is driven principally by the feedstock now being modelled, not by the process. In order of contribution: a materially higher assumed feedstock head grade; an updated feedstock composition, in particular a much higher dysprosium content; updated Western benchmark pricing assumptions; independently validated technical performance informing the development case; and updated engineering and cost estimates.

Parameter	November 2025 evaluation	Updated evaluation
Feedstock throughput (one module)	2,000 tpa	2,402 tpa
REO head grade	~7.2% (implied)	30.66% (assumed)
Dysprosium oxide share of contained REO	not separately modelled	4.45%
Dysprosium recovery	32.1% (assumed)	88.8% modelled; 93.5–93.6% validated
Payable oxides	Nd, Pr, Dy, Ho, Gd	Nd, Pr, Dy
Payable oxide production	~115 tpa	~624 tpa

The increase in modelled production, from approximately 115 tpa to approximately 624 tpa, is principally a function of the richer assumed feedstock rather than of improved recovery. Confirmation of feedstock grade and availability at commercial scale is accordingly central to the evaluation. Dysprosium oxide accounts for approximately 4.7% of modelled production by mass and

approximately 49.5% of base-case revenue, so the assumed dysprosium content of the feed and the assumed dysprosium price are both material to the result.

Pricing basis

Oxide	Benchmark assumption	Realisation	Realised price
Nd ₂ O ₃	US\$115/kg	90%	US\$103.50/kg
Pr ₆ O ₁₁	US\$115/kg	90%	US\$103.50/kg
Dy ₂ O ₃	US\$2,300/kg	90%	US\$2,070/kg

The benchmark price assumptions above are management-adopted figures referenced to Platts (S&P Global Commodity Insights) CIF North America assessments for NdPr oxide and dysprosium oxide. They are inputs to the model. They are not independently determined price forecasts, and no sales price is contracted. The base case values recovered product at 90% of those benchmark assumptions, giving a blended realised value of US\$193 per kilogram of product.

The dysprosium benchmark assumption of US\$2,300/kg is an ex-China Western market level. For comparison, the model also carries the Chinese domestic assessment for dysprosium oxide, published by Shanghai Metals Market, at US\$191/kg. The separation between ex-China and Chinese domestic dysprosium pricing is a material feature of the base case. A case run wholly against Chinese domestic assessments, at 170% of those assessments, is included in the sensitivities below.

Feedstock cost

Feedstock is costed at 20% of the contained value of neodymium, praseodymium and dysprosium oxide in the delivered material, valued at the benchmark assumptions set out above. On the modelled feed this equates to US\$30.4 million per annum, or US\$48.30 per kilogram of product, and represents 51% of total operating cost. The methodology recognises the contained value of dysprosium in the incoming material as well as that of neodymium and praseodymium.

Sensitivities

Post-tax NPV (10% real) under each pricing case run in the model:

Pricing case	Post-tax NPV (10% real)
Flat US\$115/kg reference	US\$40m
Illustrative floor pricing	US\$80m
75% of Platts CIF North America	US\$159m
170% of Chinese domestic (SMM) assessments	US\$200m
Illustrative floor plus 70% of upside	US\$233m

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Pricing case	Post-tax NPV (10% real)
90% of Platts CIF North America (base case)	US\$243m
100% of Platts CIF North America	US\$298m

Post-tax NPV (10% real) under movements in the principal model variables:

Variable	Down 30%	Base case	Up 30%
Realised product price	US\$130m	US\$243m	US\$355m
Operating cost	US\$316m	US\$243m	US\$169m
Development capital	US\$247m	US\$243m	US\$238m
Discount rate (7% / 13% real)	US\$283m	US\$243m	US\$210m

No pricing case tested returns a negative net present value. The economics are most sensitive to realised product price and to operating cost, and are relatively insensitive to development capital. A discrete sensitivity to feedstock head grade has not been run in the current model; the effect of grade is addressed under “Basis of the evaluation” below.

Basis of the evaluation

- **Model.** Financial model version 0.7 dated 3 September 2026 for a single module, prepared by ProProcess Engineering (Pty) Ltd and ModelAnswer Commercial Analytics Pty Ltd. Ungeared, real United States dollars, 10% real discount rate, 30% corporate tax rate, valuation date 31 December 2025, one construction year followed by ten operating years. All model integrity checks pass.
- **Scope of independent validation.** The independent validation referred to in this announcement is of technical recovery performance in laboratory testwork. It does not extend to the commercial assumptions on which the economics depend, being feedstock head grade and availability, feedstock composition, product pricing and realisation, capital and operating cost estimates, and plant utilisation. Those assumptions are management assumptions and are set out in this announcement so that the basis on which the economics are stated can be assessed.
- **Feedstock head grade.** The base case assumes a feedstock head grade of 30.66% REO, taken from assay of a commercial United States magnet feedstock sample. This is one of the largest single drivers of the modelled economics. Feedstock grade and availability at commercial scale remain to be confirmed. Feedstock costs move with contained metal and therefore fall as grade falls, but reagent, energy, residue-handling and capacity costs are set by tonnes processed and do not, so a sustained lower head grade would reduce production and margin.
- **Feedstock composition.** The modelled feed comprises 74.75% Nd₂O₃, 15.87% Pr₆O₁₁, 4.45% Dy₂O₃ and 4.93% other rare earth oxides, expressed as a share of contained REO, taken from the same sample. Only neodymium, praseodymium and dysprosium oxide carry revenue in the model.
- **Product pricing.** Benchmark price assumptions are management-adopted figures referenced to published assessments, applied at a 90% realisation. They are modelling assumptions. No sales price is contracted and no offtake agreement has been executed.

- **Utilisation.** The model assumes 85% plant availability, no production ramp, no working capital and full utilisation from first production. Modelled IRR and payback are amplified accordingly.
- **Cost estimates.** Capital and operating cost estimates carry study-level accuracy and will be refined through front-end engineering design.
- **Development.** Construction of a commercial module requires funding, site selection, permitting and approvals, and a final investment decision, none of which is assured.

Management commentary

Iondrive's Chief Executive Officer, Dr Grant Caffery, commented:

"The updated work puts economics around a single commercial module using modelled overall flowsheet recoveries of approximately 89%. These assumptions sit below the independently validated single-pass leach results and allow for element-specific losses through the downstream flowsheet. Integrated testwork still needs to validate overall recovery through to final product.

"The number that matters most in this study is not the rate of return. It is the feedstock. The economics assume material at 30.66% REO, and confirming grade and availability at commercial scale is the work in front of us. That is where the qualification campaign and the supply arrangements are directed.

"On US\$11.9 million of development capital for the first module, this is a small, capital-light project by the standards of the sector. Our job is to take it through engineering, feedstock and customer qualification, and funding, to an investment decision."

Commercial pathway

The evaluation is directed at sourcing end-of-life permanent magnet feedstock in the United States, processing it there using IONSolv™, and supplying the resulting rare earth oxide to United States downstream customers. Rare earth separation and refining capacity remains heavily concentrated offshore, and United States manufacturers in defence, automotive, robotics and clean energy are seeking secure, traceable domestic supply.

The modular design allows capacity to be added in increments and sited close to where magnet waste arises. The economics above are for one module. The Company's strategy contemplates the deployment of multiple modules as feedstock supply and customer demand allow.

Next steps

- Complete front-end engineering design and refine capital and operating cost estimates for a first commercial module.
- Complete the United States commercial-scale qualification campaign and confirm feedstock grade, composition and availability.
- Progress United States site selection, permitting and approvals.
- Advance feedstock supply, product offtake and funding arrangements toward a final investment decision.

This announcement has been approved for release by the Board of Iondrive Limited.

Forward-looking statements

This announcement contains forward-looking statements, including statements regarding the modelled production, revenue, costs, EBITDA, net present value, internal rate of return and payback of a commercial IONSolv™ module, the availability and grade of feedstock, the prices at which recovered product may be sold, and the funding, construction and operation of a commercial facility. They are based on the Company's current expectations and on the assumptions set out under "Basis of the evaluation" above, and are subject to risks and uncertainties, many of which are outside the Company's control.

The financial outcomes described are the output of a financial model. They are not a forecast, a guarantee or a representation of future financial performance, and actual results may differ materially. Investors should not place undue reliance on forward-looking statements.

Further Information & Investor Relations

Jane Morgan

Investor and Media Relations
jm@janemorganmanagement.com.au
+61 405 555 618

Dr Grant Caffery

Iondrive Limited
Chief Executive Officer
info@iondrive.com.au

About Iondrive

Iondrive is developing IONSolv™, a metal extraction platform based on deep eutectic solvent chemistry, designed for the selective recovery of critical minerals from primary and secondary feedstocks. Unlike conventional hydrometallurgical and pyrometallurgical approaches, IONSolv™ operates at lower temperatures, avoids aggressive acid systems, and offers a tuneable chemistry able to selectively extract individual metals. Iondrive's immediate commercial focus is the recovery of rare earth elements from end-of-life permanent magnets and the deployment of modular IONSolv™ processing capacity in the United States. Solar panel recycling and battery materials represent additional applications of the same platform.