

Iondrive Quarterly Activities Report March 2025

Highlights

- Global trade tensions heighten the need for surety of access to critical minerals, supporting the European need for environmentally sustainable onshore battery recycling underpinning Iondrive's go to market strategy in Europe.
- Independent economic modelling for Iondrive's proprietary DES process confirmed strong investment metrics, adding to the previous benchmarking study which showed a 36% lower CAPEX than a conventional hydromet plant based in Europe.
- Optimisation trials demonstrated 100% recovery of lithium and aluminium from untreated black mass, indicating further scope for CAPEX reductions.
- Pilot Plant remains on track for a Financial Investment Decision (FID) in July to meet a target commissioning in 2025 with the objective of both demonstration of the technology in continuous operation and the production of sample battery metal material to allow evaluation through the supply chain downstream including OEM's.
- The Company is advancing the application of its DES process across a range of feedstocks from both circular economy and virgin mining sources. The first evaluation is already underway, trialling the recovery of critical minerals from U.S.-sourced MHP feedstock. In parallel, the Company is planning a second program to assess the potential of the DES process for recycling electronic waste, targeting the recovery of gold, silver, palladium, and other valuable metals.
- The \$6 million placement was completed with the second tranche of \$4 million finalised in February, following shareholder approval. Cash on hand at 31 March 2025 was \$7 million.
- Exploration business is being rationalised through the sale of a Rare Earths Element tenement for \$100,000 and advancing negotiations for the divestment of the remainder of the business¹ that would reduce the Company's annual cost base by \$600,000.

Iondrive Limited (ASX: ION) ("Iondrive" or "the Company") is pleased to present its report for the quarter ended 31st March 2025 (the "Quarter").

Review of Operations

Economic Modelling and Financial Validation

In February, Iondrive completed independent third-party economic modelling of its proprietary DES process. The modelling confirmed strong financial viability, particularly when overlaying the earlier benchmarking study which indicated that the CAPEX for Iondrive's DES process was 36% lower than a conventional hydrometallurgical plant based in Europe (refer ASX announcement 1 November 2024). The economic modelling and benchmarking study indicates that Iondrive's DES process is a more capital-efficient and economically attractive alternative to existing conventional hydrometallurgical processes.

¹ Divestment of the exploration business may be subject to obtaining approval from ION shareholders.

In Europe — the core focus of londrive's business case — a growing deficit in battery materials processing capacity presents a clear and timely market opportunity. Recent global trade tensions have accentuated the need for ensuring access to critical minerals, adding to the case for onshore processing of end-of-life batteries in Europe. The smaller environmental footprint of londrive's DES process and 36% lower CAPEX (refer ASX announcement 1 November 2024) provides an attractive solution for this onshore processing.

In addition to the unique environmental value proposition and 36% lower CAPEX, independent modelling of londrive's DES process suggested strong economics with a post-tax NPV of \$249 million, post-tax IRR of 17% and a payback period of 5.8 years (refer ASX announcement 19 February 2025). The modelling was based on a conservative scenario of no government incentives and a small commercial plant processing 21,000 tonnes of raw black mass per year (yielding approximately 10,000 tonnes of upgraded intermediate product).

Pilot Plant Development

During the Quarter, londrive advanced the development of its Pilot Plant, appointing Wave International to complete the Front-End Engineering Design (FEED) following a competitive RFQ process. Early-stage engineering commenced in January, subject to a FID planned for July, with commissioning on track for late 2025.

The Pilot Plant will be located at the University of Adelaide and is designed as a mobile unit capable of future deployment into key global markets. At full capacity, the plant will process 10 tonnes of black mass per annum. Material produced from the pilot plant will be used for OEMs to qualify recycled material in new batteries.

The Pilot Plant represents a significant milestone in demonstrating the scalability of londrive's closed-loop DES recycling process, which offers a lower-cost, more environmentally sustainable alternative to conventional battery recycling methods.

The process integrates both pre-treatment and DES solvometallurgical refining, enabling efficient separation of lithium, nickel, cobalt and manganese with recovery rates consistently exceeding 95% in bench-scale testing. Importantly, the economic analysis assumed no government grants, tax incentives, or scale-up savings—underlining the robustness of the project economics under conservative assumptions supporting the European business case.

As previously announced in August 2024, londrive is party to a collaboration agreement with the Production Engineering of E-mobility Components Department at RWTH Aachen University and PEM Motion GmbH, both based in Germany. The collaboration aims to establish a consortium, and access necessary funding, to address battery recycling challenges in the EU. The consortium is intended to comprise strategic partners from the entire battery recycling value chain to validate the performance of battery cells made from recycled metals (refer Figure 1 below). The establishment of this consortium is progressing well, and the proposed consortium members have jointly applied for EU grants. Formal contractual terms for participation in the consortium are being prepared, with an announcement of the consortium members (and potential grants) expected in the next three months.

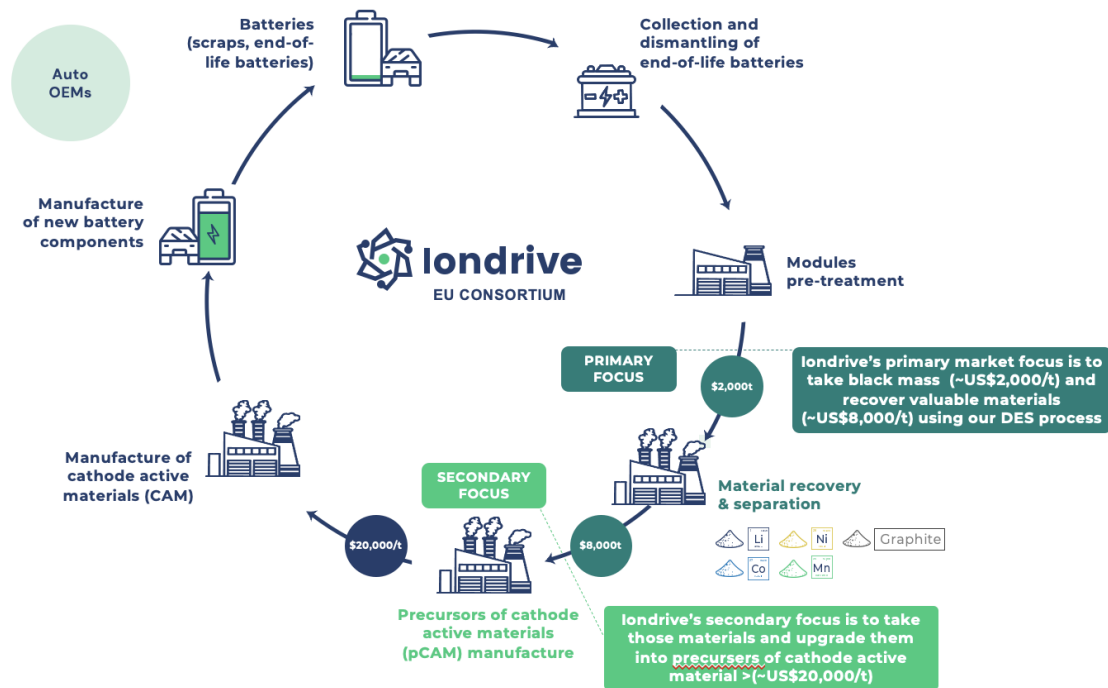


Figure 1: Iondrive's Business Model

The full value chain from EV battery production to recycling, highlighting value uplift through black mass processing and critical mineral recovery

Commercial Activities and New Feedstock Trials

The Company is in discussions with several commercial partners globally. Testing has commenced, trialing the application of its DES process for critical mineral processing, specifically Mixed Hydroxide Precipitate (MHP) received from a US-based producer.

The Company is exploring opportunities to extract nickel and cobalt from MHP more selectively and sustainably than conventional hydrometallurgical processes. It is also assessing priority feedstocks for future DES viability testing, targeting both virgin mining and circular economy sources. Additionally, the Company is awaiting the outcome of a grant application focused on e-waste, which would fund a program to evaluate the use of its DES technology for the extraction of gold, silver, palladium and other valuable metals.

A number of grant applications have been submitted by the Company across several jurisdictions, as part of the Company's non-dilutive funding strategy. The Company is particularly encouraged with the grant opportunities in the EU, in collaboration with PEM Aachen and other industry participants. The outcome for most of the applications is expected to be known in the coming three- four months, whilst the FEED of the Pilot Plant is being completed.

Process optimisation trials undertaken at the University of Adelaide yielded 100% recovery of lithium and aluminium from untreated black mass. This result indicates, in certain cases, the potential to eliminate the need for pre-treatment in ION's DES process, with substantial cost savings.

Outlook

Iondrive remains on track to deliver several key milestones in 2025, as it progresses commercialising its DES battery recycling process. With engineering for the Pilot Plant underway and commissioning

targeted for year-end, the Company will focus on validating continuous-processing for the recovery of critical minerals, expanding into new feedstocks, and formalising partnerships across the value chain.

Additional focus areas include securing non-dilutive funding, trialing application of the DES process to critical mineral processing, and continuing technology optimisation as part of the ARC Training Centre collaboration.

Corporate

Placement

In December Iondrive received commitments to raise \$6 million through a two-tranche placement at \$0.014 per share, representing a 16.7% premium to the last traded price. The second tranche of the placement, being \$4 million, was completed on 27 February 2025, following shareholder approval. The placement attracted participation from all Directors, new institutional investors, including Terra Capital, and received strong support from cornerstone shareholders such as Strata Investment Holdings Plc and Ilwella Pty Ltd. The funds are being directed towards pilot plant development, market expansion, and operational activities.

Quarterly Cashflows

For the Quarter, the Company reported total net cash inflows of \$2,979,000, represented by:

- net cash outflows from Operating and Investing activities of \$817,000, which included \$502,000 outflows associated with research & development activities (costs directly associated with progressing the battery recycling technology); and
- cash inflows from Financing activities of \$3,796,000, being the placement proceeds after capital raising costs.

These cashflow movements in the Quarter resulted in a reported consolidated cash balance of \$7,049,000 at 31 March 2025. This may be further supplemented by grant funding that has been applied for in both Australia and the EU.

Cash flows for the Quarter include related party payments of \$66,000, comprising Non-Executive Directors fees.

South Korea Exploration

As previously announced, KoBold withdrew from the earn-in and joint venture agreement effective 8 February 2025. Through this agreement, KoBold had been partly funding the exploration activities in South Korea. This is expected to have minimal impact on the Company's recent underlying cost base, as exploration activities have now been significantly scaled back.

The Company has expedited negotiations with respect to the potential sale of the exploration business and expects to finalise the process in the June quarter. The Company has separately entered into a binding agreement to sell one tenement for \$100,000. \$25,000 has been received, with the final payment of \$75,000 due by 30 April 2025.

The Company has been moving further away from its exploration roots over the past 12 months and the sale of the business would reduce the underlying cost base of the business by \$600,000 per annum and allow the business to be wholly focussed on the DES technology opportunities.

The following tenements information is provided in accordance with ASX Listing Rules. All tenements were 100% owned by the Company as at 31 March 2025:

	Tenement Info			Register Info		
Project Name	Korean	English	Block ID	No.	Type	Date of Granting
Jangnam *	자은	Jaeun	150	201483	Exploration	1/11/2024
Aphae	무안	Muan	99	201136	Exploration	26/03/2019
Deokon	전주	Jeonju	70	201041	Exploration	31/07/2018
	전주	Jeonju	80	201040	Exploration	31/07/2018
	전주	Jeonju	60	201218	Exploration	17/12/2019
Dokcheon	영암	Yeongam	116	201143	Exploration	4/12/2019
	영암	Yeongam	114	201465	Exploration	19/01/2024
Janghwal	해남	Haenam	139	201302	Exploration	20/08/2021
Samgeun	현동	Hyeondong	46	201473	Exploration	5/07/2024
Goseong	충무	Chungmu	131	201439	Exploration	18/05/2023
	충무	Chungmu	136	201414	Exploration	22/11/2022
	충무	Chungmu	142	201440	Exploration	19/05/2023
	삼천포	Samcheonpo	1	201469	Exploration	19/04/2024
Chungju	충주	Chungju	73	201491	Exploration	19/02/2025
	충주	Chungju	83	201492	Exploration	19/02/2025
	충주	Chungju	134	201493	Exploration	19/02/2025

* The Company has entered into a binding agreement to sell this tenement for \$100,000, with the final payment of \$75,000 due to be received by 30 April 2025.

Approved for release by the Board of Iondrive Limited.

Further Information

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About Iondrive

Iondrive is developing an innovative metal extraction process using Deep Eutectic Solvent technology (DES). Its initial business case is focussed on battery recycling where the proprietary method is designed to efficiently recover critical metals, including nickel, cobalt, lithium, and manganese, from black mass in a closed-loop, environmentally friendly process. Unlike conventional hydrometallurgical and pyrometallurgical approaches, Iondrive's DES technology operates at lower temperatures, eliminates the need for aggressive acids, and offers a tuneable chemistry that can selectively extract

individual metals. Whilst progressing the battery recycling application for its DES technology, londrive is actively seeking to expand the commercialisation opportunities into other markets, including mineral processing and recycling of electronic waste.

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

IONDRIVE LIMITED

ABN

30 107 424 519

Quarter ended ("current quarter")

31 MARCH 2025

Consolidated statement of cash flows

Current quarter
\$A'000

Year to date
(9 months)
\$A'000

1. Cash flows from operating activities

1.1	Receipts from customers	79	482
1.2	Payments for		
	(a) exploration & evaluation	(83)	(361)
	(b) research & development (battery technologies)	(502)	(1,878)
	(c) production		
	(d) staff costs	(220)	(527)
	(e) administration and corporate costs	(129)	(799)
1.3	Dividends received (see note 3)		
1.4	Interest received	9	23
1.5	Interest and other costs of finance paid	-	(1)
1.6	Income taxes paid		
1.7	Research and development refunds	-	406
1.8	Other (short term lease payments)	(3)	(18)
1.9	Net cash from / (used in) operating activities	(849)	(2,673)

2. Cash flows from investing activities

2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	-	(40)
	(d) exploration & evaluation		
	(e) investments		
	(f) cash held by acquired entity		

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements	25	25
	(c) property, plant and equipment	-	8
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (exclusivity fees)	7	84
2.6	Net cash from / (used in) investing activities	32	77

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	4,055	7,033
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	-	319
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(257)	(448)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (repayment of lease liability)	(2)	(17)
3.10	Net cash from / (used in) financing activities	3,796	6,887

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,071	2,759
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(849)	(2,673)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	32	77
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,796	6,887

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

4.5	Effect of movement in exchange rates on cash held	(1)	(1)
4.6	Cash and cash equivalents at end of period	7,049	7,049

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,612	1,943
5.2	Call deposits	5,437	2,128
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	7,049	4,071

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	66
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

The above amount at item 6.1 relates to Directors fees, including the executive salary of the Company's Managing Director.

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7. Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1 Loan facilities		
7.2 Credit standby arrangements		
7.3 Other (please specify)		
7.4 Total financing facilities		
7.5 Unused financing facilities available at quarter end		
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(849)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(849)
8.4 Cash and cash equivalents at quarter end (item 4.6)	7,049
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	7,049
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	8.3
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer:	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer:	

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:29 April 2025.....

Authorised by:The Board of Directors.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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