

Updated Corporate Presentation

Iondrive Limited (ASX: ION) (“Iondrive” or the “Company”) is pleased to provide the attached updated corporate presentation.

Authorised for release by the Board of Iondrive Limited.

Further Information

Ebbe Dommissie
CEO
08 8368 8888
info@iondrive.com.au

Aiden Bradley
Investor and Media Relations
+61 (0) 414 348 666
aiden@nwrcommunications.com.au



Smarter, Cleaner, Greener Metal Recovery

INVESTOR PRESENTATION

Next-generation metal recovery using Deep Eutectic Solvents

FEBRUARY 2025

ASX: ION
iondrive.com.au

Forward looking statements

This document contains certain forward-looking statements that involve risks and uncertainties. Although we believe that the expectations reflected in the forward-looking statements are reasonable at this time, we can give no assurance that these expectations will prove to be correct. Given these uncertainties, readers are cautioned not to place undue reliance on any forward-looking statements. Actual results could differ materially from those anticipated in these forward-looking statements due to many important factors, risks and uncertainties including those risks detailed from time to time in the Company's announcements to the ASX including, without limitation, risks associated with: 1) the exploration business, such as regulatory matters and the tenure of exploration and mining leases, the results of present and future exploration activities, the impact of fluctuating commodity prices, foreign exchange rates on the business and the ability of the Company to realise value through sale or joint venture of its exploration assets; and 2) the battery technology business, such as the risk that the technologies are not commercially viable, provisional patents may not result in successfully granted national patents, others may independently develop similar or improved technologies or design around patents or patent applications, or that granted patents will provide meaningful protection or competitive advantages. All reasonable efforts have been made to provide accurate information, but the Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this presentation, except as may be required under applicable laws. Recipients should make their own enquiries in relation to any investment decisions from a licensed investment advisor.

ASX Announcements

The Company recommends that this presentation is read in conjunction with its relevant ASX Announcements – in particular the announcement of 1 November 2024

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**NEXT-GENERATION
METAL RECOVERY**

Using Deep Eutectic Solvents (DES)

Our technology is a cleaner, greener, and more cost-effective approach to recover metals.

Our process enables "urban mining" which is recovery of critical minerals from waste and a wide range of other sources. This minimises waste, reducing environmental impact, and unlocks new supply chain opportunities.

THE IONDRIVE ADVANTAGE



**Supportive,
High-Quality
Shareholder Base**



**Massive Market
Opportunity**



**Proven
Technology**



**Compelling
Economics**



**Early-Mover
Advantage**



**Clear Path to
Commercialisation**

DEEP EUTECTIC SOLVENTS

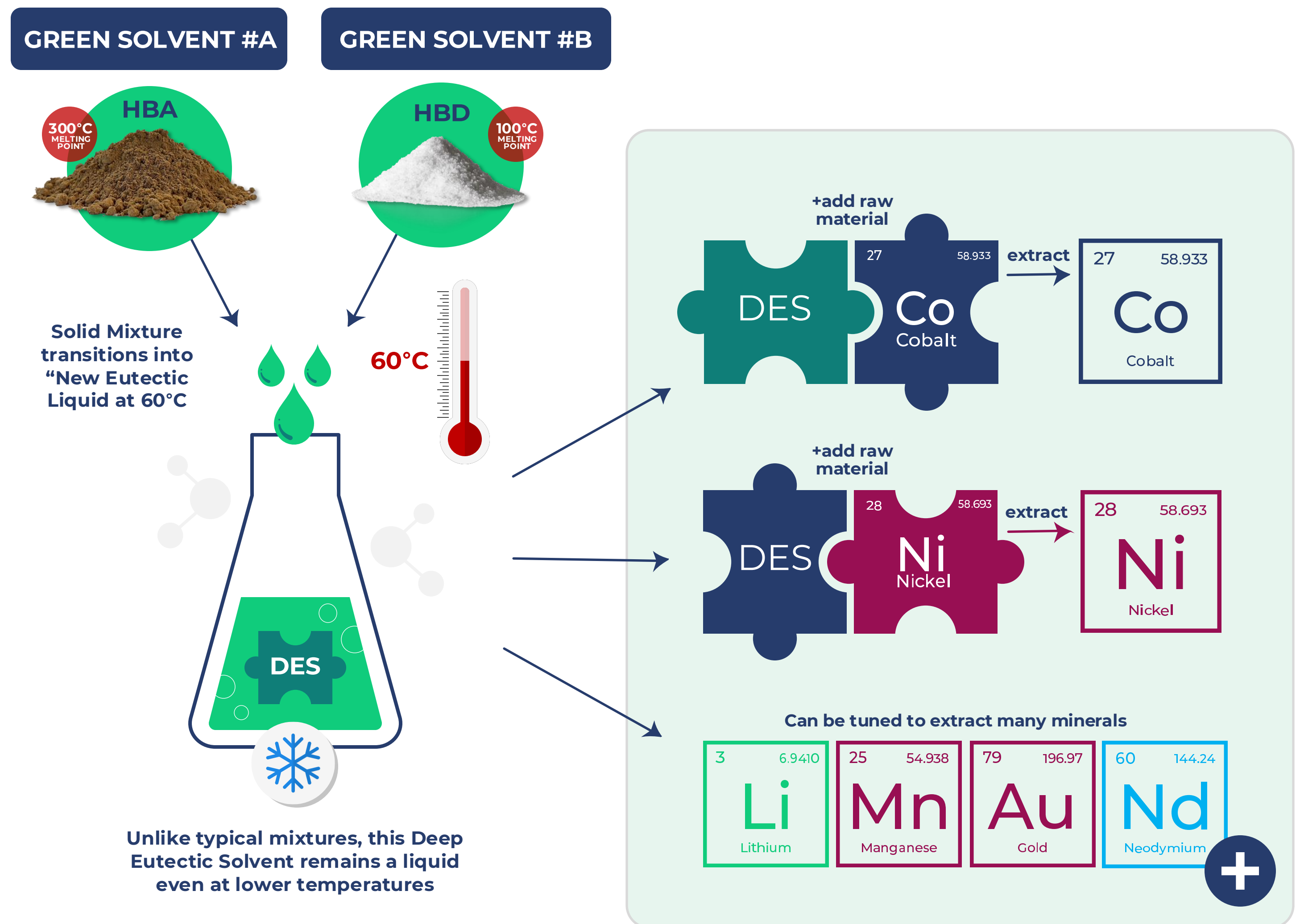
A Tuneable approach to sustainable metal extraction

What are DES?

- Deep Eutectic Solvents (DES) are green solvents formed by mixing a hydrogen bond donor (HBD) and a hydrogen bond acceptor (HBA). They interact through hydrogen bonding to create a eutectic mixture with a lower melting point than its individual components
- DES are typically low toxicity, biodegradable, and reusable.

How they work:

- Dissolve metals via complex hydrogen bonding interactions.
- Tailored chemistry enables selective extraction of specific metals, depending on the chosen HBD/HBA pair
- DES solvents can be re-used to extract more minerals unlike acids which are consumed



URBAN MINING

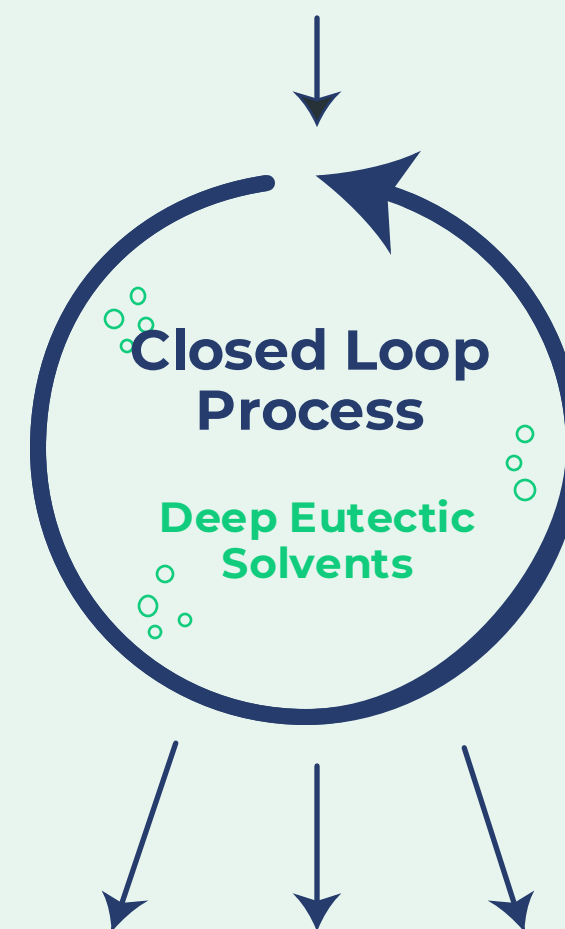
High efficiency, low environmental impact

Traditional metal recycling relies on energy-intensive, toxic processes with high waste and low efficiency in separating the critical minerals.

ION's innovative technology uses eco-friendly solvents in a closed-loop system, minimising environmental impact while achieving very high recovery rates, ideal for sustainable-focused markets.


SOLVOMETALLURGY

 RAW MATERIAL

↓


~98%
METAL RECOVERY
FROM BATTERY WASTE

PYROMETALLURGY

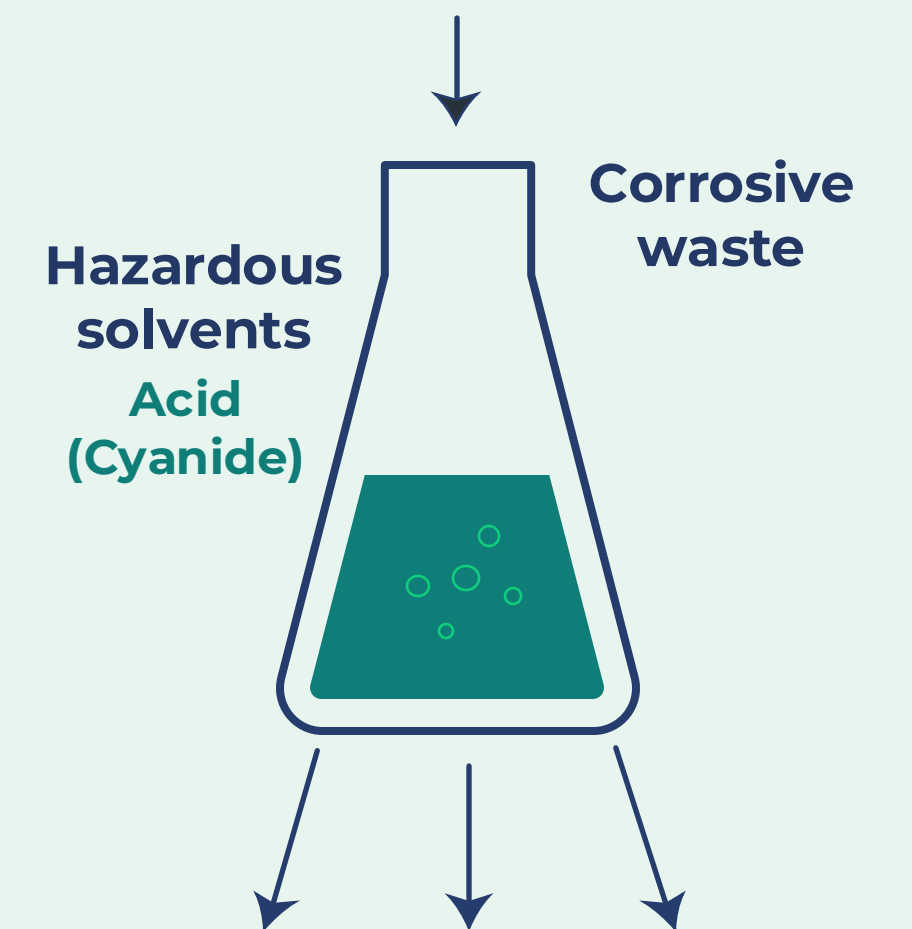
 RAW MATERIAL

↓


~50-85%
METAL RECOVERY

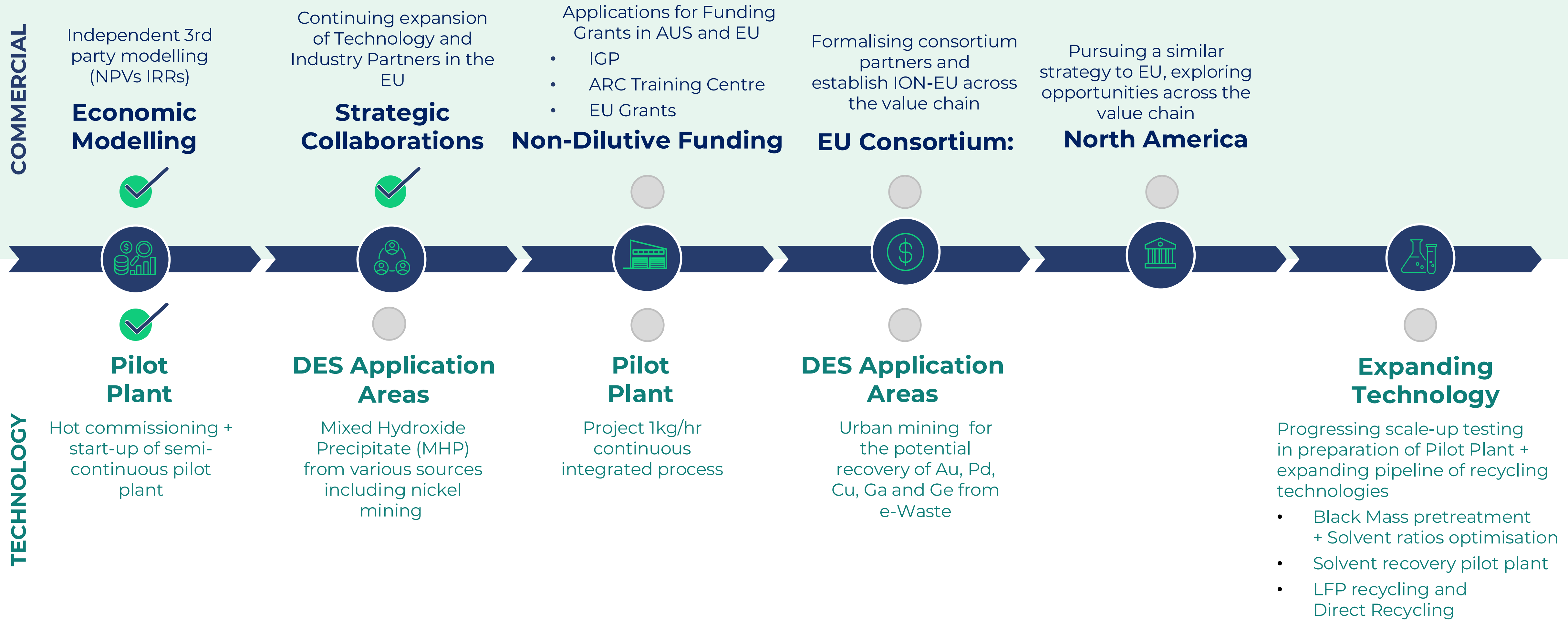
HYDROMETALLURGY

 RAW MATERIAL

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~70-95%
METAL RECOVERY

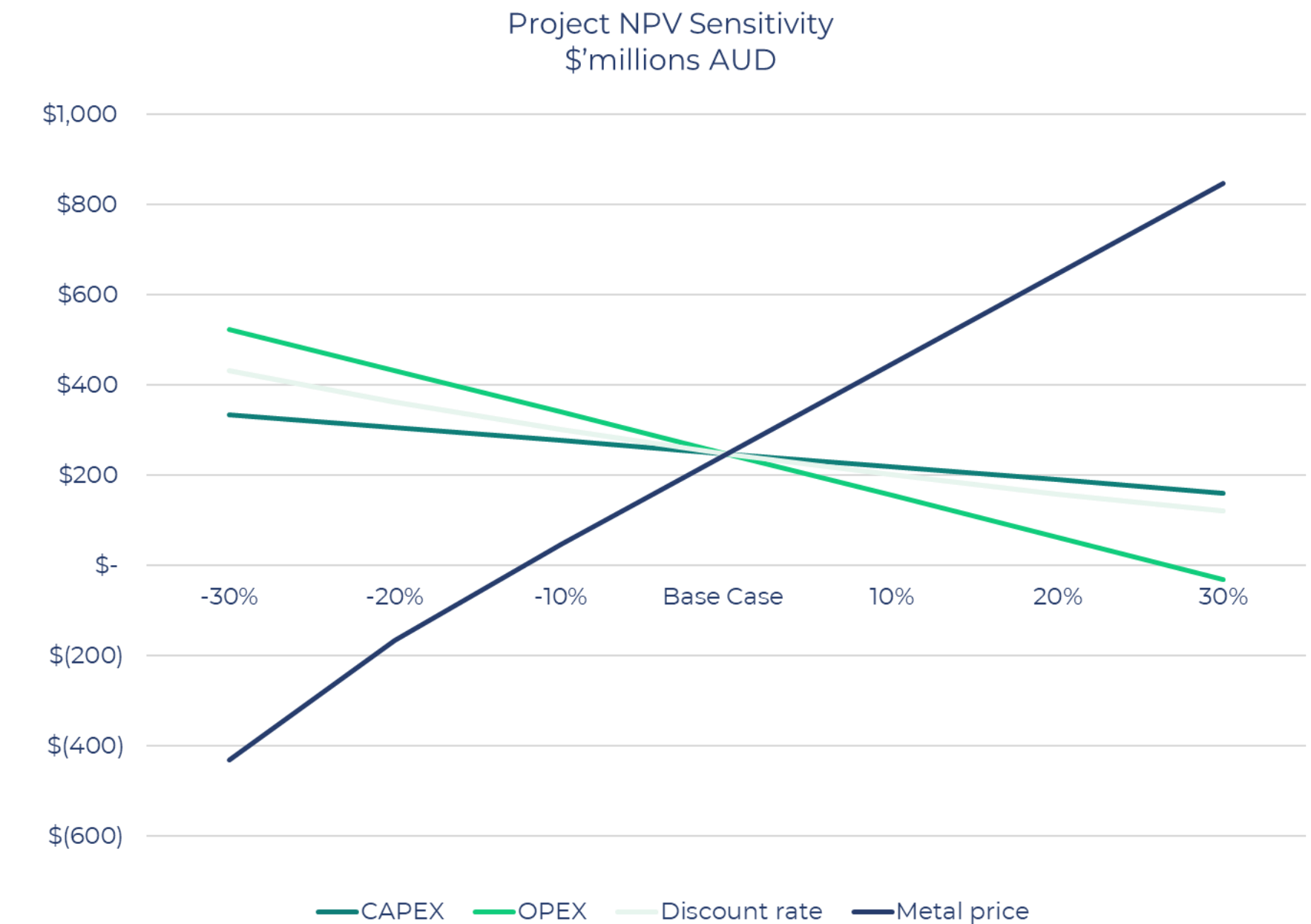
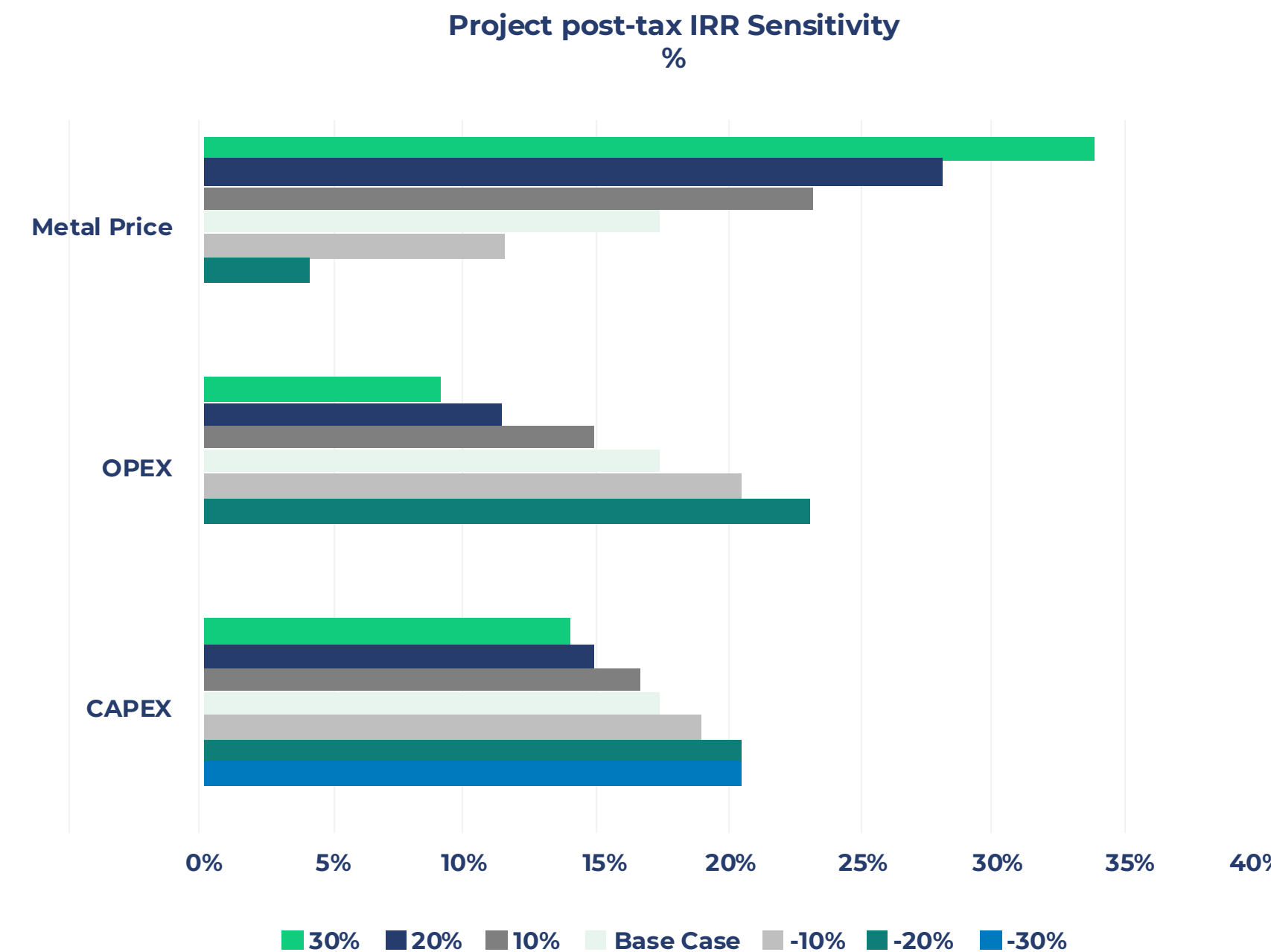
Growth catalysts (3-9 months)



Illustrative plant economic indicators



PROJECT LIFE - YEARS 21	CONSTRUCTION PERIOD - YEARS 1
OPERATIONS PERIOD - YEARS 20	DISCOUNT RATE % 10
TERMINAL VALUE 20%	PAYBACK - YEARS 5.8
EUR:AUD 1.66	USD:AUD 1.57



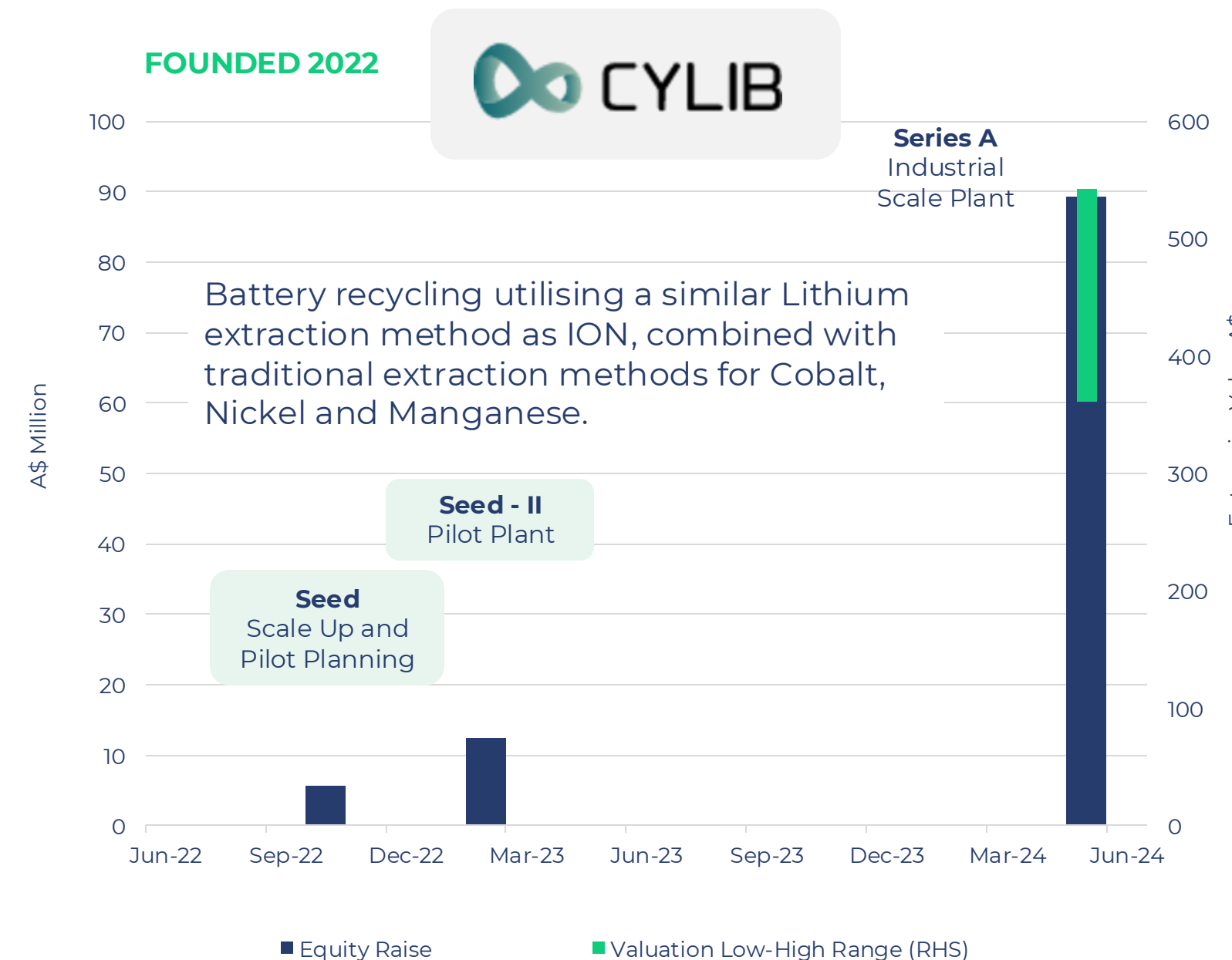
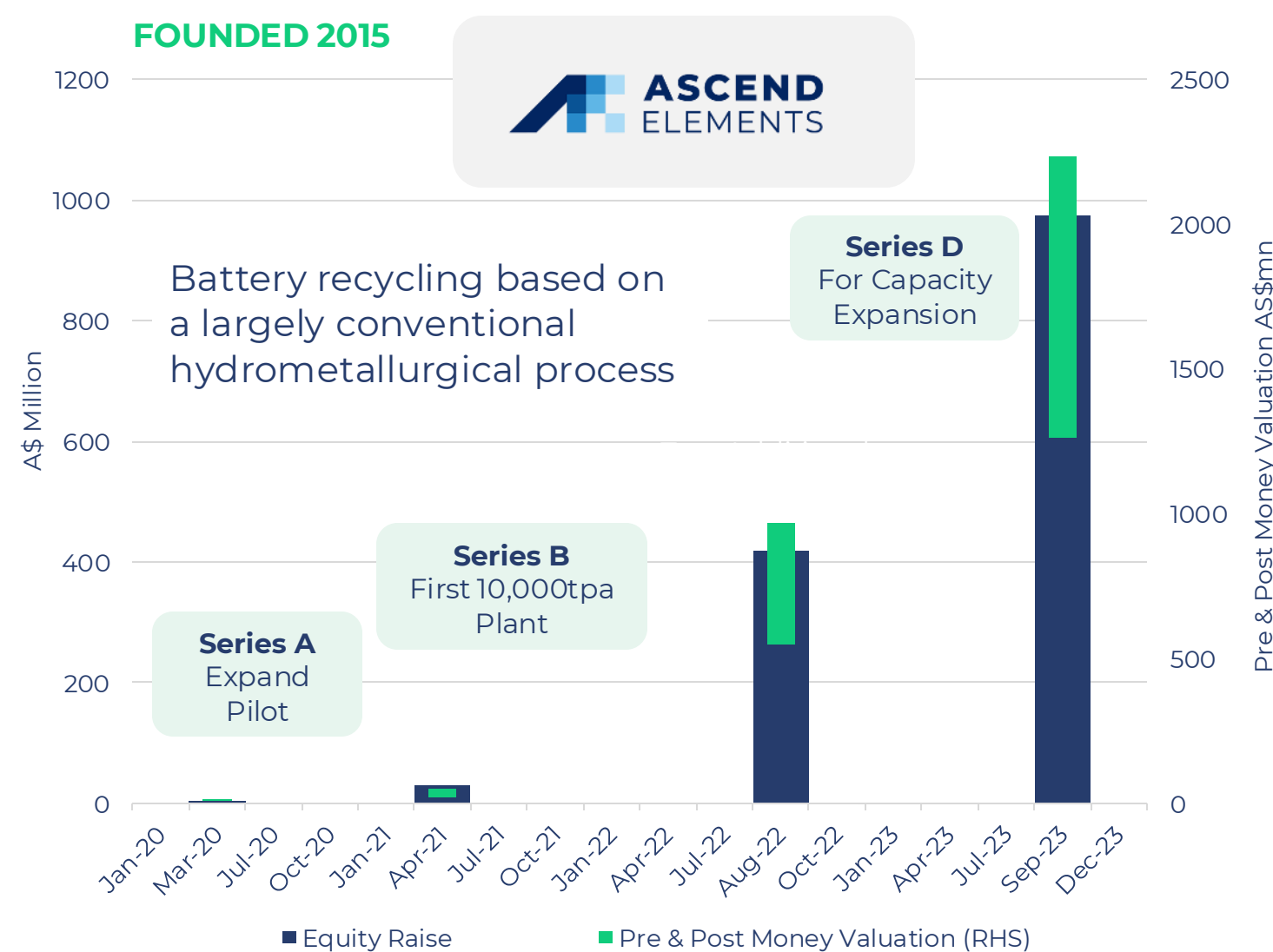
Underlying commodity prices have the largest impact on NPV and IRR

1. Company aspirations that should not be read as forward-looking statements.
 2. No assurance that actual outcomes will not differ materially from these amounts
 3. pkt/pa references plant throughput in kilotonnes for first year only as CAPEX does not reoccur year on year
 4. Assumptions for Economic Modelling presented in Appendices

CAPITAL AND VALUATION SUPPORT

Illustrative plant

Breakthrough technologies in Metal and Battery Recycling are attracting strong capital support and increasing valuations pre and post pilot



Sources: Ascend Elements Equity and Valuation data from S&P Capital IQ. <https://ascendelements.com/>
Sources: DEScycle Equity and Valuation data from dealroom.co. <https://www.descycle.com/>

Sources: cylib Equity and Valuation data from dealroom.co. <https://www.cylib.de/>

Capital structure



CORPORATE STRUCTURE:

Ordinary Shares	1182.8m*
Share Price (VWAP 18 Feb, 15 days traded)	AUD\$0.023
Market capitalisation	AUD\$27m*
Cash (31 Dec 2024) + Debtors/ RDTI claim + Placement*	AUD\$8.2m*
Enterprise Value (EV)	~AUD\$19m*

OPTIONS/PERFORMANCE RIGHTS:

ESOP incl. Directors various dates & prices	91,405,000
Broker Options	30,000,000*
Performance Rights (LTI)	30,625,000

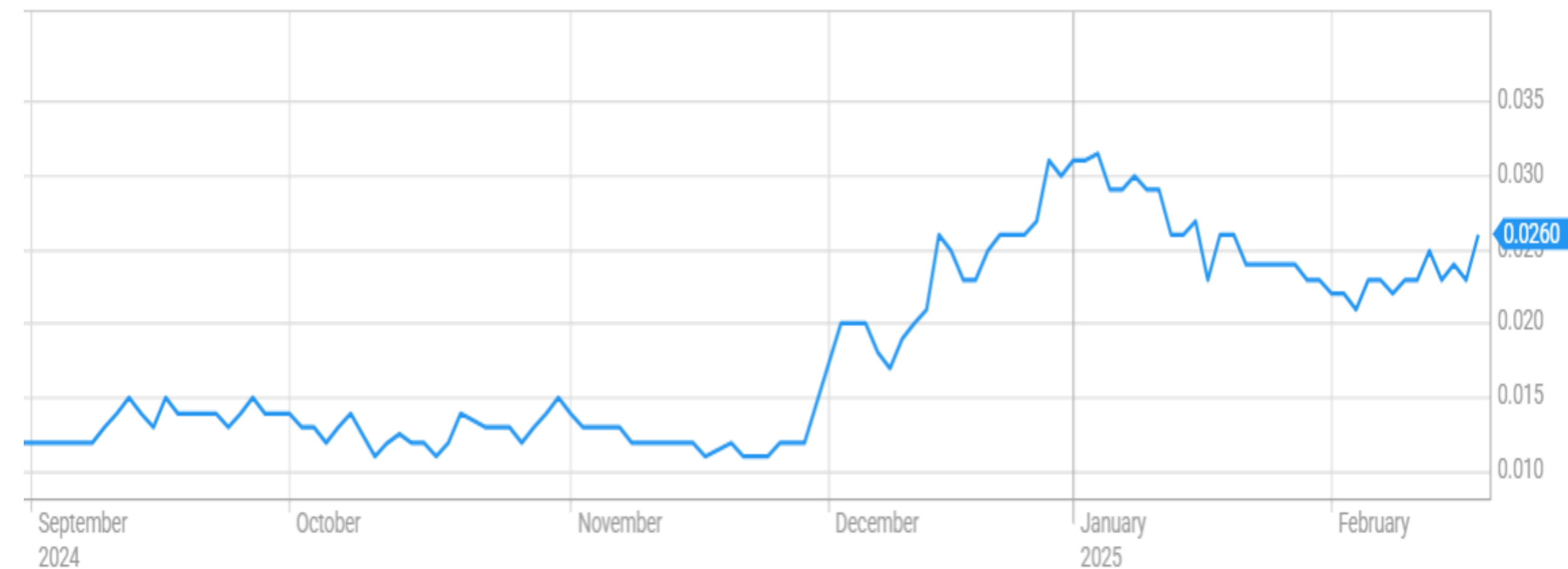
* Includes placement shares & proceeds, and options subject to shareholder approval at EGM on 20 Feb 2025

SUPPORTIVE STRATEGIC SHAREHOLDERS - MAJOR SHAREHOLDERS (>5%)

Strata Investment Holdings Plc	~15.3%
Ilwella Pty Ltd	~10.9%
Terra Capital Pty Ltd	~6.6%

ION SHARE PRICE GRAPH 6 MONTHS

ion



Iondrive Team



Michael McNeilly
Chair - BA Econ

- Chief Executive Officer of Strata Investments Holdings Plc. (~19% shareholding of ION).
- Extensive experience in listed companies and is currently NED of ASX-listed Cobre Limited.
- Sits on several private company Boards within the Strata Investments Tiger Group.
- Past Board appointments include MOD Resources Limited (up to acquisition by Sandfire in November 2019), Metal Capital Limited, Greatland Gold Plc and Connemara Mining Plc.



Dr Jack Hamilton
NED - PhD (Chem Eng)

- Highly accomplished senior executive and board director
- Significant leadership roles incl. Director of NorthWest Shelf Ventures for Woodside, overseeing Australia's largest resource project.
- NED roles include commercialisation of start-ups notably Calix Ltd and Anteo Diagnostix Ltd



Andrew Sissian
NED - CPA, MAcc, BCom (Finance)

- Seasoned corporate and capital markets executive and CPA.
- CEO of leading international technology company Procon Telematics, teams in India, US, AU/NZ.
- Extensive listed experience, including directly as a Co-founder and NED of Cobre Limited, (ASX: CBE).
- Previous institutional banking and equity roles with NAB in Australia and Shanghai and Wilsons Advisory.



Adam Slater
NED - BA

- Three decades of invaluable experience in the commodities industry.
- Led the development of the commodity division at CWT Limited, a company listed on the SGX, from 2007 to 2018. Pivotal to the growth in the CWT commodities division, which accounted for over 80% of Group revenues (\$\$12 Billion out of \$\$14 Billion) and in excess of 50% of the Group's profits.
- Current primary focus towards venture capital, contributing his expertise to multiple company boards and advisory committees.



Hugo Schumann
NED - CFA, MBA (INSEAD), SEP (Stanford)

- Former CEO of the Silver Division at Hindustan Zinc Limited, a leading global silver producer.
- Previously CFO at Jetti Resources, scaling an innovative copper extraction technology.
- Currently establishing a private equity business focused on critical metals recycling in the US.
- Extensive experience identifying and scaling technologies for metal extraction and processing.



Dr. Ebbe Dommissie
CEO - B.Eng (Chem) MSc PhD MBA GAICD

- Seasoned professional with over 25 years of commercialising technologies, execution, and manufacturing.
- Previously served as the COO at Circa Group, an Australian startup that commercialised a biochemical process from lab-scale to commercial scale.
- Prior, as GM of Pact Group, an ASX-listed manufacturer, responsible for establishing a world-class plant in Indonesia.



Ray Ridge
CFO & Company Secretary
BA(Acc), CA, GIA(cert)

- A senior financial and commercial professional with over 30 years experience across a diverse range of industries.
- CFO and capital markets experience with four other ASX listed companies, with two in technology commercialization.
- Previous roles include National GM Commercial in a large global engineering firm (now WSP Global) and CFO of the agricultural products division of Elders Limited.



Lewis Utting
Commercial Director
BAppSc, GAICD

- Former Managing Director and CEO of ASX listed SciDev Ltd, driving rapid growth and shareholder returns.
- Previously BASF Global Business Development and R&D manager for Mining
- 20 years experience in business management servicing chemical, mining, water treatment, and oil & gas industries.
- Expertise in technology commercialization, capital markets, and strategic partnerships



Breakthrough Technology for a Huge Market Opportunity

Driving Urgent Battery Recycling Solution

EV growth accelerating

Black mass supply to reach 11.3M tonnes by 2040.

Recycling demand outpacing capacity

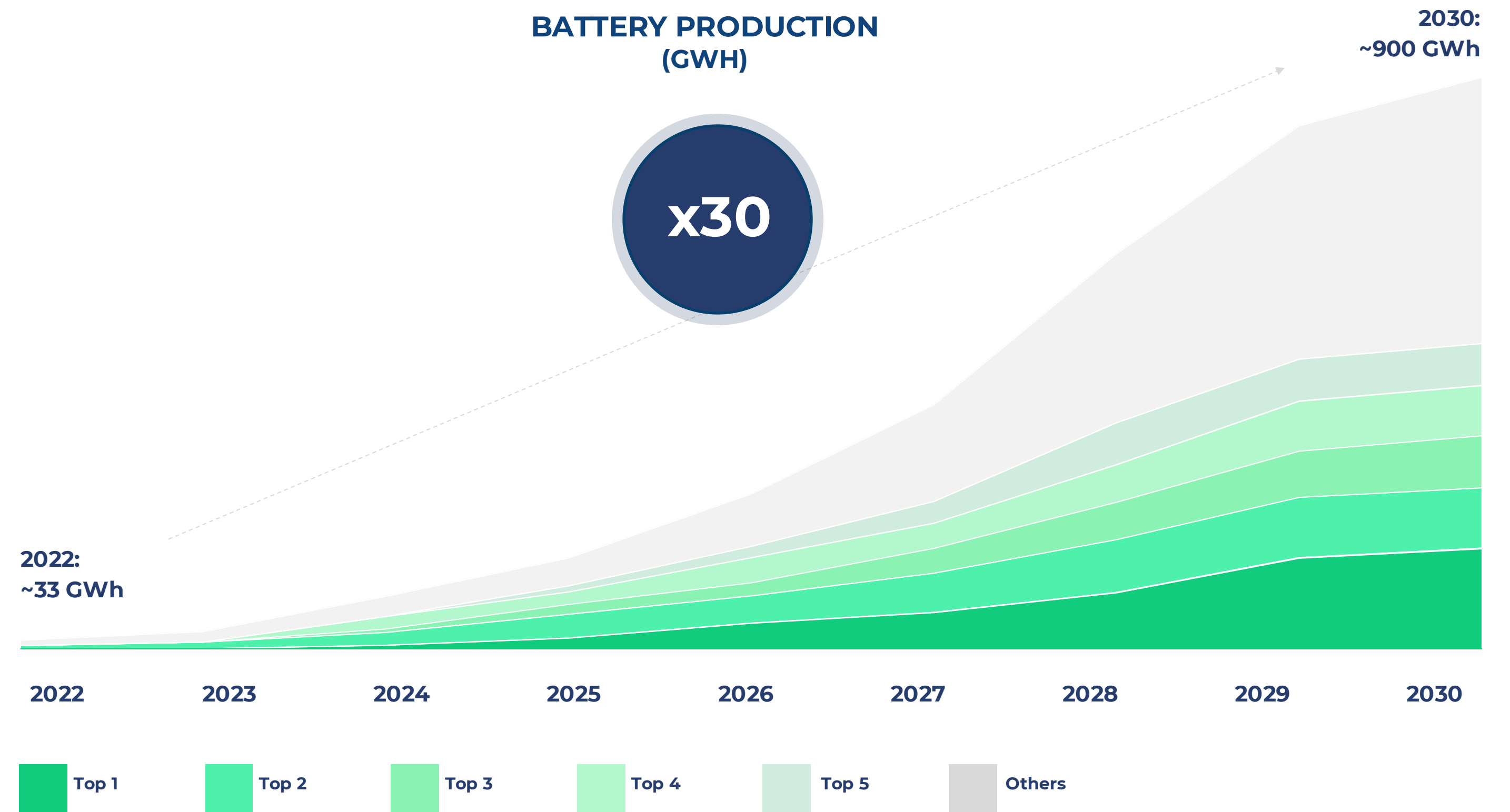
Black mass growth +25% CAGR, but EU lacks hydromet capacity (74% deficit).

Regulations pushing localised recycling

EU & US policies drive sovereign supply chains.

Current methods are costly & unsustainable

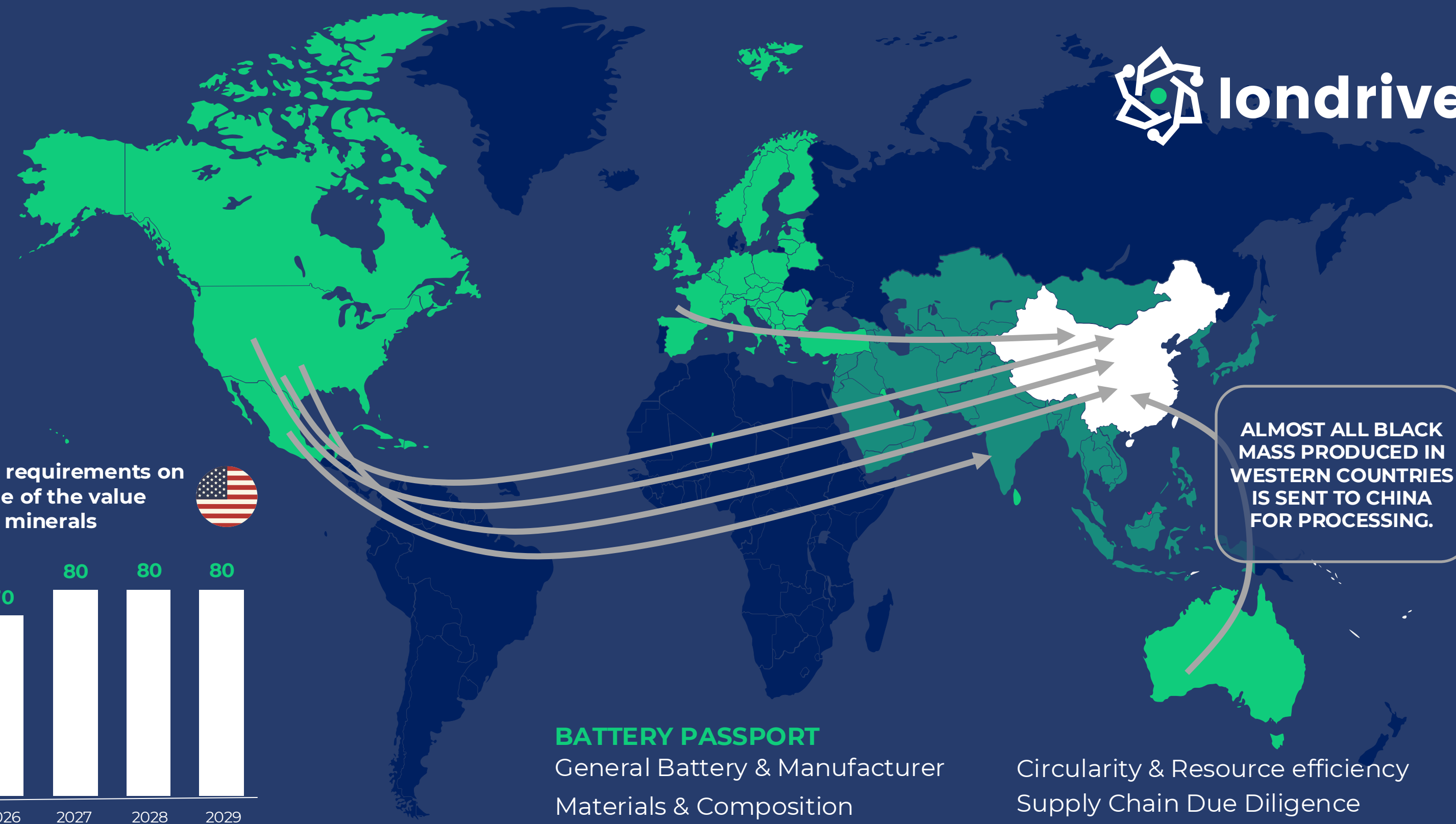
Need for cleaner, scalable solutions



Source: Joint study between Strategy & and PEM of RWTH Aachen University, August 2023

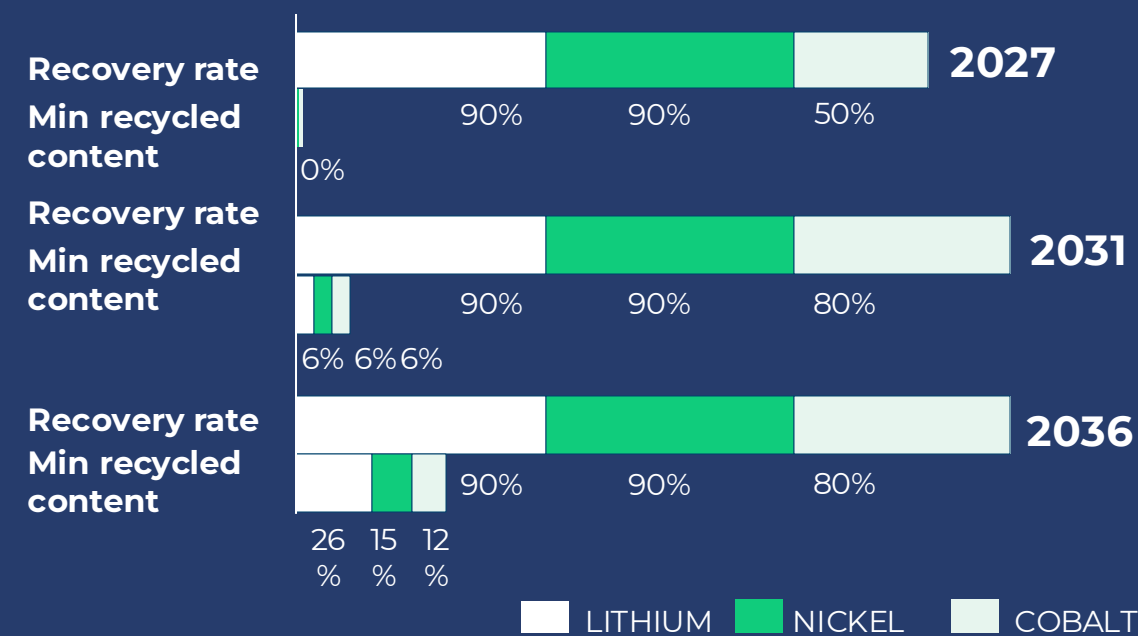
Adjusted forecast based on announced GWh capacity compared to current project start-up status, based on desktop research and expert estimates.

DRIVING FORCES OF Battery Recycling

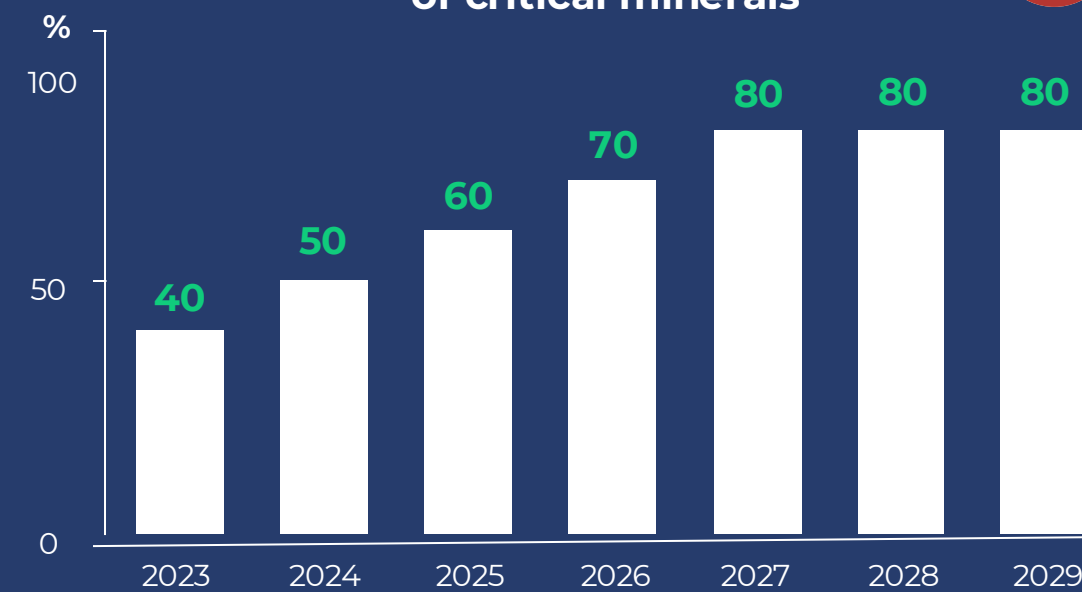


ALMOST ALL BLACK MASS PRODUCED IN WESTERN COUNTRIES IS SENT TO CHINA FOR PROCESSING.

EU targets for material recovery rates and minimum levels of recovered contents



IRA Clean Vehicle requirements on the percentage of the value of critical minerals



BATTERY PASSPORT

General Battery & Manufacturer
Materials & Composition
Carbon Footprint

Circularity & Resource efficiency
Supply Chain Due Diligence
Performance & Durability



EU bans black mass exports, now classified as hazardous.



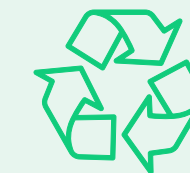
EV batteries must meet minimum recycled content by law.



OEMs mandated to manage end-of-life batteries via 'battery passports'.

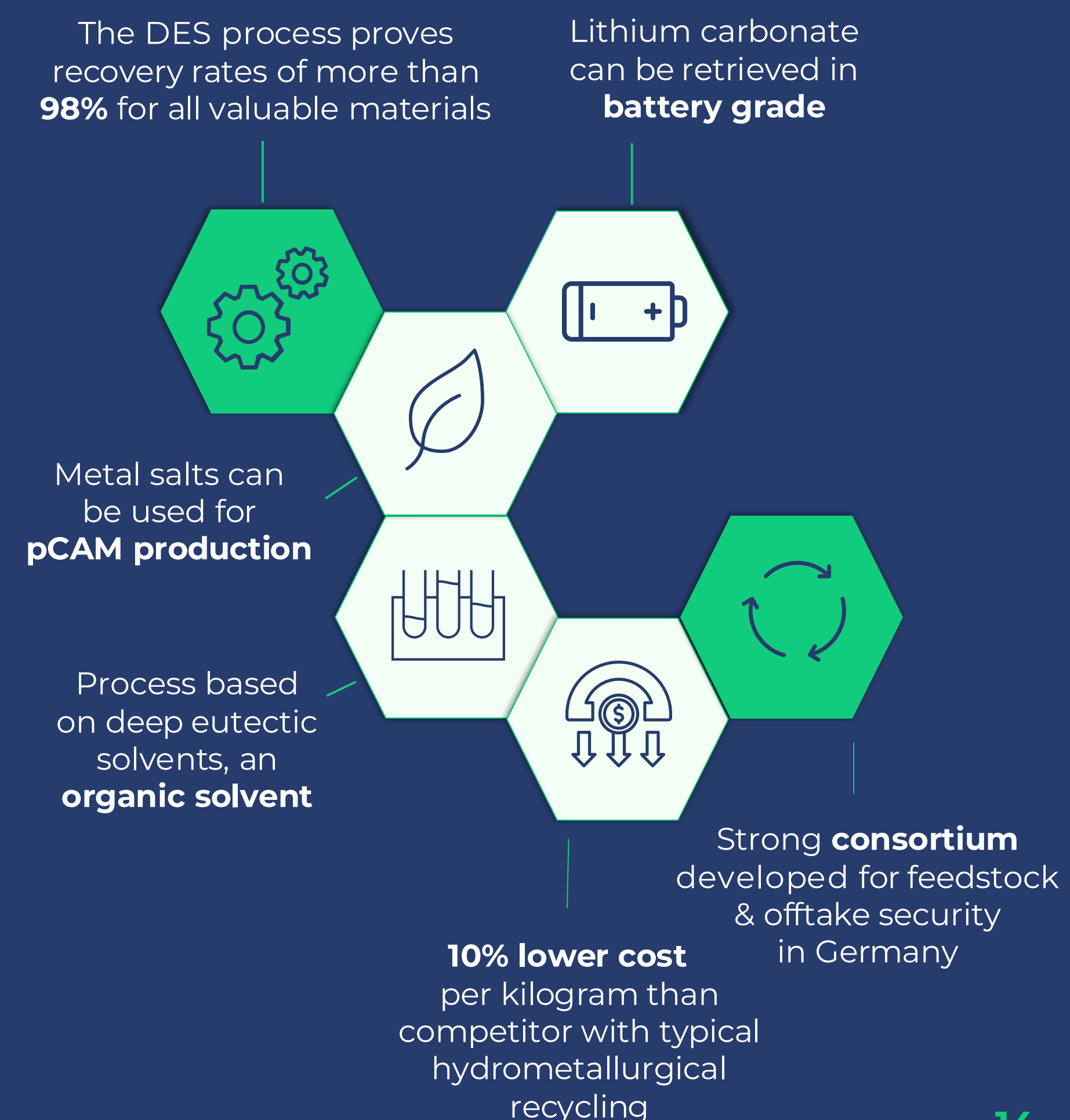
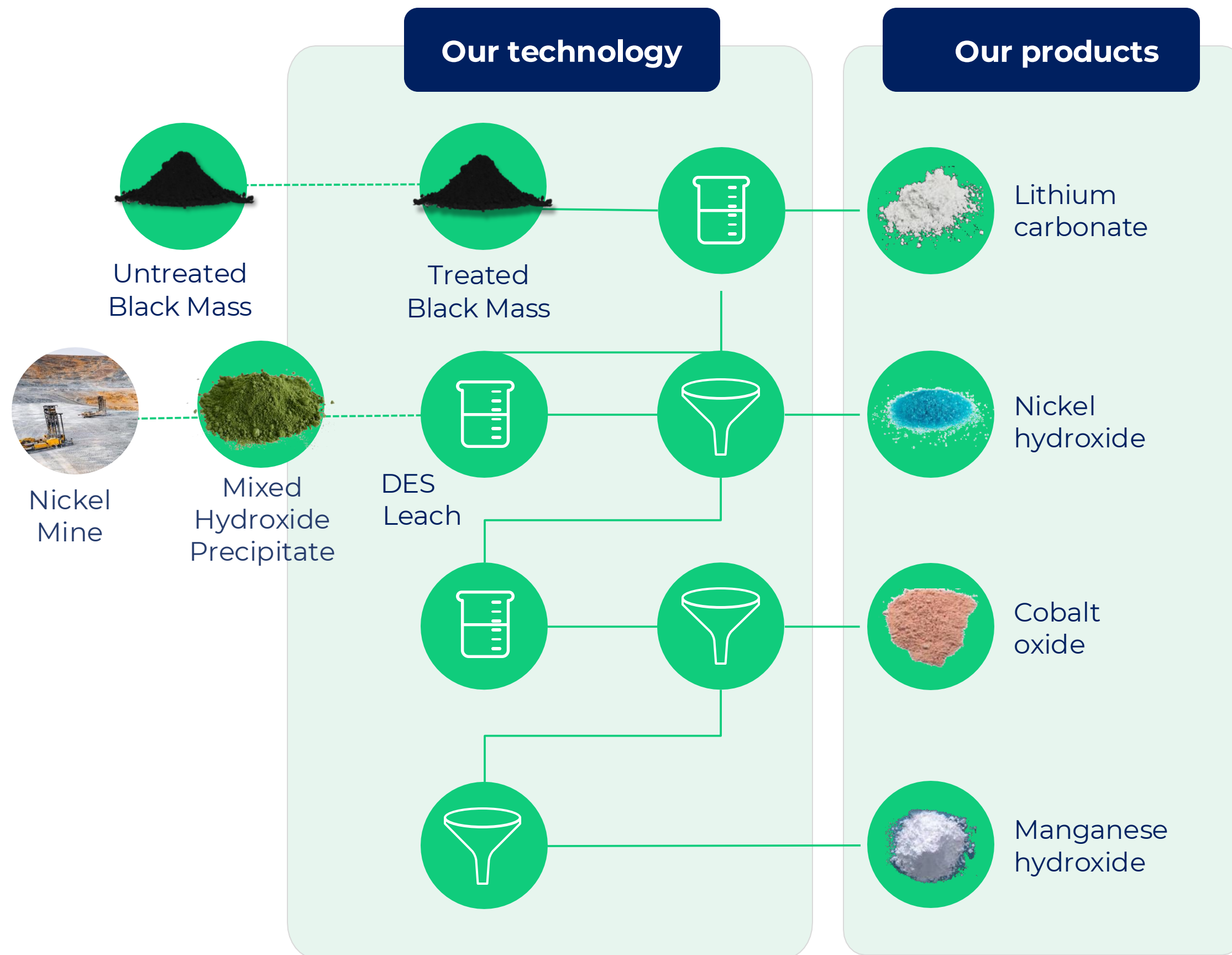


2030 deadline Regulatory requirements align with rising black mass supply.



Current recycling methods struggle with high costs, waste, and energy use.

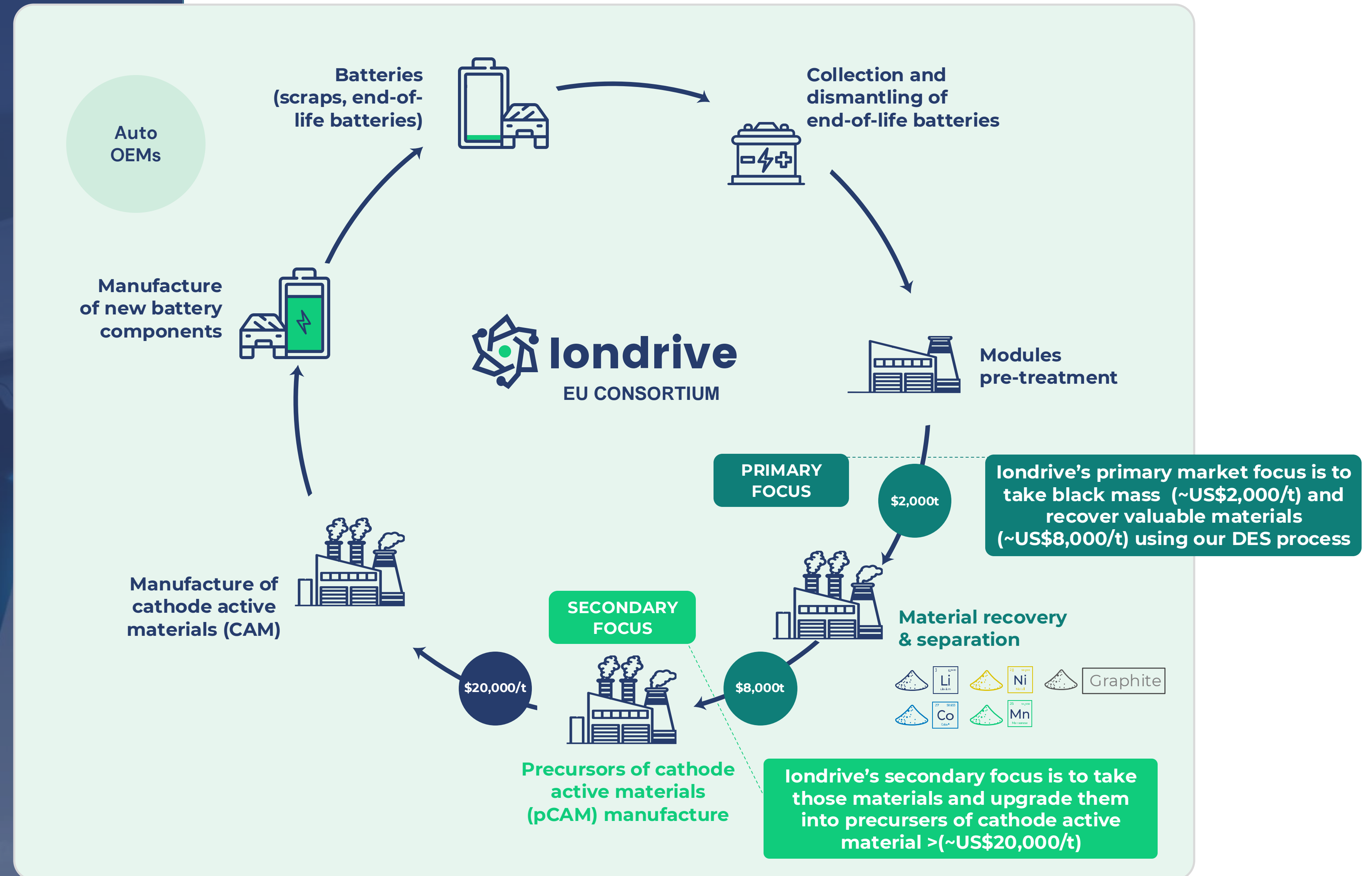
Metal Extraction Solution



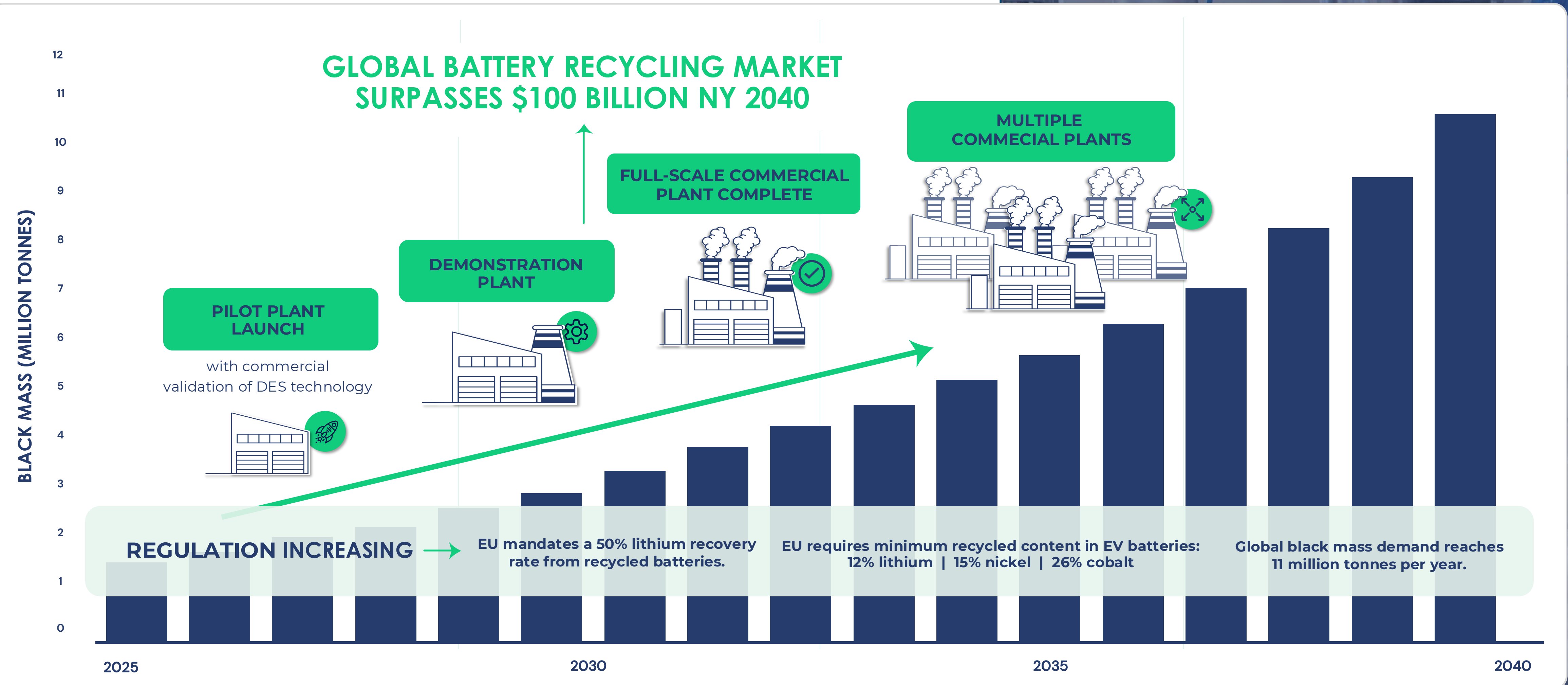
Iondrive's DES-leaching technology enables high recovery rates and minimal environmental impact

IONDRIVE Business model

Iondrive intends to generate value uplift by processing black mass into reusable critical minerals and upgrading them into high-value cathode precursors. This approach bridges battery recycling and advanced material production, adding economic and market value.



Commercialisation activities align with EV metal market demand





Pre-Feasibility Study (PFS) Confirms Exceptional Recovery Rates and Market Viability

Technology Validated, Economics Confirmed

Economic and technical results driving commercialisation



Economically Robust & Profitable

Independent modelling confirms a AUD249m NPV and 17% IRR, highlighting the project's strong profitability.



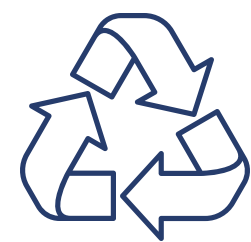
High Recovery Rates

Verified high recoveries across critical minerals (Li, Ni, Co, Mn)



Cost- Advantages

36% lower Capex* than benchmark and competitive OPEX



Eco- Friendly

Minimal solvent loss (<2%), low toxic waste & less energy intensive



Scalable & Viable

Proven scalability and Technical Feasibility; Concept engineering study for 10,000 tpa plant completed



Strong Market Position

Early-mover advantage aligned with EU regulations and green initiatives. Industry partnerships consolidated with PEM Consortium participation

*PEM Aachen University Benchmarking Study 2024



Appendix

Appendix 1: Key Assumptions of the Economic Evaluation of the PFS Iondrive Battery Recycling Plant Configuration

Project life	years	21
Construction period	years	1
Operations period	years	20
Discount rate (real)	%	10
Total CAPEX*	AUDm	370m
Terminal Value	AUD	20%
Payback	years	5.8
NPV10	AUD	249m
IRR	%	17.4%
FX	EUR:AUD	1.66
	USD:AUD	1.57

*both Pretreatment and DES plants incl. 10% Owners Costs

Notes:

1. Location-specific electricity pricing sourced by Wood from third-party market references.
2. Other variables based on Wood data base and business judgement.
3. No Government funding, tax incentives or debt funding upside benefit included.
4. Assumes that the Iondrive Plant demonstrates that the Iondrive process technology is effective at producing recovered battery metals consistently and reliably with recoveries similar to bench scale test results
5. Economics are for a standalone plant; no royalties or licence fees are included in the economic assessment.

Appendix 2: Battery-grade Price Forecasting (Benchmark Minerals International)

Product Sales price	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year- 10 21				
Li Carbonate	\$ 15,308		\$ 19,233		\$ 29,830		\$ 45,530		\$ 39,250	\$ 34,540	\$ 32,970	\$ 32,970	\$ 32,970	\$ 32,970
Ni Hydroxide	\$ 13,782		\$ 14,112		\$ 14,333		\$ 14,733		\$ 16,414	\$ 17,215	\$ 18,016	\$ 18,416	\$ 17,615	\$ 16,302
Co Oxide	\$ 29,779	\$ 33,284		\$ 37,495		\$ 43,724		\$ 48,820		\$ 53,537	\$ 58,172	\$ 62,050	\$ 65,564	\$ 81,909
Mn Hydroxide	\$ 1,413		\$ 1,884		\$ 2,434		\$ 2,826		\$ 2,591	\$ 2,355	\$ 2,041	\$ 1,806	\$ 1,806	\$ 1,806

Appendix 3: Battery-grade Materials Annual Production

Production TPA	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10- 21
Li Carbonate	-	4,793	4,793	4,793	4,793	4,793	4,793	4,793	4,793	4,793
Ni Hydroxide	-	3,556	3,556	3,556	3,556	3,556	3,556	3,556	3,556	3,556
Co Oxide	-	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603
Mn Hydroxide	-	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335	2,335

References:

Wood study: ASX 15th July 2024

PFS: ASX 1st November 2024

PEM Aachen University Benchmarking Study: ASX 1st November 2024

Rho Motion Report: ASX 25th March 2024

BMI Report: ASX 19th February 2025

Model Answer Economic Modelling: ASX 19th February 2025



[CONTACT US](#)

Ebbe Dommissse, CEO

info@iondrive.com.au

Lewis Utting, Commercial Director

info@iondrive.com.au

Ray Ridge, CFO & Co-Sec

info@iondrive.com.au

ASX: ION
iondrive.com.au