Building a Global Manganese Business

Supplying low-carbon sustainable manganese ore and EV battery grade HPMSM to global markets

Sharewise Investor Webinar - December 2024

ASX : E25
OTCQX : ELMTF

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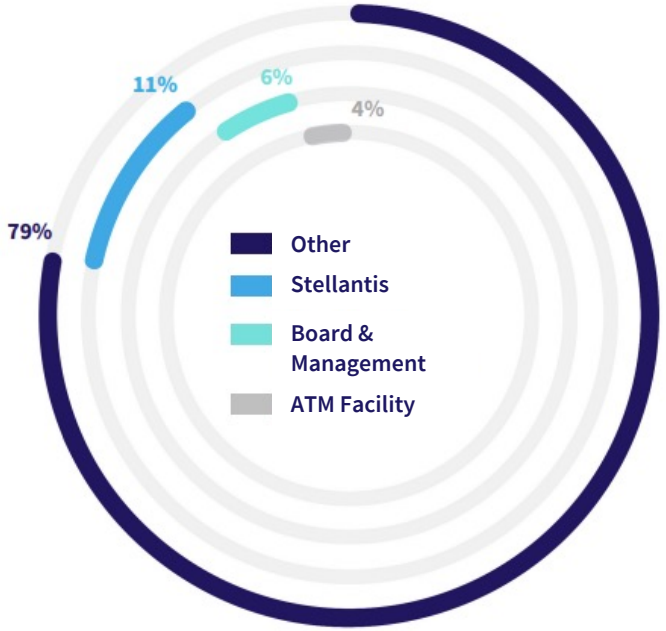
Element 25 Introduction

Expanding the 100% owned Butcherbird Manganese Mine in Western Australia to produce high-quality manganese oxide concentrate.

Developing a USA-based refinery to supply ethical battery-grade High Purity Manganese Sulphate Monohydrate (HPMSM) products.

Offtake and funding agreements in place with our partners General Motors and Stellantis to supply HPMSM for Electric Vehicle batteries.

Share Register:



ASX Ticker:	OTCQX Ticker:	Shares on Issue:	Debt:
E25	ELMTF	218M	NIL

Company Leadership

BOARD OF DIRECTORS

John Ribbons
Chairman
CPA

Justin Brown
Managing Director
Geologist

Fanie van Jaarsveld
Non-Executive Director
Analytical Chemist

Sam Lancuba
Non-Executive Director
Chemical Engineer

Experienced,
Multi-disciplinary Board &
Management

PROJECT DEVELOPMENT AND OPERATIONS TEAM

Michael Jordon
Chief Financial Officer
CPA

Neil Graham
VP Battery Materials
Chemical Engineer

Sias Jordaan
VP Marketing & Logistics
Accountant

Ian Huitson
Study Manager
Mining Engineer

Gideon van Wyk
GM Manganese Ore Bus.
Mechanical Engineer

Leon Lima
Technology Manager
Chemical Engineer

The Butcherbird Manganese Project

Butcherbird Manganese Project

- World-class manganese resource.
- Located in a Tier-1 jurisdiction with strong ESG regulation.
- Over 270 million tonnes in resources with potential to expand (2024 resource update[1]).
- Long mine-life with further upside by converting Inferred Resources
- Very clean metallurgically – no toxic contaminants.
- Produces a low carbon, high-quality manganese concentrate ideal for manganese alloys and high-purity manganese sulphate monohydrate (HPMSM)[2].

[1]Reference: Company ASX Release Dated 29 October 2024
[2]Reference: Company ASX Release Dated 21 February 2023

Butcherbird Manganese Mine - Resources & Reserves

Ore Reserve[1]

Category	Tonnes (Mt)	Mn (%)	Contained Mn (Mt)
Proved	14.4	11.5	1.65
Probable	36.2	9.8	3.56
Total	**50.6**	**10.3**	**5.22**

Mineral Resource[2]

Resource Category	Tonnes (Mt)	Mn (%)
Measured	14	11.3
Indicated	116	10.1
Inferred	144	9.8
Total	**274**	**10.0**

- High conversion of measured and indicated resources to reserve.
- Current Reserve:
  - Only utilises approximately 20% of global mineral resource; and
  - Excludes additional Measured and Indicated tonnes from latest model.
  - Reserve upgrade pending completion of pit optimization and mine design.
- Excellent potential for future expansion with known mineralization outside resource areas.
- Global resource not closed off.

[1] Reference: Company ASX Release Dated 27 September 2024 (Annual Report)
[2] Reference: Company ASX Release Dated 29 October 2024 (Mineral Resource Estimate Update)

Company strategic vision for growth

Butcherbird Expansion

1.1Mt/a Manganese Ore[1]

Build and commission a full large-scale processing facility at the 100% owned Butcherbird Manganese Mine in WA.

Louisiana HPMSM

USA EV Critical Raw Materials[2]

Construct the first US HPMSM processing facility (Louisiana), producing 65,000 tonnes per annum of battery-grade HPMSM with GM and Stellantis

Expand Globally

HPMSM Expansion - EU & Asia

Multiple HPMSM modules globally to deliver sustainable HPMSM supply to global EV markets targeting Europe and Asia.

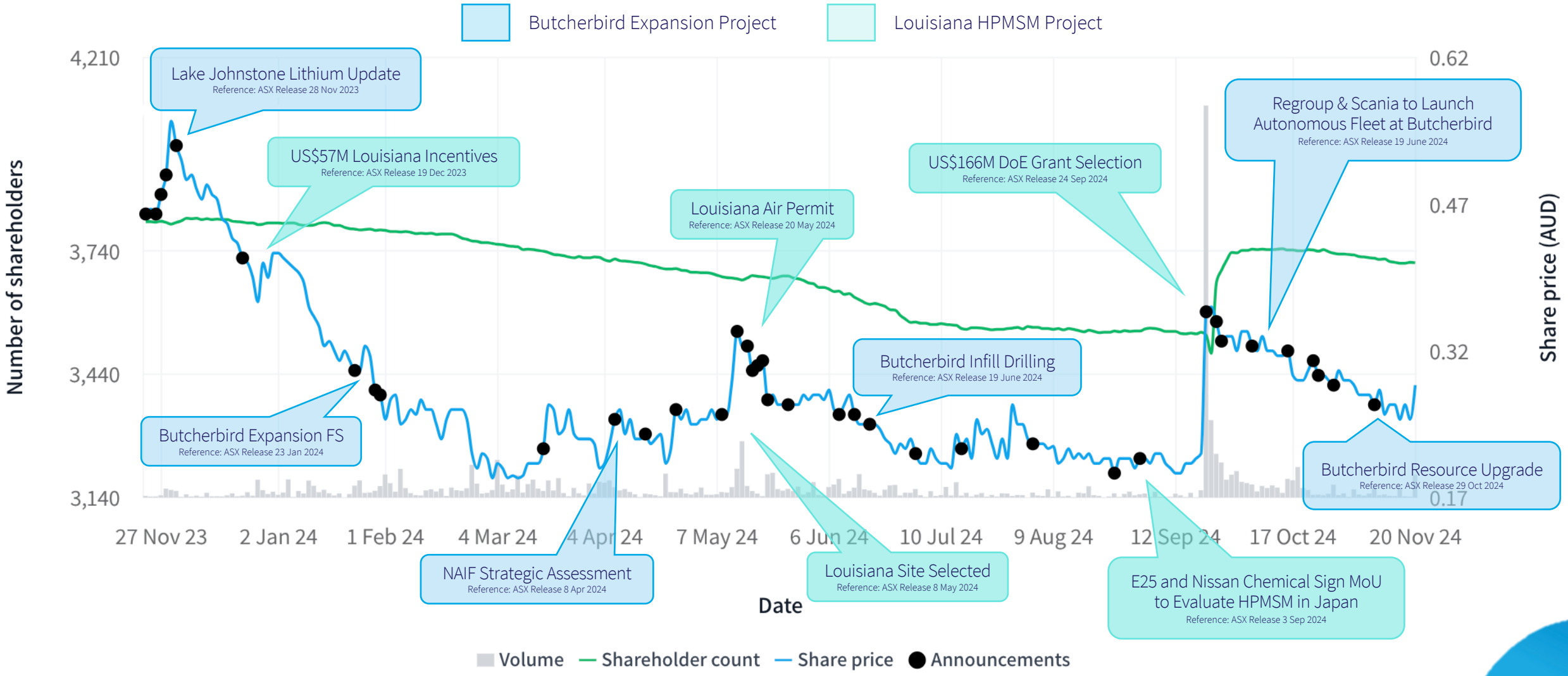
1-Year Plan
3-Year Plan
10-Year Plan

Best in class, low carbon[3], ethically produced, scalable HPMSM for electric vehicle batteries:

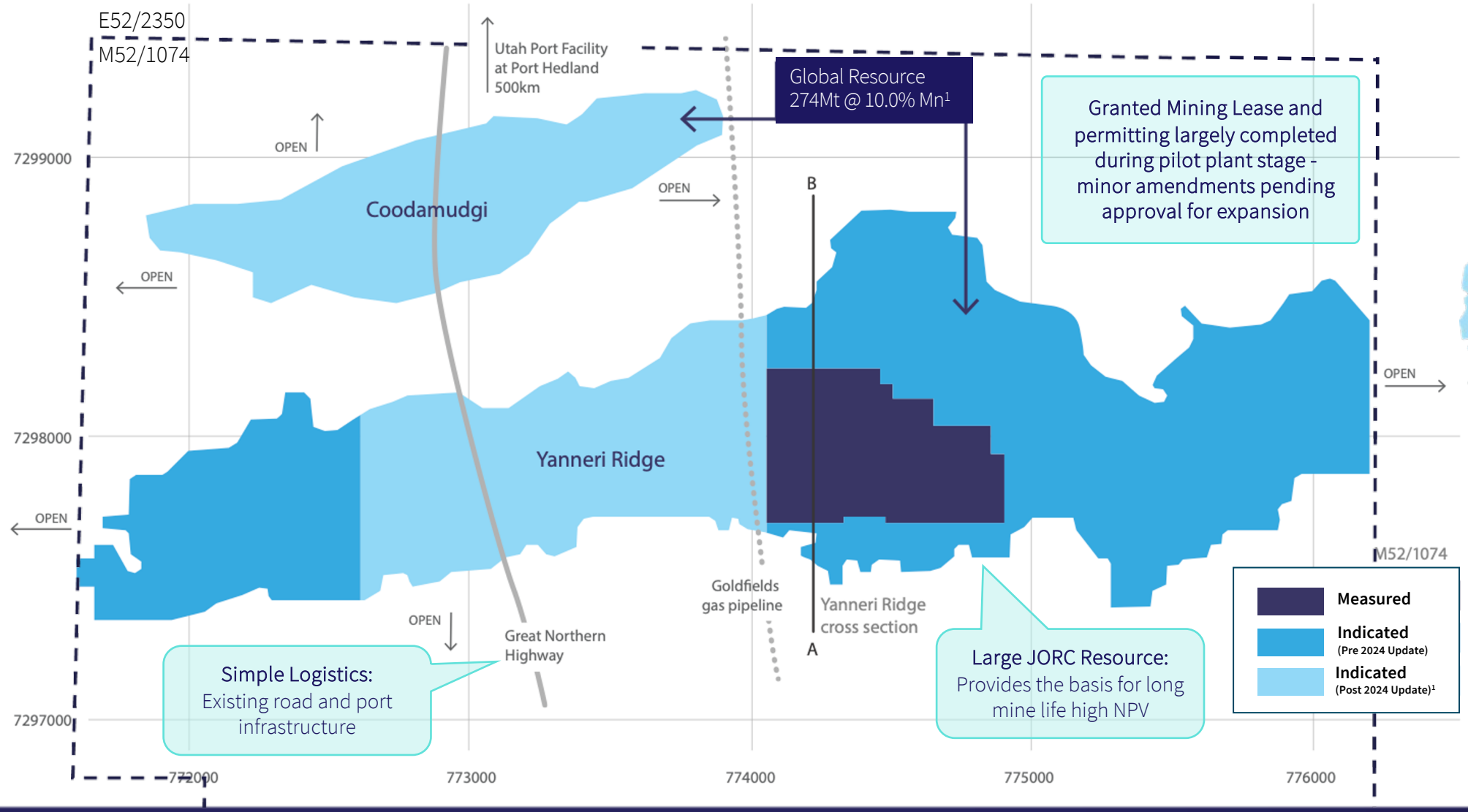
Sustainably Supplying Global EV Markets

[1] Reference: Company ASX Release Dated 23 January 2024
[2] Reference: Company ASX Release Dated 12 April 2023
[3] Reference: Company ASX Release Dated 22 February 2023

A Year of Milestones



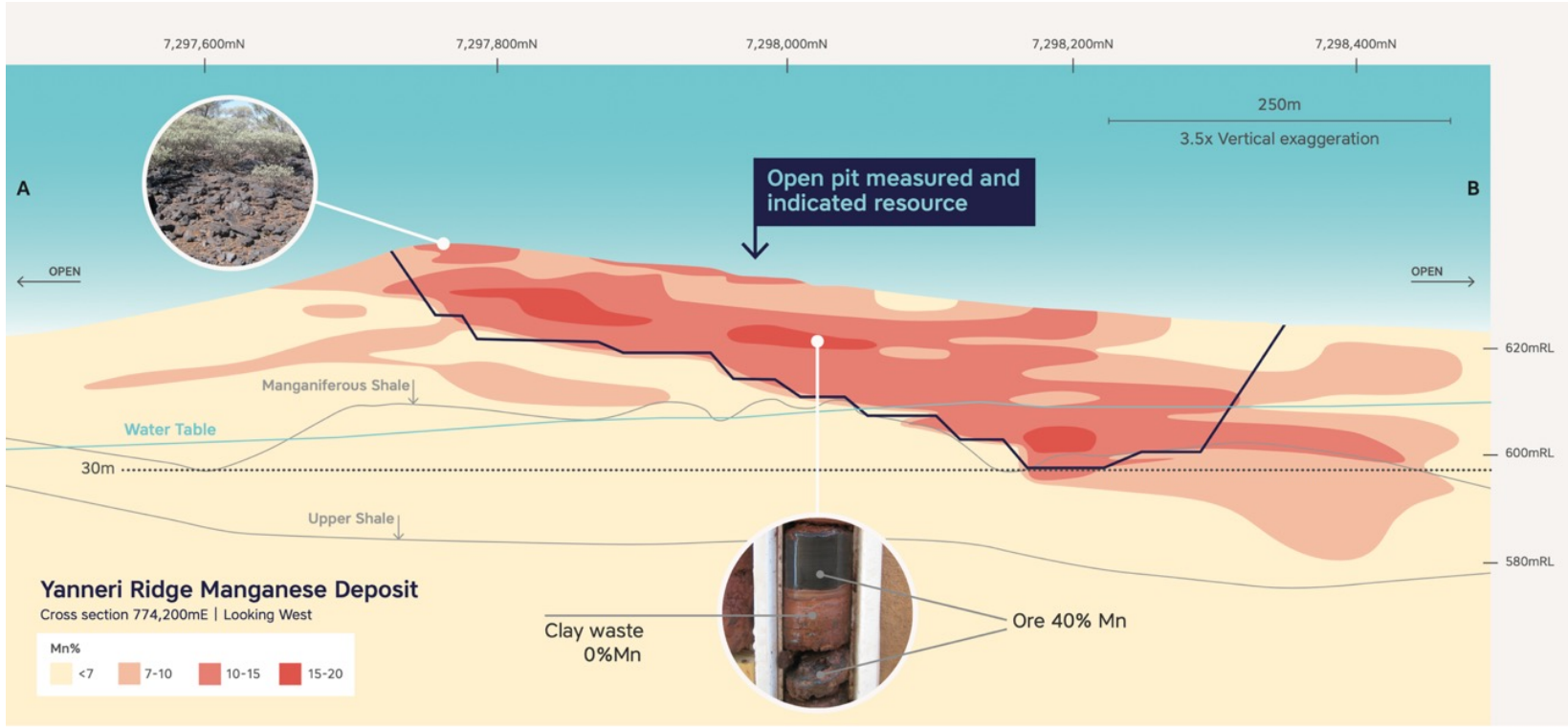
Large, long-life manganese ore mine in Western Australia



[1]Reference: Company ASX Release dated 29 October 2024

Simple Geology: low-cost, low-impact operations

Classification	Tonnes (Mt)	Mn (%)	Contained Mn (Mt)
Resource[1]	274	10.0	27.4
Reserve[2]	49.0	10.2	5.0



RESOURCE GROWTH POTENTIAL

- Large resource offers long term operating potential.
- Mineralisation outside existing resource provides upside.
- Ore suitable for ferroalloys, battery grade HPMSM and EMM.

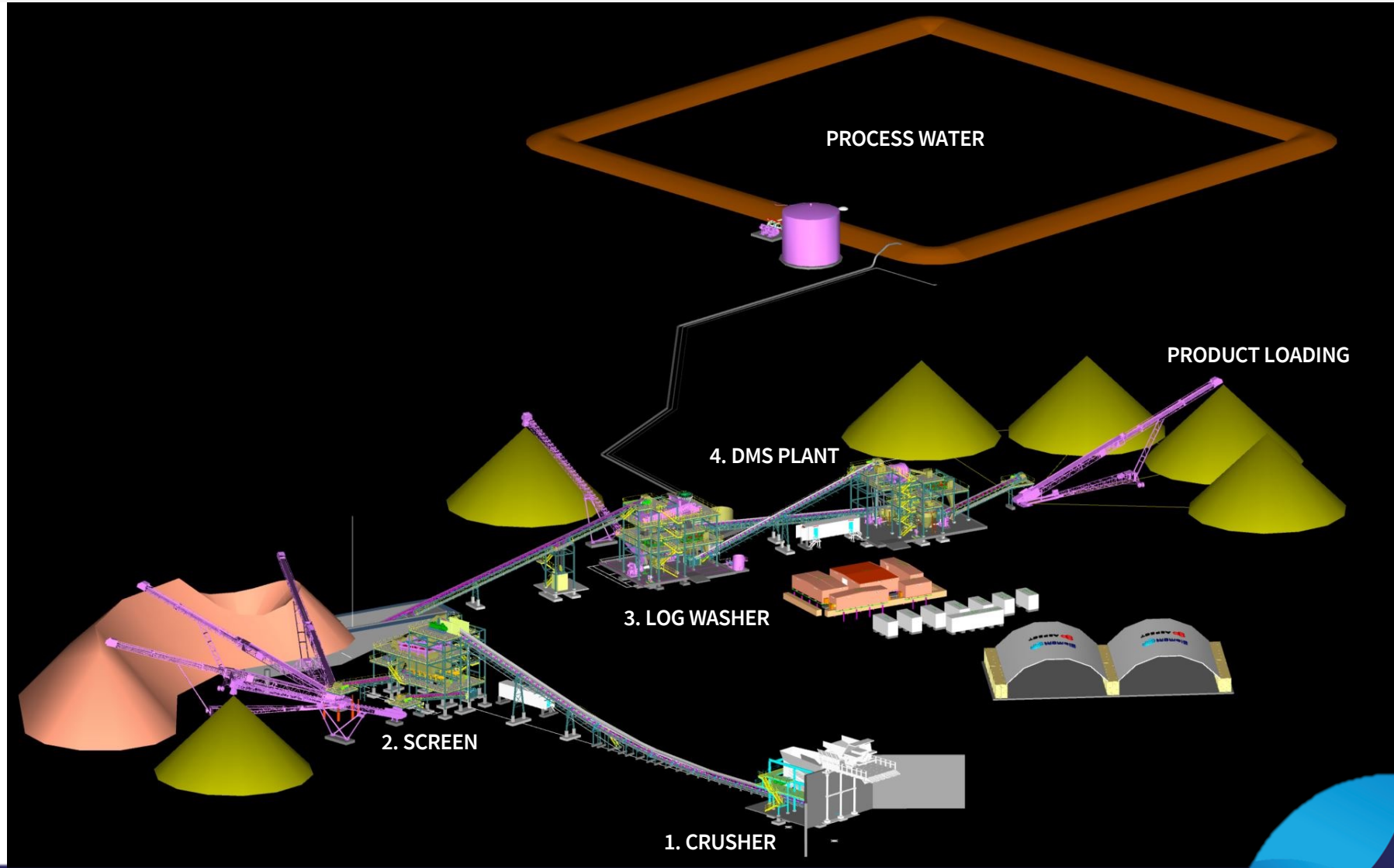
ENVIRONMENTALLY BENIGN OPERATION

- Ore from surface.
- Low strip-ratio.
- No explosives required.
- No dewatering required.
- One reagent – water.
- Very low levels of contaminants.

[1] Reference: Company ASX Release Dated 29 October 2024 (Mineral Resource Estimate Update)
[2] Reference: Company ASX Release Dated 27 September 2024 (Annual Report)

Butcherbird Manganese Mine Expansion

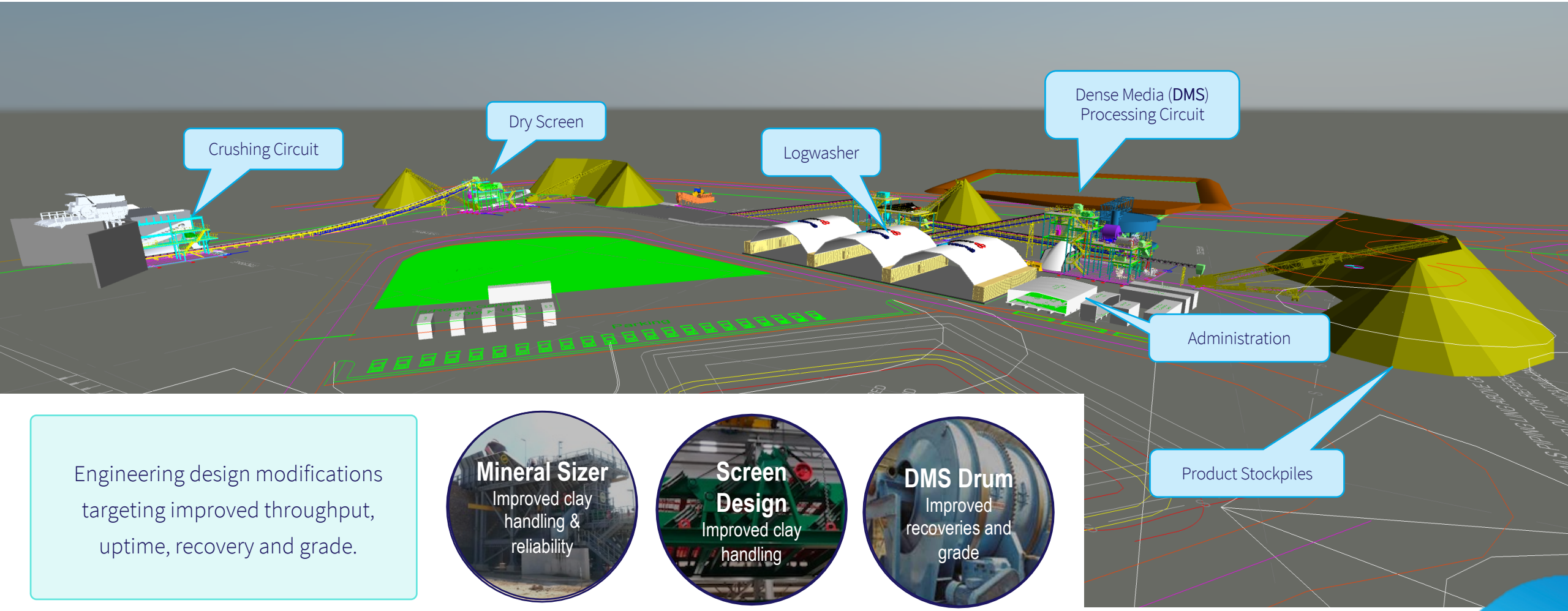
- New processing facility will optimise and scale the process.
- Scale and improved efficiencies to lower costs and increase profits.
- CO_2 emission intensity and ESG outcomes will be improved by:
  - Integration of renewable energy (targeting year 3 of operations).
  - Equipment selection criteria for energy efficiency.
  - Investigating autonomous mining fleet to improve safety and efficiency[1].
  - Transition to EV mining fleet (targeting Year 2 of operations).



[1]Reference: Company ASX Release Dated 7 October 2024

Butcherbird Manganese Mine Expansion

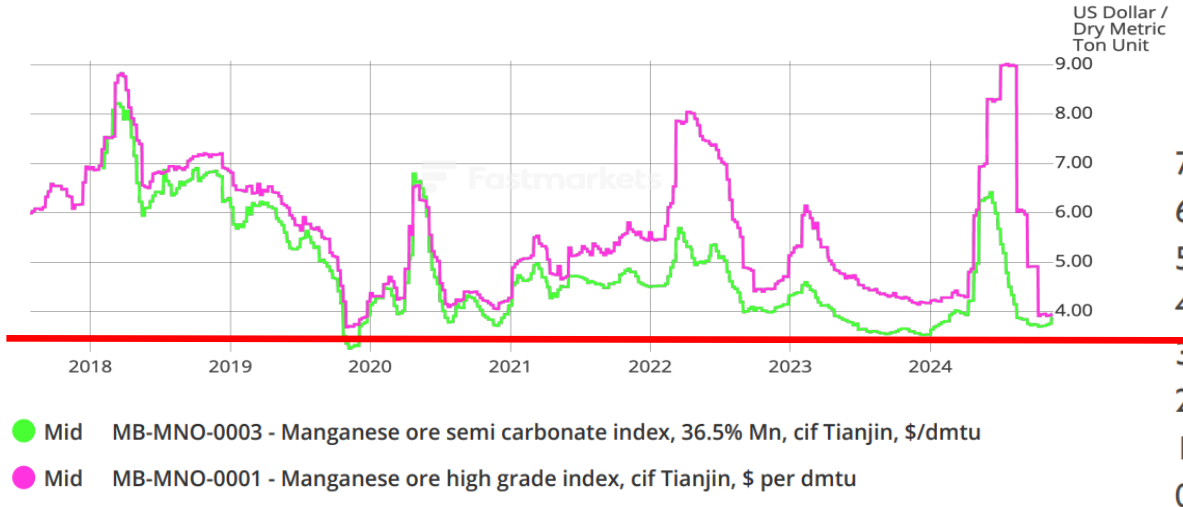
Element 25

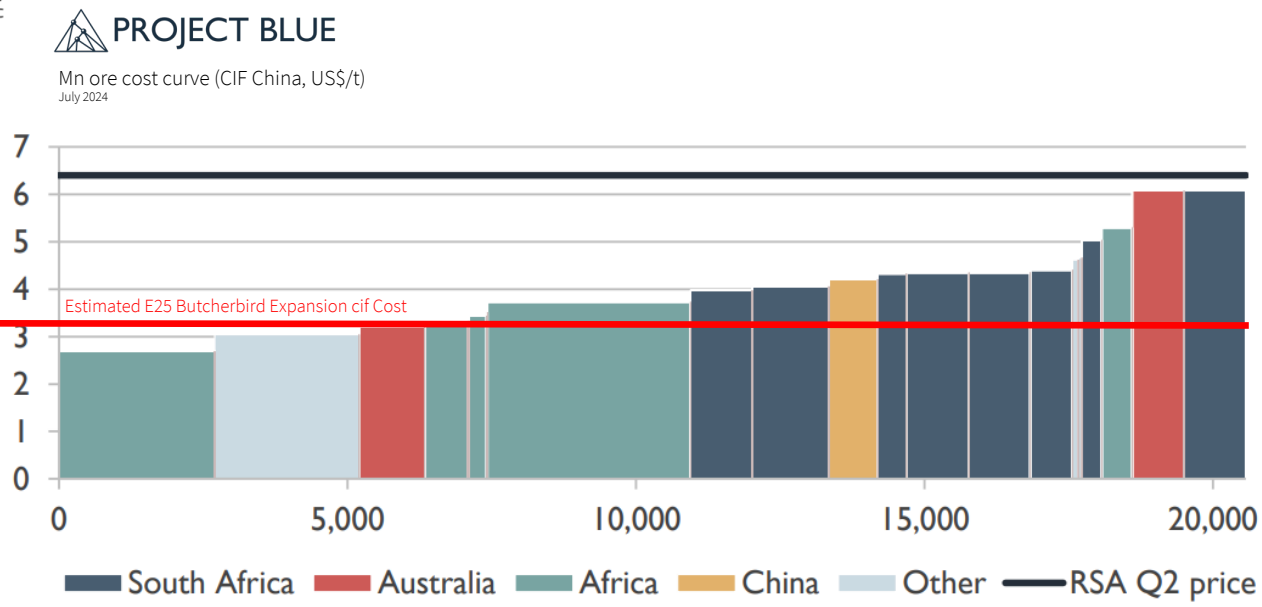


Engineering design modifications targeting improved throughput, uptime, recovery and grade.

Butcherbird Expansion – Scale Strengthens the Business

Economies of scale from the expanded operation will move the Butcherbird production costs lower on the global cost curve and strengthen the business through all price cycles.

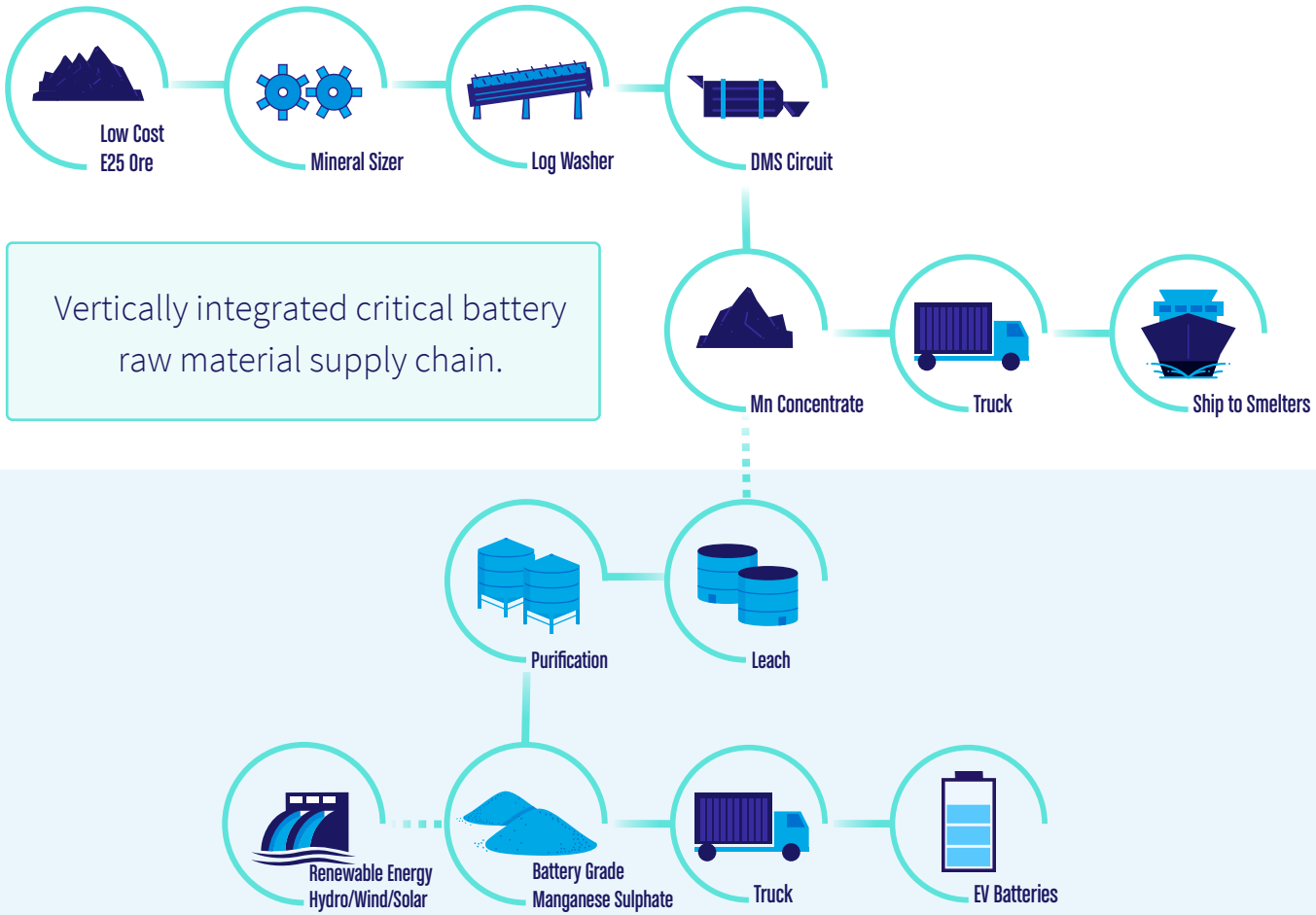




Reference: Fastmarkets, Project Blue 2024

E25 HPMSM Strategy

Vertically-integrated global HPMSM supply



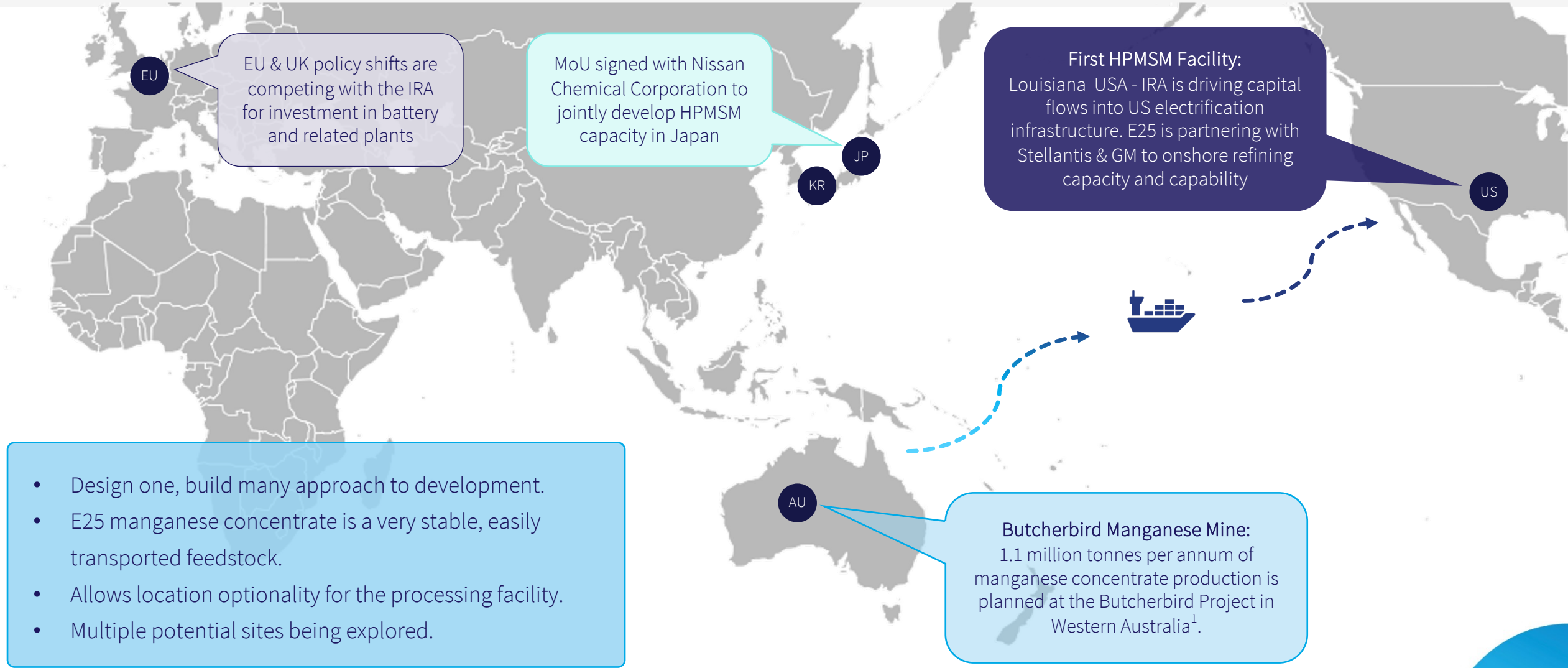
WA Manganese Ore Supply:

Australian manganese ore concentrates as feedstock for HPMSM production to supply US EV markets. Surplus ore will supply existing ferroalloy customers.

Louisiana HPMSM Refinery:

Louisiana manganese refinery will utilise the Australian ore as feedstock to produce high purity low carbon IRA compliant battery grade manganese sulfate.

Global Refining Capacity in the Longer Term



- Design one, build many approach to development.
- E25 manganese concentrate is a very stable, easily transported feedstock.
- Allows location optionality for the processing facility.
- Multiple potential sites being explored.

[1] Reference: Company ASX Release Dated 23 January 2024

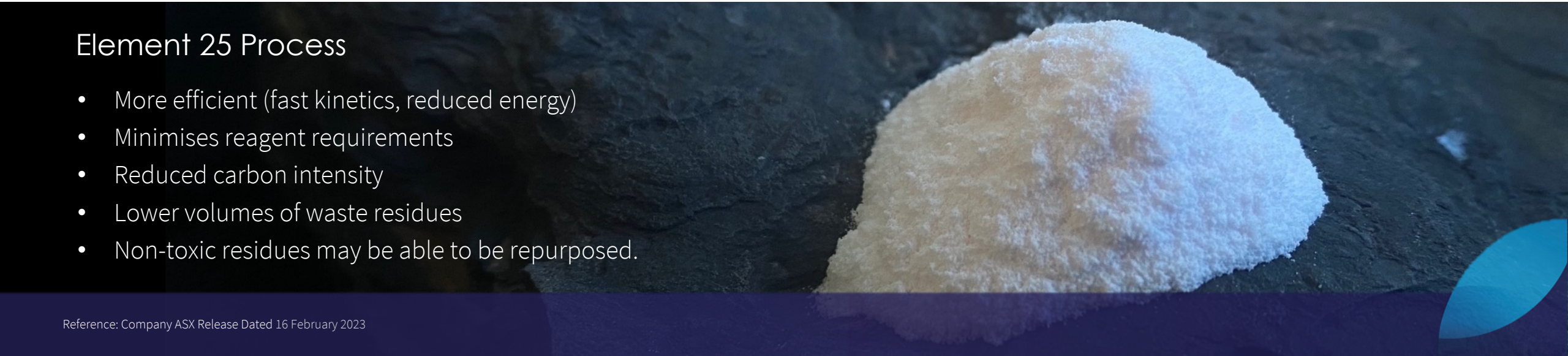
Improved, Cost-Competitive Cleaner Process Technology

The Element 25 Process makes significant changes & improvements:

- Reagents/Cost
- Carbon Emissions
- Waste Residue

Current Outdated Technologies mean:

- Large volumes of waste residues.
- Toxic Reagents like fluorine.
- Inefficient.
- Higher Cost.
- Outdated processing technology.



Element 25 Process

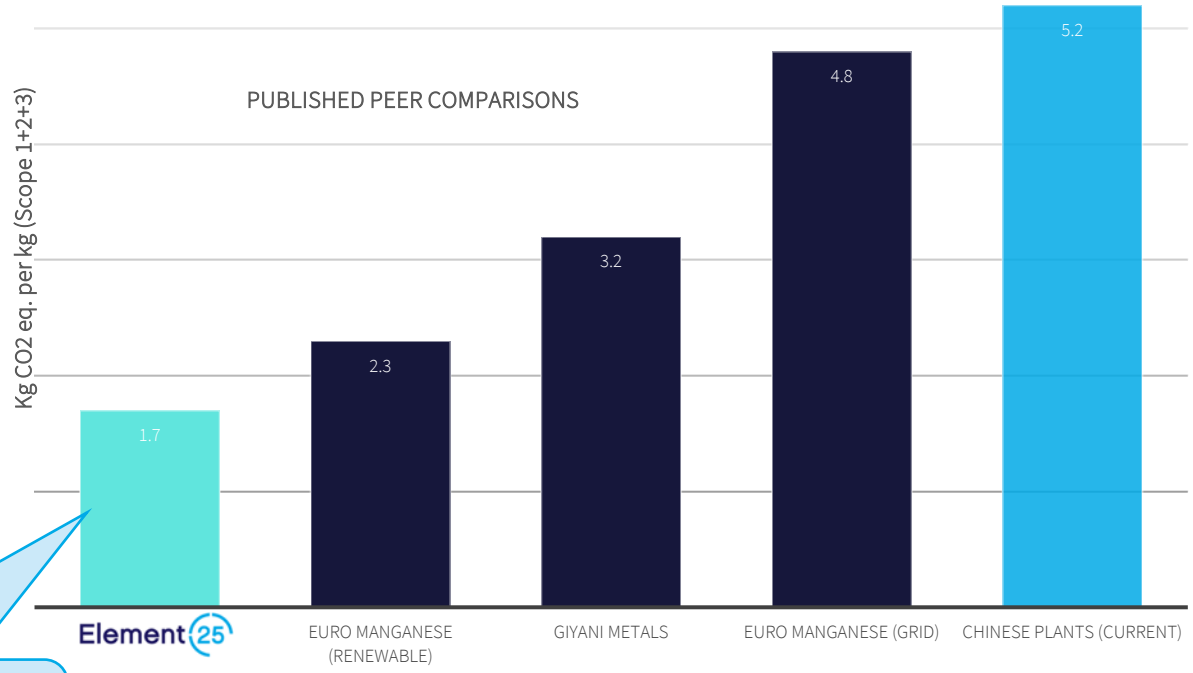
- More efficient (fast kinetics, reduced energy)
- Minimises reagent requirements
- Reduced carbon intensity
- Lower volumes of waste residues
- Non-toxic residues may be able to be repurposed.

Reference: Company ASX Release Dated 16 February 2023

ESG - LCA demonstrates a low-carbon, ethical process

- LCA covers Scope 1, 2 and 3 emissions from mining through to the proposed USA-based HPMSM processing plant.
- E25 HPMSM to produce **~1.7kg of CO_2 for every 1kg of HPMSM**:
  - **~ 67% lower** than competitors in China.
  - up to **47% lower** than competitors outside China.
  - **~26% lower** than next lowest project's optimised case.
- E25 process is **not yet fully optimised** for carbon reduction.
- E25 to explore renewable energy and other potential carbon reduction strategies to further reduce CO_2.

E25 Process Reduces Global Warming Potential Relative to Incumbent Producers



Element 25 HPMSM Process
Industry leading carbon intensity

Reference: Company ASX Release Dated 16 February 2023

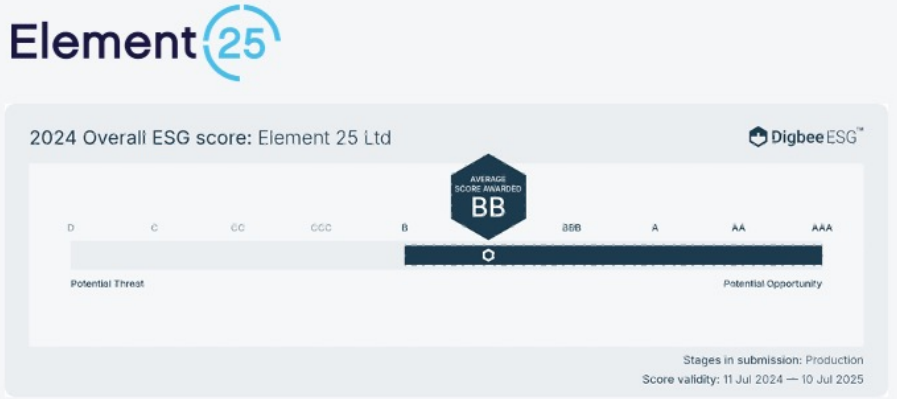
Reference: Company ASX Release dated 16 February 2023

ESG Benchmarking

- Digbee ESG benchmarking process completed for 2024.
- Opportunities identified for action over following period.
- Executive incentive KPIs now linked to ESG outcomes.
- Internal reporting processes being developed to improve ESG credentials and preparedness for compliance reporting.

ESG CERTIFIED

Digbee ESG™

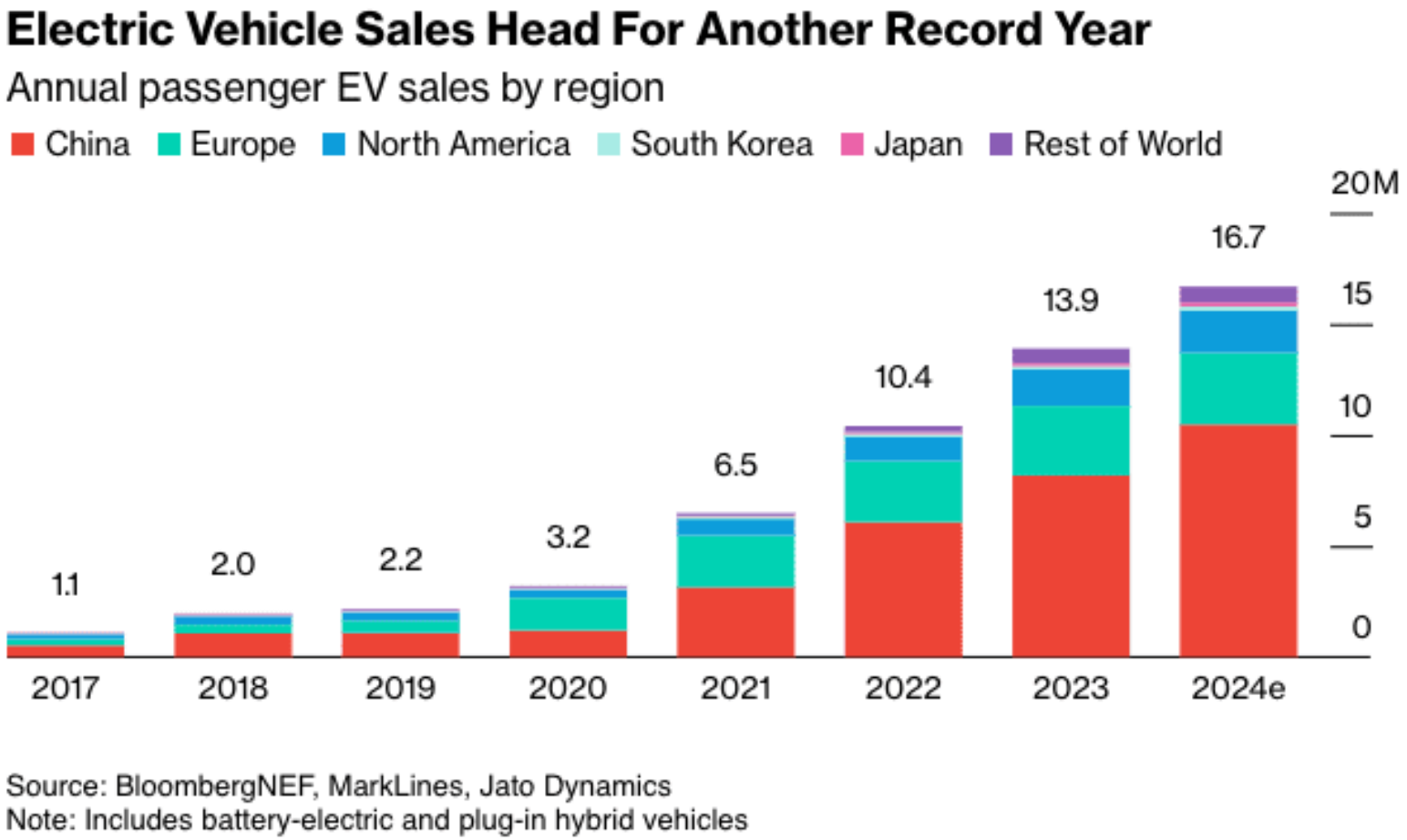


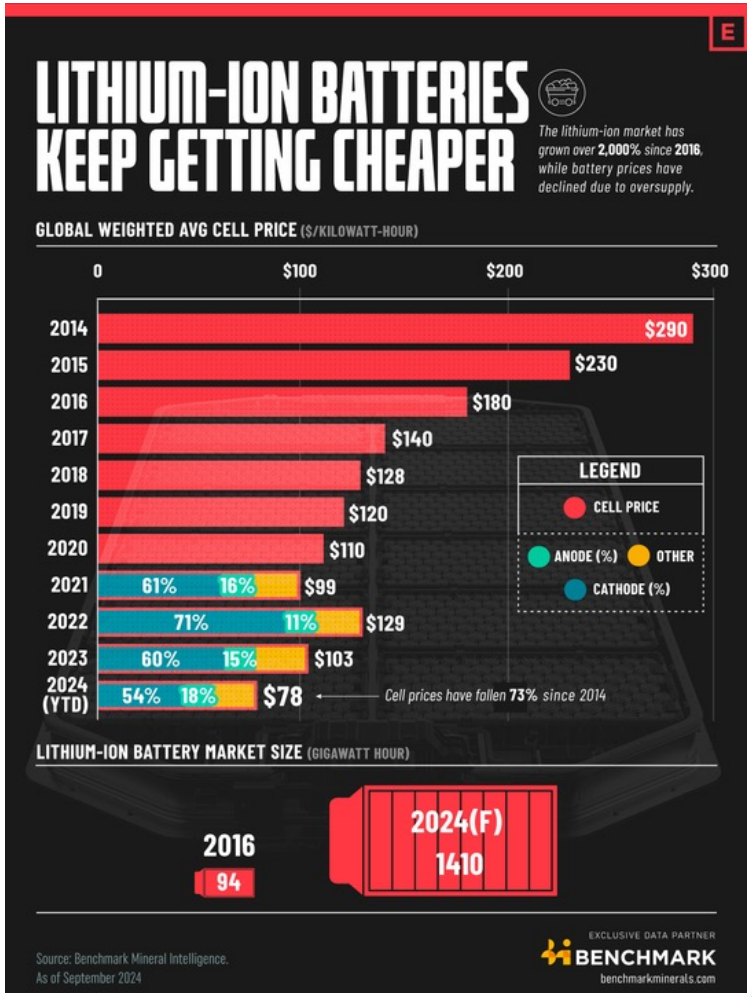
Element 25 Ltd's overall ESG rating as of July 2024

Digbee assembled an independent team of suitably qualified Mining ESG experts to manually review our submission against a set of rigorous and standardised scoring criteria. These scores were then peer reviewed before being finalised to ensure accuracy and credibility. The overall score above is the calculated average of the corporate and project scores shown on the right. Context scores reflect the inherent risk of where we are operating and there is little that can be done to influence these, whereas the action scores reflect the action being taken by us to mitigate these risks.

The Importance of Manganese

Electric Vehicle (EV) uptake keeps accelerating…





Reference: https://thedriven.io/2024/11/13/global-ev-sales-heading-for-record-16-7-million-sales-in-2024-despite-reports-of-slowdown/

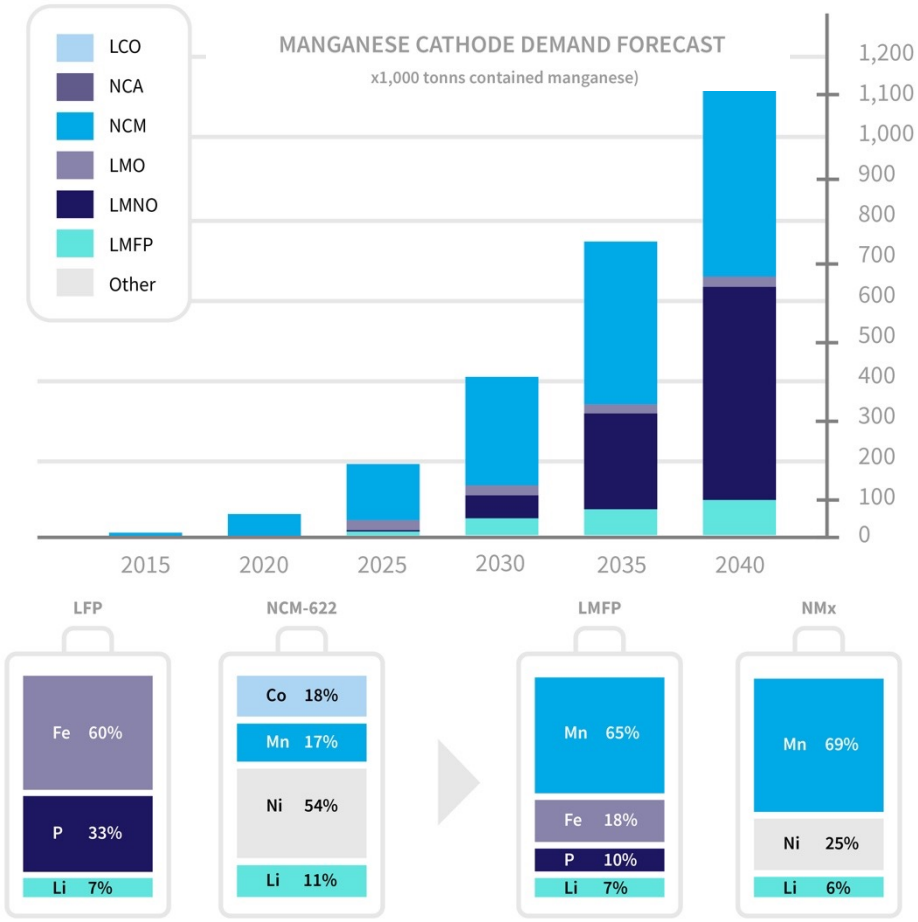
Transition to Higher Manganese Cathodes

Manganese Rich Cathode chemistries help to solve supply, ESG and supply security challenges

High-manganese represents the optimum cost-benefit ratio.
Volkswagen, March 2021

Li-Mn-rich technology shown as "cost" solution in electrification roadmap. BMW, November 2021

Tesla is working on new manganese battery cell.
Tesla, March 2022

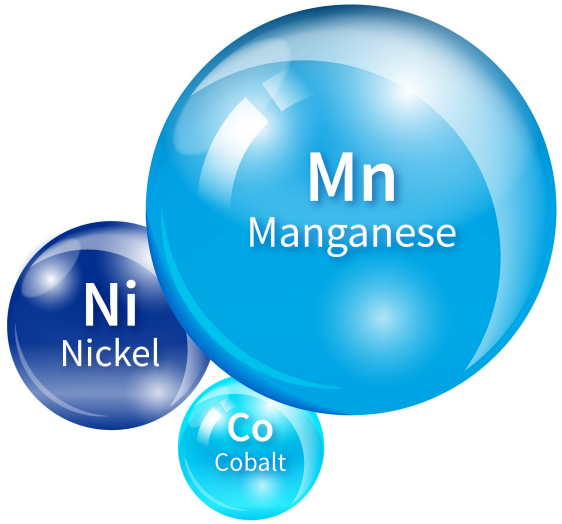


Reference: Umicore Capital Markets Day 2022
Reference: Benchmark Mineral Intelligence, South 32 Limited

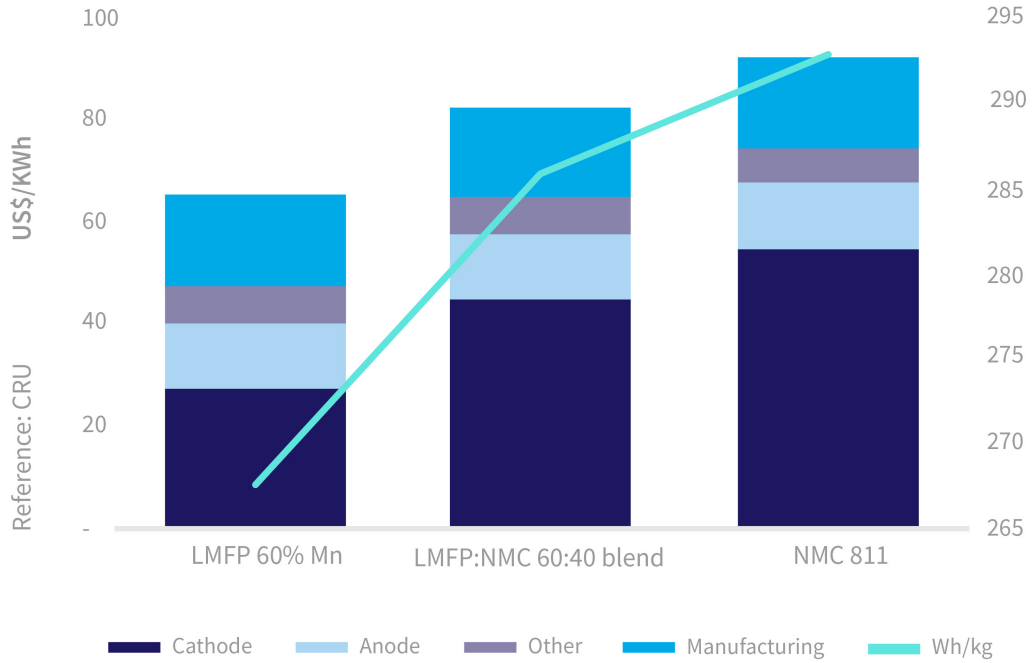
Transition to Higher Manganese Cathodes

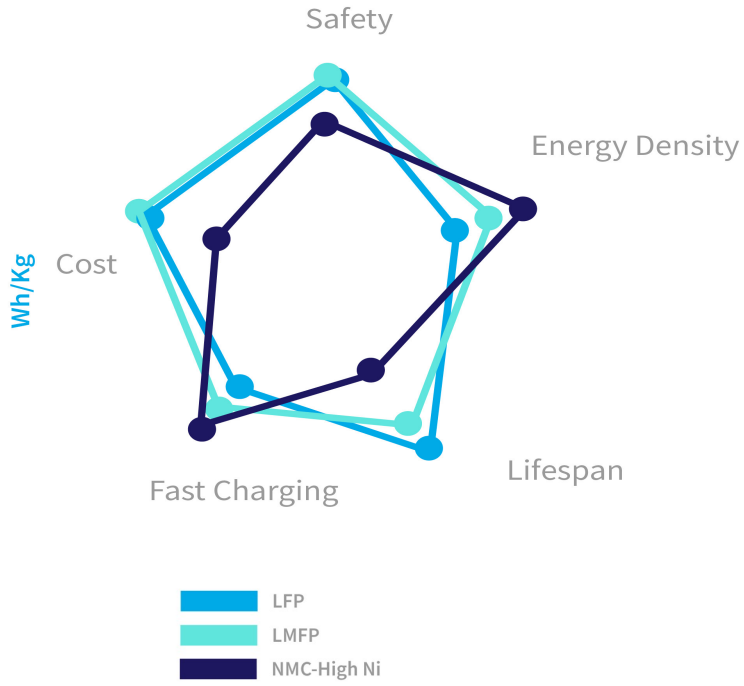
LMFP, LMNO and NM_X cathode chemistries offer improved safety, higher energy density, reduced cost per KWh and greater supply chain flexibility.

High Manganese Cathode Material offers a number of advantages:



Reduced nickel and very low to no cobalt content.





Reference: Umicore 2023

Louisiana Battery Grade HPMSM

DoE Grant - Part of US Government Drive for Domestic Manufacturing

DoE Grant Selection

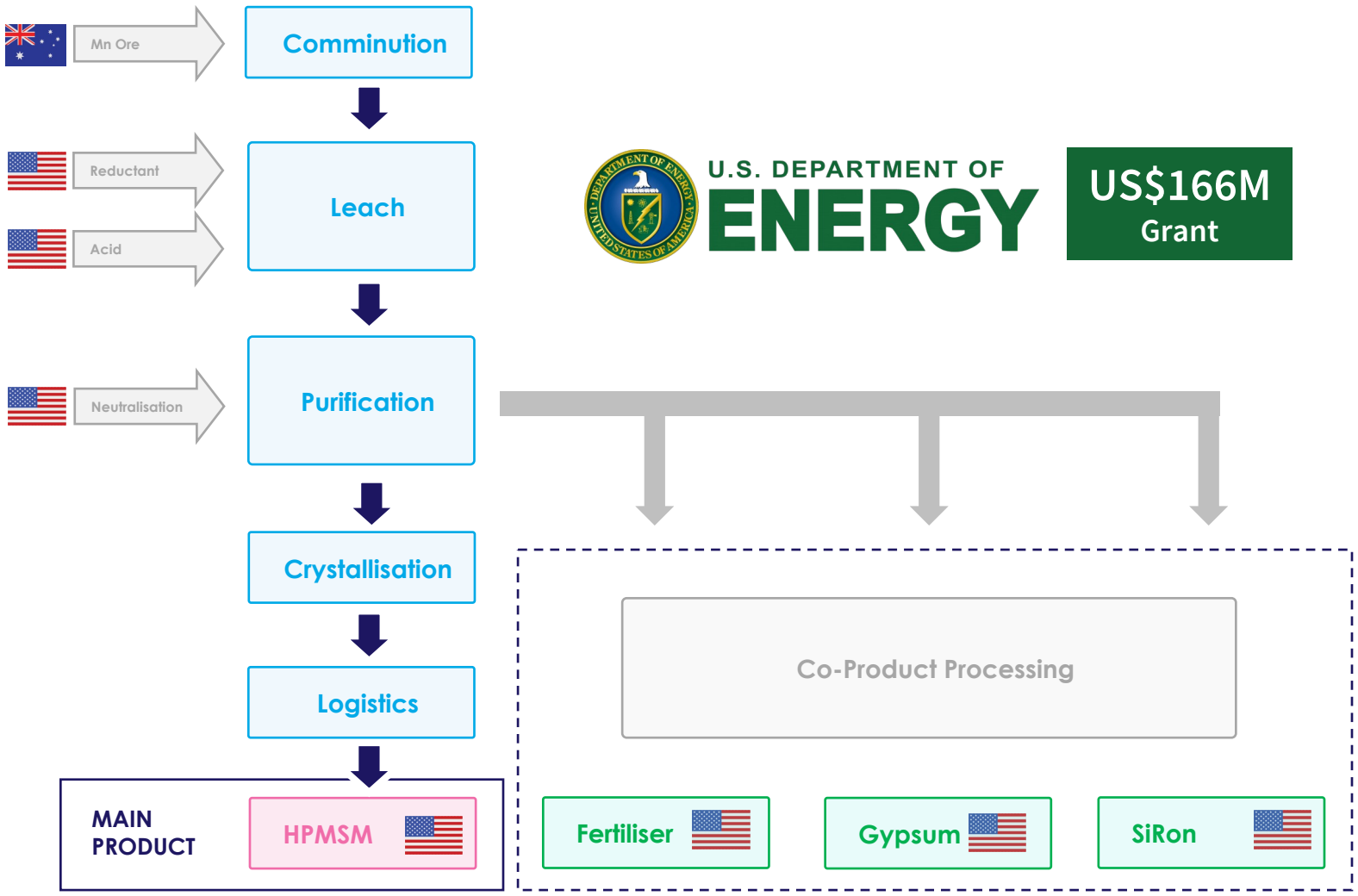
- E25's planned HPMSM facility in Louisiana selected for award negotiations for **US$166 million grant** from the U.S. DoE.
- Louisiana HPMSM Project selected under DoE's MESC Battery Materials Processing Grant Program.
- E25 and DoE expect to finalise a binding funding agreement for the grant as soon as practicable.
- The DoE's funding commitment is **in addition to U$115M financing commitments** from GM and Stellantis.

Reference: https://www.energy.gov/sites/default/files/2024-11/Supply_Chain_Readiness_Level_%28SCRL%29_Analysis_%28Nov-2024%29_2.pdf

DoE MESC Grant - Supporting Local Raw Material Supply

Local Supply Chain

- Process and supply chain developed to **maximise U.S. industry involvement.**
- Working with partners GM and Stellantis to **supply low carbon HPMSM for EV batteries.**
- **All reagents sourced locally** from established suppliers.
- **Site located close** located adjacent to acid recycling facility.
- Solid residues as co-products will be placed into local industries **targeting zero waste.**
- **Low carbon, circular economy approach.**



DoE Grant Award Underpins Project Capital Stack

- DoE US$166M grant selection provides cornerstone funding to support project success[1].
- Louisiana HPMSM Project selected under DoE's MESC Battery Materials Processing Grant Program.
- E25 and DoE grant team working to finalise binding documentation ASAP.
- Grant support is **in addition to U$115M financing commitments** from GM and Stellantis.
- Discussions in train with prospective financiers to close out remaining capital funding requirement.

Grant award secures 50% of capital requirement up to US$166M

[1] Reference : Company ASX Release Dated 24 September 2024

Upcoming Planned Investment Catalysts

Planned newsflow:

- Updated Reserve Statement to confirm extension to the mine life based on increased Measured and Indicated Resources.
- Updated Feasibility Study to support the revised Reserve Statement and refined capital and operating costs and financial metrics.
- Signing of the DoE grant contracts to secure $166M in DoE grant funding for the Louisiana Project.
- Finalise project financing from third lender to complement firm funding from DoE grant, GM Loan, and Stellantis Pre-Payment.
- Finalise key commercial contracts for both the Butcherbird Expansion and Louisiana HPMSM Projects.
- Commence of construction!

Questions?

References:
- ASX Company Release dated 24 September 2024
- ASX Company Release dated 18 September 2023
- ASX Company Release dated 29 October 2024

Contact Details

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ASX : E25
OTCQX : ELMTF

Competent Person's Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr Justin Brown who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results and Exploration Targets were compiled, Mr Brown was an employee of Element 25 Limited. Mr Brown is a geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brown consents to the inclusion of this information in the form and context in which it appears in this report.

The information in this report that relates to the Yanneri Ridge and Coodamudgi Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr. Dean O'Keefe, who acts as Consultant Geologist for Element 25 and is a full-time employee of MEC Mining. Mr. O'Keefe is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. O'Keefe consents to the inclusion in this report of the Mineral Resources estimates and supporting information in the form and context in which it appears.

The information in this report that relates to the Mundawindi and Ritchies Find Mineral Resources is based on and fairly represents information and supporting documentation prepared by Mr Greg Jones, who acts as Consultant Geologist for Element 25 and is a full-time employee of IHC Robbins. Mr. Jones is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Jones consents to the inclusion in this report of the Mineral Resources estimates and supporting information in the form and context in which it appears.

The information in this report that relates to the Bindi Bindi, Budgie Hill, Cadgies Flat and Ilgarrarie Ridge Mineral Resources is based on, and fairly represents information and supporting documentation prepared by Mr Mark Glassock who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Mineral Resources were compiled, Mr Glassock was a consultant to Element 25 Limited. Mr Glassock is a geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Glassock consents to the inclusion of this information in the form and context in which it appears in this report. Element 25 confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements, and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Please note with regard to exploration targets, the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

For further information on Element 25 Limited and its Projects please visit its website at www.element25.com.au which contains copies of all continuous disclosure documents to ASX, Competent Persons' Statements and Corporate Governance Statement and Policies.

This release has been approved by the Element 25 Limited Board of Directors.

References:

- ASX Company Release dated 29 October 2024