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Element 25 Limited Investor Update

Building a world-class Zero Carbon Manganese business

November 2021 AGM Presentation

Element 

Introduction

Disclaimer

This presentation contains only a brief overview of Element 25 Limited and its associated entities ("Element 25") and their respective activities and operations. The contents of this presentation, including matters relating to the geology of Element 25's projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.

This presentation contains a number of forward-looking statements. Known and unknown risks and uncertainties, and factors outside of Element 25's control, may cause the actual results, performance and achievements of Element 25 to differ materially from those expressed or implied in this presentation.

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The information contained in this presentation is not a substitute for detailed investigation or analysis of any particular issue. Current and potential investors and shareholders should seek independent advice before making any investment decision in regard to Element 25 or its activities.

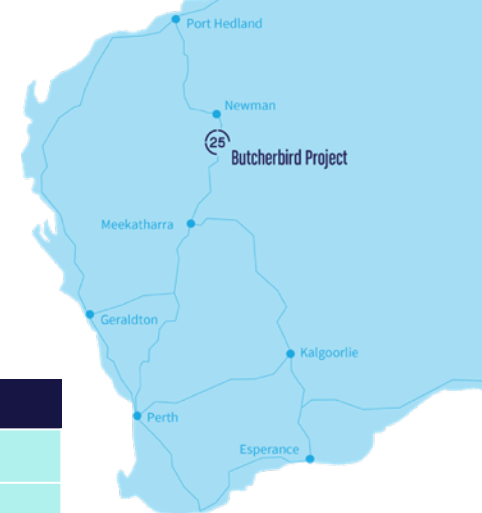
Overview

Developing the world class **Butcherbird Manganese Project** in Western Australia to produce high quality manganese concentrate and High Purity Manganese (HPM) products for traditional and new energy markets.

Financial Information

ASX Ticker	E25
Shares on Issue	153M
Share Price	\$1.10
Debt	Nil

- Australia's largest onshore manganese deposit.
- >260 Mt of manganese ore in JORC resources¹.
- Reserve containing 5.22 Mt of manganese².
- 100% owned by Element 25 Limited.
- Located in WA, ranked #1 for mining investment³.
- Ethical, proven, sustainably regulated jurisdiction.
- Simple low-cost mining and processing.
- No blasting or dewatering required.
- Long mine life – 42 years using only 20% of the global resource, potential to improve.
- Outstanding economics²
- Excellent infrastructure: highway and gas pipeline



¹Reference: Company ASX release 17 April 2019. ²Reference: Company ASX Release 3 December 2020. ³Reference: Fraser Institute Annual Survey of Mining Companies, 2019, ⁴Reference: Company ASX Release 26 May 2021, ⁵Reference: Company ASX Release 16 June 2021

Our Strategic Vision...

Stage 1

365Kt per annum

Commissioning and ramp-up underway



Stage 2

1 Mt per annum

PFS study complete, startup 2022



Stage 3

High Purity Mn

PFS study anticipated for completion H1 2022



Stage 4

MnSO₄ Expansion

Long term - multiple HPMSM modules globally

12 month plan

2 year plan

5 year plan

Cashflow

Low capital cost, rapid start up to establish E25 as a producer while minimising dilution.

Expansion

Improved resource utilisation, reduction in unit operating costs, increased operating cash.

The Prize

Position E25 as a globally dominant producer of high purity, sustainable manganese products.

Zero Carbon Manganese™

Best in class, zero carbon, ethically produced, scalable high purity manganese for global markets.

Not all manganese is created equal

E25 Manganese

Serving the Established...

- Manganese (**Mn**) is the fourth most used metal on earth in terms of tonnage.
- Used in steel, specialty alloys and aluminium products.
- Traditionally the market has been dominated by the steel and alkaline battery industries.
- There is no substitute for manganese in steel.
- **E25 manganese concentrate and EMM feed this market.**

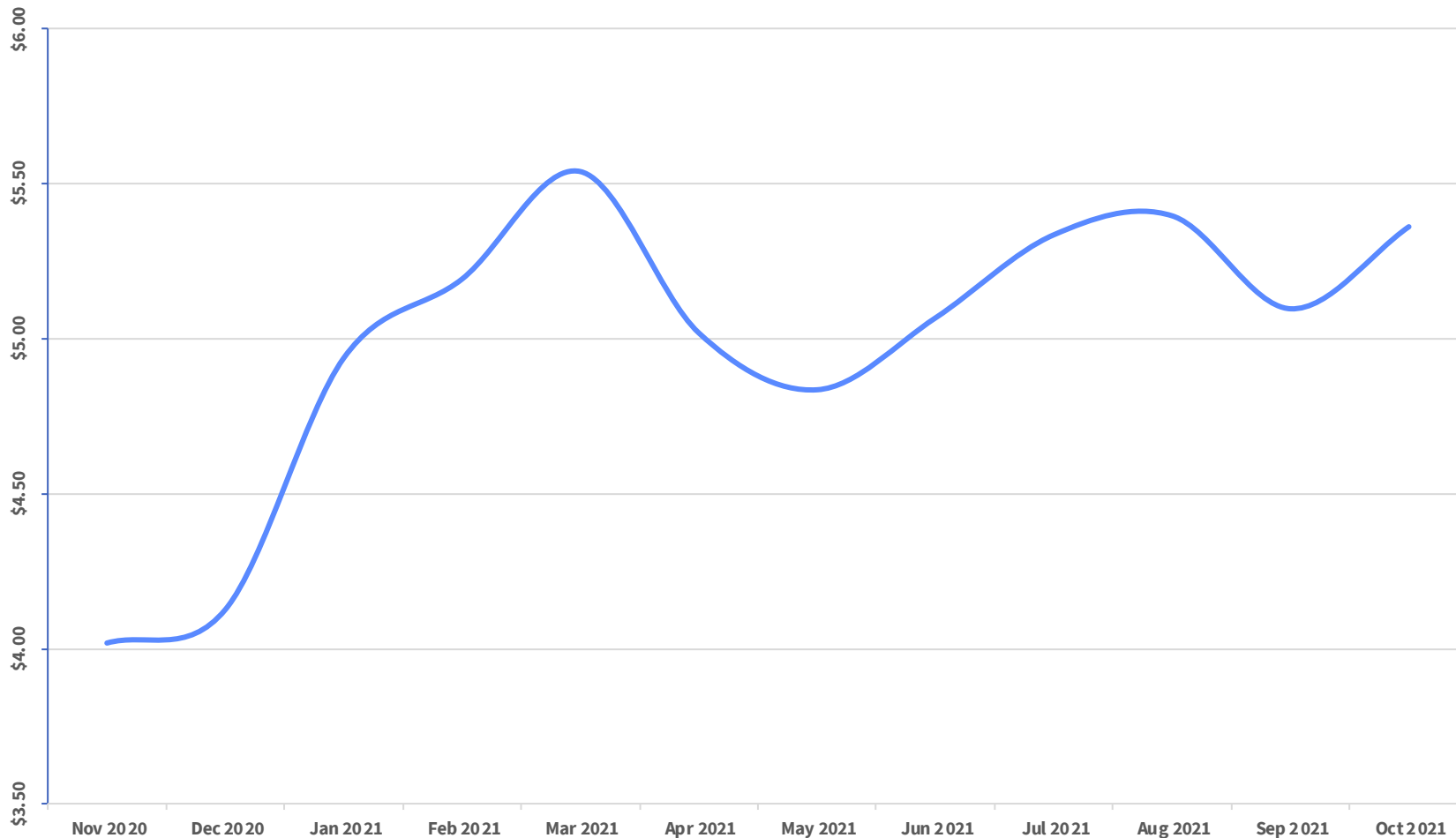
And the Emerging...

- The electrification of the global vehicle fleet requires vast amounts of cathode materials.
- Nickel and cobalt supplies cannot meet projected demand for new energy vehicle (NEV) growth.
- Batteries are trending toward higher manganese content for safer, more cost-effective solutions.
- **E25 high purity manganese will feed these markets.**



Manganese prices - stable since commissioning

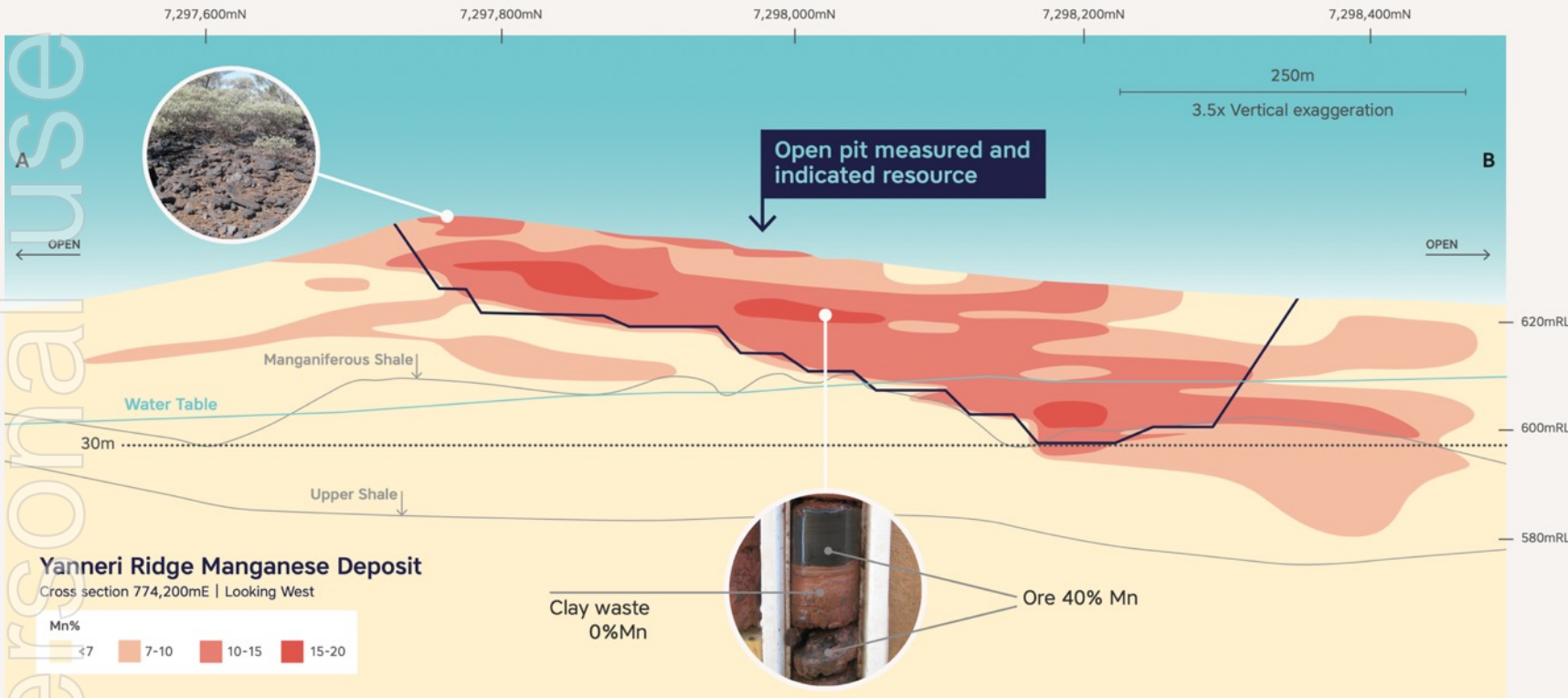
Manganese Price (44%Mn cif Tianjin)



- Fundamentals have favoured higher ore prices;
 - COVID Disruptions
 - Shipping congestion
 - Supply shortages
 - Elevated alloy prices
- Fundamentals remain sound going forward but may be impacted by seasonal factors in China.
- Supply side constraints likely to continue.
- Future incremental demand increases likely.

Very simple geology equals low-cost, low environmental impact manganese units

Classification	Tonnes (Mt)	Mn (%)	Contained Mn (Mt)
Resource	263	10.0	20.8
Reserve	50.6	10.3	5.22



RESOURCE GROWTH POTENTIAL

- Enough resource base for multi-decade long expansion pathway.
- Can produce concentrate, battery grade HPMSM and EMM without resource limitation.

ENVIRONMENTALLY BENIGN OPERATION

- Ore from surface
- No explosives required
- No waste water
- One reagent – water
- Extremely low levels of contaminants

Stage 1: Operational, ramping up to nameplate

- 20-year Mining Lease granted
- All Stakeholder Agreements finalised
- Processing water confirmed and permitted
- Fully funded with no debt
- Operation is fully permitted
- Stage 1 is operational
- Stage 2 fully funded to provide expanded concentrate sales and provide feed for $MnSO_4$ conversion

Maiden product shipment July 2021



Stage 1

Low impurity Mn concentrate

Operating and ramping up.
Two shipments dispatched.



Stage 2

Expanded Mn concentrate

PFS study complete, fully funded.
Startup planned for 2022.

Stage 1: Project Delivery Complete - Ramp Up Underway



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ROM Stocks

Process Water Storage

Tails Storage

Processing Plant

Ore Stockpiles

Main Access Road

Concentrate Business- Cost/Revenue Drivers...

Key Revenue/Margin Drivers

- Shipping
 - significant COVID related congestion has increased costs
 - E25 margins are directly impacted by increased shipping tariffs.
 - E25 receives a CIF price with shipping deducted, paid FOB.
- Manganese price
 - currently firm at >USD\$5/dmtu, macro conditions supportive.
 - stockpiles in China reducing.
- Forex
 - E25 operates in AUD and sells in USD.
- Site costs
 - largely fixed, with variable per tonne costs, throughput sensitive.

E25 Challenges

- Throughput
 - Debottlenecking the process plant (scalping screen/crusher)
- Grade
 - Improved geological control, optimize processing to reduce dilution.
- Efficiencies
 - Higher product volumes for the same/lower equipment/labour.
- Expansion
 - Economies of scale, reduced costs, larger shipments.



Macro-economic Factors

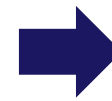
- Manganese Price (no hedging)
- AUD:USD Exchange Rate (no hedging)
- Inflation pressures
- Labour market constraints
- COVID related shipping congestion and costs

Quarterly Cashflow Comments

Revenues reported for the sale of 53Kt product.
 Production volumes of approximately 73 Kt.
 Shipping costs peaked at \$56/t.
 Current ship booked at a 45% reduced tariff.
 Throughput expected to reach nameplate Q1 2022.

Our Goal- The Concentrate for Stages 1 & 2 is Feed for Stage 3...

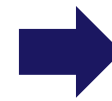
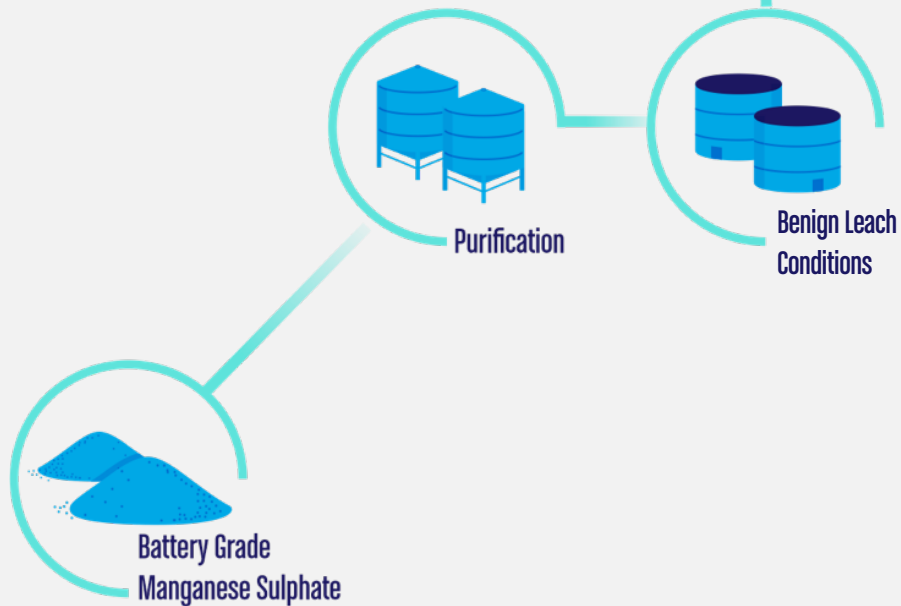
Manganese Concentrate



Stage 1

First production of manganese concentrate to sell to steel alloy manufacturers

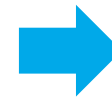
Battery Grade Manganese Sulphate ($MnSO_4$)



Stage 2

Expansion of the concentrate production to produce manganese feedstock to convert to HPMSM

Test work is utilising run-of-mine product



Stage 3

Serving the New Energy Vehicle Markets by converting the concentrate to HPMSM using renewable energy

New Energy Vehicle (NEV) Demand Growing MUCH Faster

58% by 2040

percentage of new vehicles that will be EV or hybrid

54 million

EV passenger sales by 2040

from 2033

decline emissions from road transport

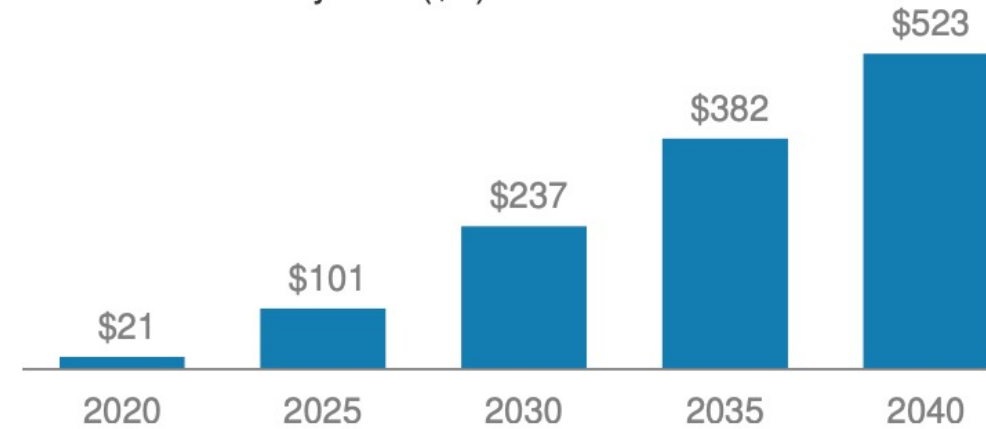
17.6M by 2040

barrels of oil displaced by EVs each day

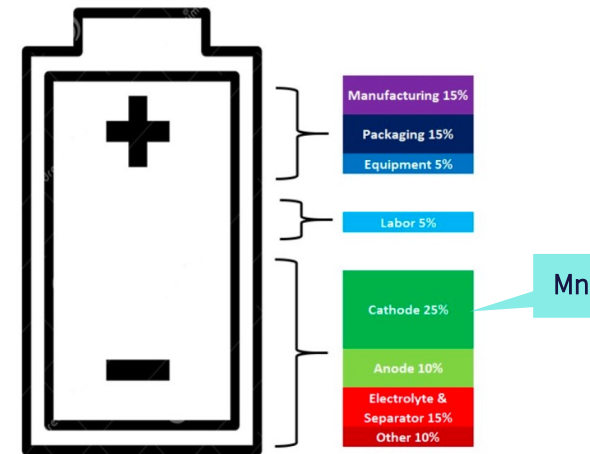
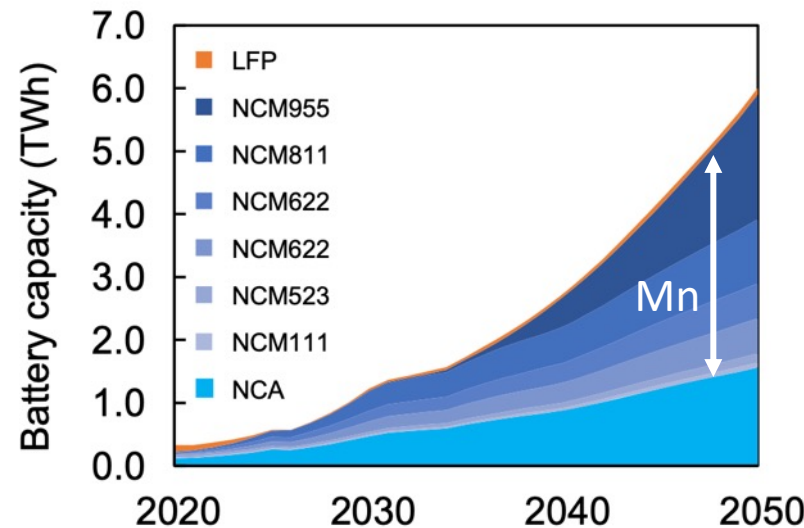
“It is reasonably straight forward to do a cathode that is two-thirds nickel and one-third manganese...”

Elon Musk, Tesla

Global EV Battery TAM (\$B)



Source: Company data, Morgan Stanley Research



If not manganese, then what?

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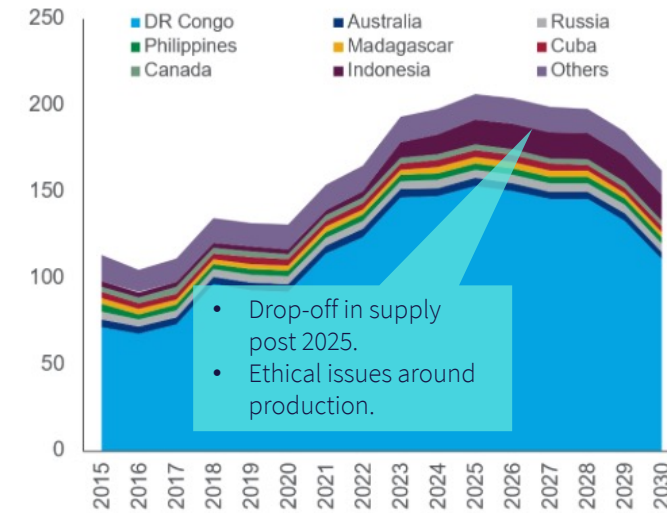
barrels of oil displaced by EVs each day

“In order to save battery costs, VW wants to use nickel and manganese for the cells in the volume segment and, if possible, do without the – more expensive – cobalt...”

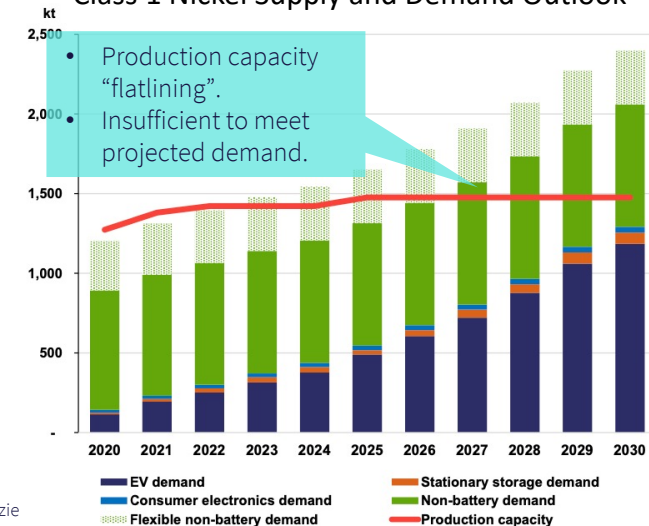
The Driven, March 2021

- Manganese is the cheapest, most abundant of the NMC cathode materials (Ni,Mn,C).
- Nickel and cobalt have supply constraints, manganese does not.
- For cobalt, there are serious ethical concerns around production methods¹.
- Manganese is perfectly placed to provide the material needed to satisfy the worlds hunger to electrify.
- **Battery makers have manganese rich cathode designs in their roadmaps post 2025.**

Global mined cobalt output (Kt)



Class 1 Nickel Supply and Demand Outlook



Low cost, efficient HPMSM process – significant improvements...

Current Manganese Concentrate Processing Technologies

- Leach - sulphuric acid leach of African/Local carbonate ores or roast reduction.
- Purification – toxic fluorine and/or sulphide reagents (toxic chemicals/waste)
- Dissolution of high purity EMM into $MnSO_4$ solution (high energy costs).
- Slow kinetics, high embedded energy, not ESG compliant.
- Geopolitical/jurisdictional issues come into play.

Element 25 Process

- Leach – rapid, low temperature leach using readily available CO_2 neutral reagent.
- Purification – minimal non-fluorine, non-sulphide based process.
- Low energy consumption and significantly reduced residue volumes.
- Residue streams may be able to be repurposed, further minimizing residue volumes.
- Jurisdictional advantages – Tier 1, ESG compliant location.
- These enhancements are also complementary to the production of EMM.

Problems with Current Technologies

Large volumes of waste residues
Toxic Reagents
Inefficient
Higher Cost
Outdated processing technology

Advantages of E25 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.

If not manganese, then what?



Volkswagen



TESLA



- OEMs including VW, Tesla and Stellantis have announced moves to high **manganese** cathodes.
- High **manganese** means better energy density and lower cost.
- Transition will require large volumes of high purity **manganese** sulphate (HPMSM).
- Some analyst estimates predict a deficit of up to 1.3Mt per annum by 2030.
- Element 25 is targeting this market for its decade long growth strategy.
- Discussions underway in relation to potential offtake partners in this segment.



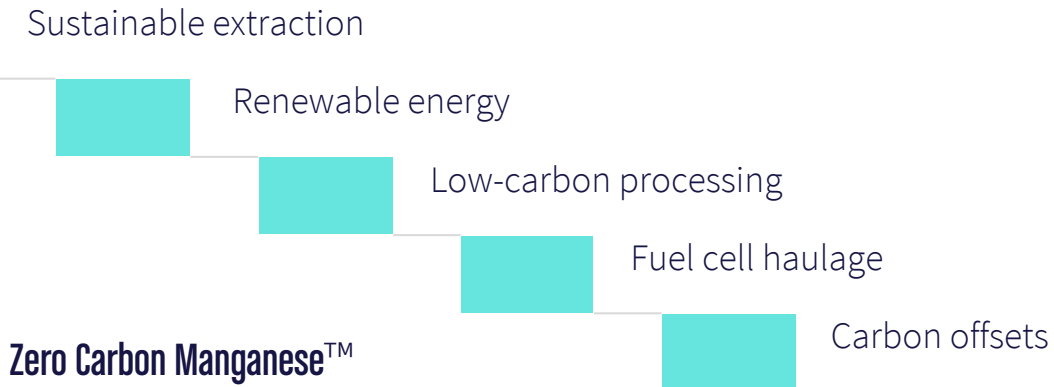
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Our Journey - Element 25 has a well advanced flowsheet and business strategy...



■ Historical ■ Projected

Zero Carbon Manganese™ – ESG considerations integral to our thinking



Other potential pathways that Element 25 is investigating:

- Extensive wind and solar resource data set collected at site (>1 year)
- Energy modelling confirmed cost advantage with renewable solutions
- Green hydrogen powered mine fleet and bulk haulage
- Battery powered bulk haulage trucks to be made available in Australia shortly
- Green hydrogen reduction reagent potential (similar to “Green Steel”)
- Supply chain transparency and ESG accounting
- Collaboration with other ESG focused companies to pursue new solutions

Sustainable Extraction



Renewable Energy
Powered Processing



New Energy Fuel



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Thank you

For more information, please contact Element 25 Limited:

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Element 

Reserves and Resources

Maiden Ore Reserve¹

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

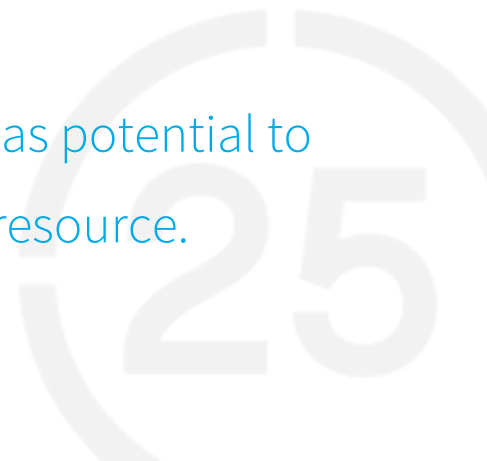
Global Mineral Resource²

Category	Tonnes (Mt)	Mn (%)	Si (%)	Fe (%)	Al (%)
Measured	16	11.6	20.6	11.7	5.7
Indicated	41	10.0	20.9	11.0	5.8
Inferred	206	9.8	20.8	11.4	5.9
Total	263	10.0	20.8	11.4	5.9

- 89% conversion of measured and indicated resources to reserve.
- Maiden Reserve only exploits approximately 20% of global mineral resource.
- Excellent potential for future expansion.
- More drilling has potential to add to global resource.

¹Reference: Element 25 Limited ASX release dated 19 May 2020.

²Reference: Element 25 Limited ASX releases dated 17 April 2019.



Competent Person's Statement

The information in this presentation that relates to Exploration Results is based on information compiled by Mr Justin Brown who is a full-time employee of the Company and is a member of the Australasian Institute of Mining and Metallurgy. Justin Brown 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'. Justin Brown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

All references to Mineral Resources pertain to the ASX release dated 17 April 2019. The Company confirms that all material assumptions, underpinning the estimations continue to apply and have not materially changed.

All references to Mineral Reserves pertain to the ASX release dated 19 May 2020. The Company confirms that all material assumptions, underpinning the estimations continue to apply and have not materially changed.

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.

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