

ARENA Funding Approved for Butcherbird Renewable Energy Powered High Purity Manganese Project

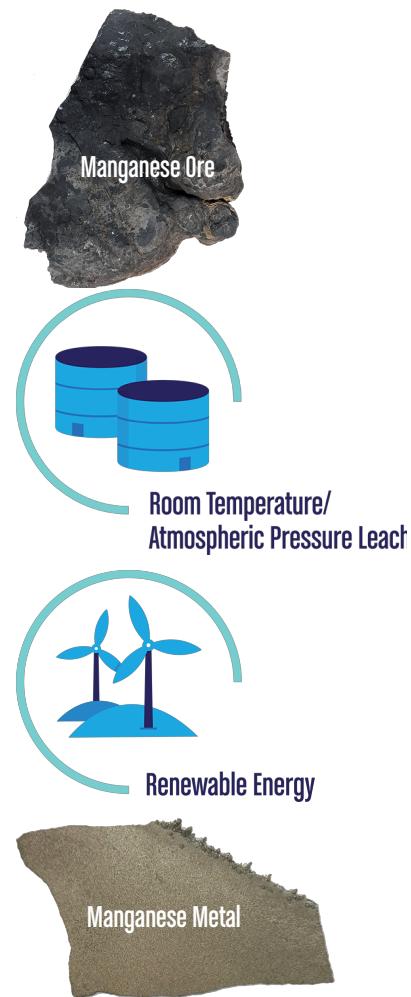
Highlights

- ARENA to contribute \$490K to demonstration of innovative manganese electrowinning technology.
- Programme designed to maximise project economics by increasing renewable energy penetration.
- Work expected to be included in the Pre-Feasibility Study on developing the Butcherbird Project.

Element 25 Limited (**ASX:E25**) (**E25** or **Company**) is pleased to advise that on behalf of the Australian Government, the **Australian Renewable Energy Agency** has awarded funding to the Company to assist with the demonstration of technology to **maximise project economics by increasing renewable energy** penetration for the production of high purity metals, specifically Electrolytic Manganese Metal (**EMM**), at the Company's 100% owned Butcherbird Project.

The funding will contribute 50% of the total budget of \$980K to demonstrate the viability of Intermittent Dynamic Electrowinning (**IDe**). This technology will allow manganese metal to be produced under dynamic conditions to more closely match the generation of electricity using intermittent supply from wind and solar, thereby allowing a higher percentage of renewable generation as part of the overall power solution. The long mine life of the Butcherbird Project makes it particularly suited to take the lead on this technology.

Work completed to date under the Pre-Feasibility Study has shown that whilst the availability of natural gas at Butcherbird provides a robust base case, the best economics in relation to power generation are achieved via a combination of wind, solar and gas. Wind and solar provide cheaper power than gas and because the electrowinning of metals (including manganese, but also copper,



Company Snapshot

ASX Code:	E25	Board of Directors:		Element 25 Limited is developing the world class Butcherbird manganese project in Western Australia to produce high purity manganese sulphate for lithium ion batteries and electrolytic manganese metal.
Shares on Issue:	84M	Seamus Cornelius	Chairman	
Share Price:	\$0.18	Justin Brown	ED	
Market Capitalisation:	\$15.1M	John Ribbons	NED	
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zinc and others) requires a significant power input, this cheaper, renewably generated power makes economic sense for the project as well as presenting a more sustainable, low carbon solution.

Base case analysis without IDE indicates that up to 60% renewable penetration is possible, with the remainder powered by natural gas sourced from the Goldfields Gas Pipeline which passes through the Butcherbird Project. IDE, however is expected to show that up to 90% renewable penetration may be possible, with significantly improved economics over the base case.

The outcomes of the work will be incorporated into the Company's Pre-Feasibility Study, currently in progress and scheduled for completion in 2019. Together with co-contributions from E25, the total value of the projects is approximately \$980,000.

E25 Executive Director Justin Brown said, "*The Company is pleased to partner with ARENA on this exciting aspect of work at Butcherbird. Whilst we already have a strong base case using a gas only power solution, this grant funding will add further value to the world class Butcherbird High Purity Manganese Project by helping it to become a long-term producer of potentially the world's cleanest, greenest high purity manganese products at bottom quartile costs powered with renewable energy*".

Murdoch University

The test work will be undertaken at the Murdoch University (College of Science, Health, Engineering and Education) Extractive Metallurgy Division. The team will be headed up by Associate Professor Aleksandar Nikoloski.

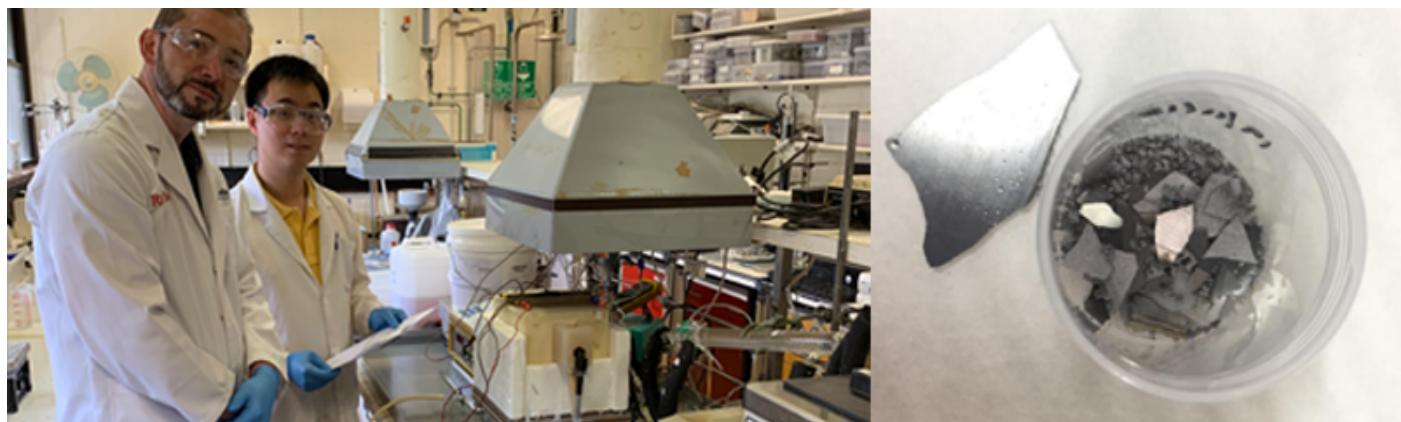


Figure 1: Murdoch University electrowinning research laboratory and EMM produced from Butcherbird ore.

Advisian

Element 25 engaged advisory consultants Advisian to develop a power solution to maximise value of the Butcherbird Project. Advisian's modelling identified a mix of renewable energy sources as the low-cost power solution for the Project. Advisian then assisted with the successful approval of \$A 490,000 in funding from the

Australian Renewable Energy Agency (ARENA). The funds will support pilot studies to test the dynamics of intermittent energy from wind and solar energy on manganese production and quality.

The success of pilot activities will enable the implementation of a low cost, low emissions solution for the Butcherbird Project, and the potential rollout to other metal producers in Australia. The future possible benefits include an increase in downstream metals processing in Australia with multiplier effects on the economy.

Advisian will continue to work with Element 25 in their next phase of work.

About the Butcherbird High Purity Manganese Project

The Butcherbird High Purity Manganese Deposit is a world class manganese resource with current JORC resources in excess of 180Mt of manganese ore¹.

The Company has completed a positive scoping study with respect to developing the deposit to produce high purity manganese sulphate for lithium ion battery cathodes as well as Electrolytic Manganese Metal for use in certain specialty steels. A PFS is currently being completed and is expected to further confirm the commercial potential of the project.

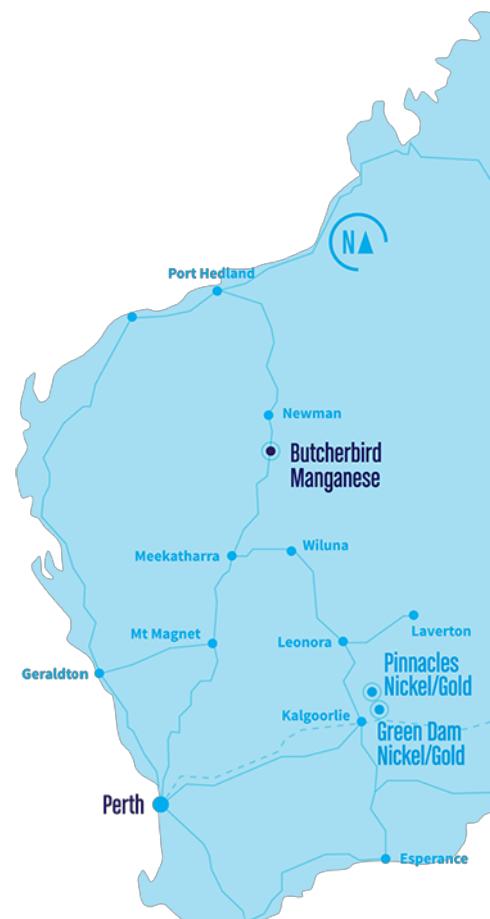
The Butcherbird Project straddles the Great Northern Highway and the Goldfields Gas Pipeline providing turnkey logistics and energy solutions. The Company is also intending to integrate renewable energy into the power solution to minimise the carbon intensity of the project as well as further reducing energy costs.

Mineral Resources

Classification	Tonnes (Mt)	Grade Mn (%)
Indicated	22.5	12.0
Inferred	158.3	10.6
TOTAL	180.8	10.8

Notes:

- Reported at 8% Mn cut-off
- All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)



¹ Reference: Company ASX release dated 12 October 2017 (released under the Company's previous ticker MZM)

Justin Brown

Executive Director

Company information, ASX announcements, investor presentations, corporate videos and other investor material on the Company's projects can be viewed at: <http://www.element25.com.au>.

Competent Persons Statement

The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources and Mineral Reserves 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, Exploration Targets, Mineral Resources and Mineral Reserves 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.

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.

The information in this report that relates to Mineral Resources is based on information announced to the ASX on 12 October 2017. Element 25 Limited 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.

Disclaimer

The views expressed herein are not necessarily the views of the Australian Government, and the Australian Government does not accept responsibility for any information or advice contained herein.