

## Butcherbird Commissioning Continuing as Planned

- Commissioning activities progressing well at the Butcherbird Mine Site.
- First ore has been successfully processed through the plant.
- Production of **in specification 30-35% Mn** concentrate achieved early in commissioning programme.
- Optimisation and ramp-up progressing on schedule.

Element 25 Limited (**E25** or **Company**) (**ASX:E25**) is pleased to confirm that the delivery of the first stage of a planned multi-stage development at the Company's 100% owned world class Butcherbird Project (**Project**) has been extremely successful with project build and commencement of commissioning completed within 11 months from the delivery of the Pre-Feasibility Study published in May 2020<sup>4</sup>.

The Project team is now fully focussed on normal commissioning activities and is pleased to report that there are no early indications of any significant flaws in any of the processing equipment or stages. Reliable, consistent operation and optimisation of the plant to the various types of ore feed identified in the starter pits are some of the initial commissioning objectives. This process is expected to roll out over a relatively short period, with all efforts being made to accelerate production rates to nameplate as quickly as practicable.

Importantly, **in-spec 30-35% Mn content concentrate** has been successfully produced early in the commissioning process and early indications are encouraging with respect to potential plant throughput. A number of optimisation opportunities will be explored and minor engineering modifications are being implemented during the normal commissioning process to enhance plant availability, processing throughput and product quality.

Power and water services are operating reliably at design rates, and TSF commissioning is progressing without issues. Other infrastructure such as the access road connection to the Great Northern Highway continue towards completion in preparation for the first cargo which will be trucked to Port Hedland for export via the Utah Point export facility.

E25 Managing Director Mr Justin Brown commented, *"This is another important milestone in the development of the Project and we look forward to updating the market further in coming weeks as we progress towards our first shipment."*



### COMPANY SNAPSHOT

#### Market Summary

ASX code: E25  
 Shares on issue: 149M  
 Shares price: \$2.23

#### Board of Directors:

Seamus Cornelius Chairman  
 Justin Brown MD  
 John Ribbons NED

Element 25 Limited is developing the world class Butcherbird Manganese Project in Western Australia to produce high quality manganese concentrate and high purity manganese products for traditional and new energy markets.



This is the first stage of a multi-stage development strategy for the Project, which will be expanded to produce high purity manganese sulphate monohydrate (HPMSM) for electric vehicle (EV) batteries to power the global transition away from fossil fuel powered mobility.

**Manganese is emerging as an increasingly important** ingredient for EV batteries, with potential supply constraints for nickel and cobalt forcing battery manufacturers to look to high manganese cathodes to produce the vast amount of cathode material required by the EV industry in coming years.<sup>1</sup>

The Project is ideally placed to feed this potential demand, with **advanced flowsheet development** work undertaken in 2019 and 2020 confirming a simple, unique, ambient temperature and atmospheric pressure leach process for E25 ores which, when combined with offsets, will target the world's first **Zero Carbon Manganese™** for EV cathode manufacture<sup>2</sup>.

## About the Butcherbird Manganese Project

The Butcherbird Manganese Project is a world class manganese resource with current JORC resources in excess of 263 Mt of manganese ore<sup>3</sup>. The Company completed a Pre-Feasibility Study (PFS)<sup>4</sup> with respect to developing the deposit to produce manganese concentrate for export to generate early cashflow with a modest capital requirement<sup>5</sup>. The outstanding economics and low capital hurdle of less than A\$17 million for the first stage of development will allow the Company to develop the project in a relatively short timeframe. The delivery of this first stage of production is fully funded and already underway.

The PFS also highlighted the Project has the potential for significant growth beyond the initial Stage 1 production volumes (the studies examined the potential for a 2X and 3X expansion to Stage 1 within 12 months of initial

---

<sup>1</sup> <https://thenextavenue.com/2021/01/22/svolt-opens-orders-for-its-nmx-nickel-manganese-batteries/>

<sup>2</sup> Reference: Company ASX release dated 12 February 2019.

<sup>3</sup> Reference: Company ASX release dated 17 April 2019.

<sup>4</sup> Reference: Company ASX release dated 19 May 2020.

<sup>5</sup> Reference: Company ASX release dated 3 December 2020

commissioning) and the Company expects to expedite the expansion of the Project once Stage 1 is fully operational. In addition to the concentrate export business, the Company has completed extensive research & development and laboratory test work into the production of high purity manganese products including battery grade manganese sulphate (HPMSM) and High Purity Electrolytic Manganese Metal (HPEMM). The work has highlighted that the Butcherbird ores are highly amenable to an ambient temperature, atmospheric pressure leach process, resulting in a very efficient extraction of the manganese into solution, the key requirement for the cost effective and sustainable production of HPMSM and HPEMM.

The Project straddles the Great Northern Highway and the Goldfields Gas Pipeline, providing turnkey logistics and energy solutions. The Company plans to integrate renewable energy into the power solution over time to target a zero-carbon footprint for the Project, which is expected to also reduce energy costs. A cleaner, lower carbon flowsheet and high penetration renewable energy will place Butcherbird at the forefront of sustainable high purity manganese production.

## Mineral Resources

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
<b>Total</b>	<b>263</b>	<b>10.0</b>	<b>20.8</b>	<b>11.4</b>	<b>5.9</b>

Notes:

- Reported at a 7% Mn cut-off for the Measured and Indicated categories and an 8% Mn cut-off for the Inferred categories.
- All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)

## Mining Reserve

Based on the results of the Pre-Feasibility Study completed in May 2020, E25 has published a Maiden Ore Reserve for the Project of 50.55Mt in the Proved and Probable categories<sup>6</sup>.

Classification	Tonnes (Mt)	Grade (Mn%)	Contained Mn (Mt)	Recovered Mn (Mt)
Proved	14.4	11.5	1.65	1.35
Probable	36.2	9.8	3.56	2.92
<b>Total</b>	<b>50.6</b>	<b>10.3</b>	<b>5.21</b>	<b>4.27</b>

Justin Brown

Managing Director

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

<sup>6</sup> Reference: Element 25 Limited Reserve Statement lodged with ASX 19 May 2020.

## Competent Persons Statement

The company confirms that in the case of estimates of Mineral Resource or Ore Reserves, all material assumptions and technical parameters underpinning the estimates in the market announcements dated 17 April 2019 and 19 May 2020 continue to apply and have not materially changed. The company confirms that the form and context in which the competent person's findings are presented has not been materially modified from the original market announcements.

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.

This announcement is authorised for market release by Element 25 Limited's Board of Directors.