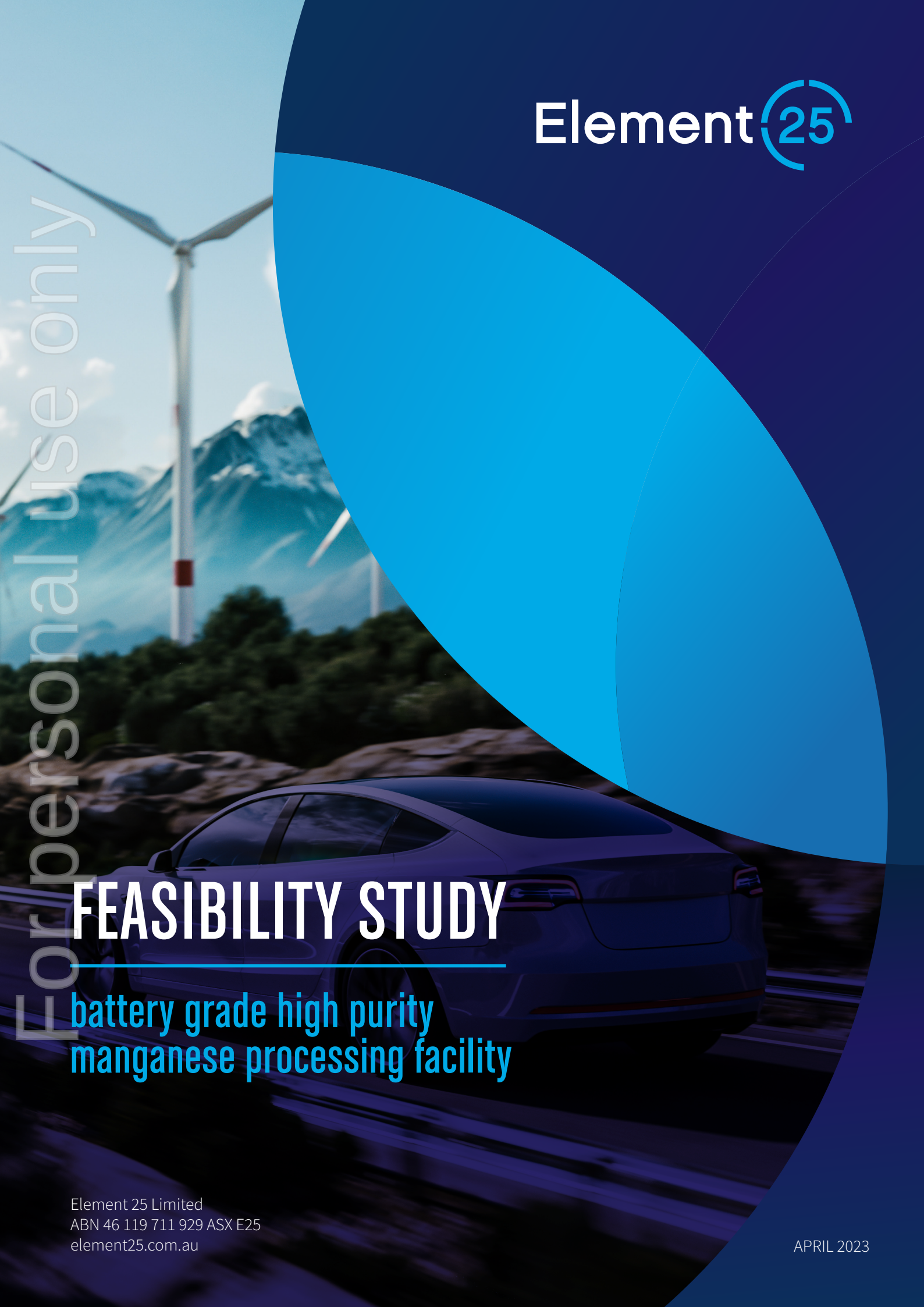

FEASIBILITY STUDY

battery grade high purity manganese processing facility

Element 25 Limited
ABN 46 119 711 929 ASX E25
element25.com.au

APRIL 2023

Strong financial results underpinned by competitive capital and operating cost estimate

Cashflow	NPV	IRR	Capital	HPMSM
US$155M	US$1,662M	29%	US$289M	65,000 t/a
pre-tax average cashflow p.a. at full production (2 trains)	pre-tax (real) at full production Discount Rate 8%	pre- tax at full production	for train 1 with an additional US$187M required for train 2	expanding to 130ktpa with a second train

USA based location to supply local fast growing electric vehicle markets:

- US Electric Vehicle (EV) demand is expected to grow 12x by 2030 (Benchmark Minerals).
- Commitments of over US$90 billion to build U.S. battery capacity will provide enough batteries for 10M electric vehicles (EVs) each year.[1]
- Manganese sulphate (HPMSM) is required for the production of pre-cathode active materials (pCAM) used in EV batteries.
- E25 facility is positioned to be the leading US source of HPMSM.
- Offtake and financing agreement in place with Stellantis and negotiations progressing with other leading EV OEMs.

Compelling ESG profile compared to existing producers[2]:

- E25 HPMSM calculated to produce ~1.7kg of CO2 for every 1kg of HPMSM which is approximately:
  - ~ 67% lower than competitors in China;
  - ~26% lower than closest non-China competitor's optimised case; and
- the E25 process is not yet fully optimised for carbon reduction – renewable energy integration will further improve ESG outcomes.

1 Investments in American-Made Energy | Department of Energy
2 Reference: Company ASX Release dated 21 February 2023
Note: all dollar amounts are in USD

Strong support from local, state and federal government:

- Competitive incentive package offered by Louisiana Economic Development (LED).
- US Inflation Reduction Act (2022) - Section 45X Advanced Manufacturing Production Credit reduces operating costs.
- Engagement with USA Federal Department of Energy has commenced in relation to potential funding opportunities.

Provides a compelling base case to underpin future growth:

- Strategic plan envisages multiple HPMSM production facilities globally.
- Continued EV market growth to require significant volumes of HPMSM for battery manufacture.
- Predicted transition to Lithium manganese (Li-Mn) rich chemistries will further increase HPMSM demand.
- HLM cathodes use 60% manganese content and LMFP expected to account for 50% of LFP market by 2030. [3]

3 CPM Group

INTRODUCTION

Element 25 Limited **(Element 25, E25 or Company) (ASX:E25)** is pleased to report the results of a detailed feasibility study **(FS or Study)** for its 100% owned proposed integrated battery grade high purity manganese sulphate facility which will produce a monohydrate manganese sulphate with the chemical formula $MnSO_4.H_2O$ **(HPMSM).**

The HPMSM is intended for use in the manufacture of electric vehicle Pre-Cathode Active Materials **(pCAM).** The proposed base case location for the business is in Louisiana, USA **(Project)**. The purpose of the study is to provide a technical and economic assessment of the development of a HPMSM business utilising E25 Butcherbird manganese concentrate as feedstock for a facility to produce HPMSM.

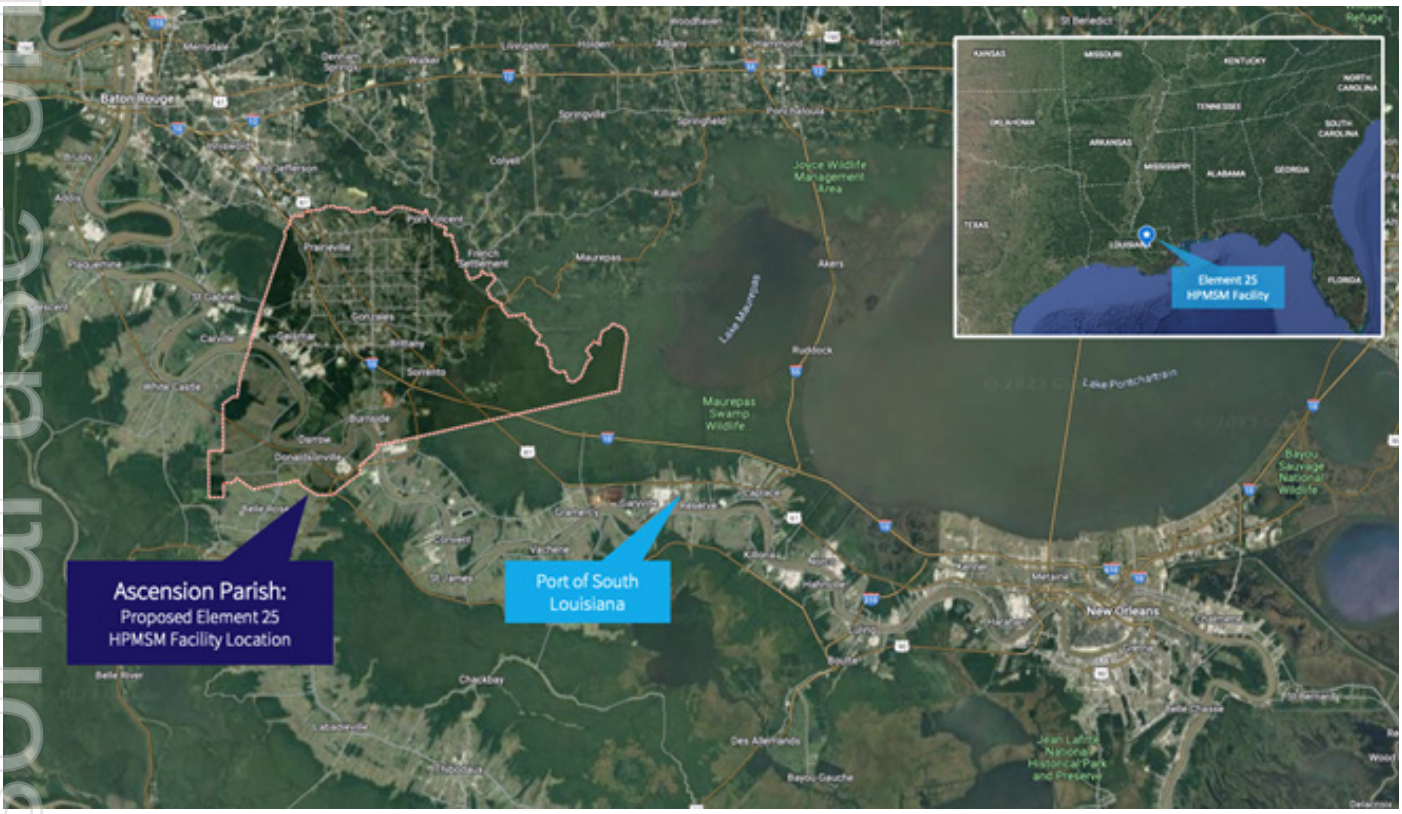

Figure 1: Proposed facility location.

The Study confirms the feasibility of producing HPMSM at a Louisiana location for sale to local and international offtake partners with an environmental impact that is significantly lower than incumbent producers to supply the rapidly growing electric vehicle supply chain in the United States. The Project is uniquely positioned to benefit from its highly favourable location in Louisiana USA, with exceptional infrastructure, a deep local talent pool, low-cost energy, and proximity to local markets for the repurposing of by-product industrial materials to maximise circular resource use.

The Study reflects conservative costing assumptions and includes provisions to take into account recent inflationary pressures having a substantial impact on both capital expenditures and operating costs.

E25 has developed a proprietary flowsheet which is covered by multiple patent applications for the conversion of the Butcherbird manganese concentrates into HPMSM.

The E25 process improves on existing HPMSM processing currently in use by reducing energy and reagent consumption and producing solid by-products in a form that can be repurposed, maximizing resource utilisation and minimising local waste and therefore also minimising the environmental impact of the complete operation.

This project scope comprises a production facility **(Facility)** capable of producing a nominal 65,000 t/year of battery grade HPMSM per train. The Study assumes a start-up production train with a second train to be constructed in subsequent years to increase production volumes up to 130,000 tonnes per annum.

The HPMSM plant will also produce re-usable material in the form of a fertiliser feedstock, a ferro-silicon **(FeSi)** smelter feedstock suitable for use in steel production processes and a gypsum by-product for industrial use.

FEASIBILITY STUDY FINANCIAL SUMMARY

The FS prioritises the processing of the Company's existing production from its 100% owned Butcherbird Manganese Mine **(Butcherbird)** in Western Australia **(WA)**. The mine has current defined Proved and Probable Ore Reserves, which have been published and updated in the Company's 2022 Annual Report to shareholders. Current reserves of over 40 years are sufficient to supply the Project over the study period which is currently modelled at 28 years (25 Years of Train 2 production).

The concentrate from Butcherbird will be sold to the E25 Louisiana operating entity under an offtake agreement at normal commercial rates prior to being processed into HPMSM and sold to offtake partners and into the spot market. Alternative sources of ore are available in the open market if required but are not included in the base case.

In addition to the Louisiana base case location, the FS has also investigated the capital and operating costs for an alternative location in Sarawak, Malaysia where extensive investigations have been undertaken previously and where the Company is in advanced discussions with the federal and state Malaysian Government bodies and potential offtake and finance partners to construct a HPMSM facility within the Samalaju Industrial Park **(SIP)**. The development of a facility at this location is subject to further work and attracting financing support. This alternative is not included in the financial model for the Study which focussed on the construction and operation of the Louisiana plant however it is being considered as a potential site for a future plant.

FINANCIAL SUMMARY	UNIT	VALUE
Capital Cost **(Construction)**	US$M	289
Average Operating Cost/tonne of HPMSM at nameplate production	US$	1,188
Pre-Tax Net Present Value at a 8% discount rate (NPV_8(Real))	US$M	1,662
Post-Tax Net Present Value at a 8% discount rate (NPV_8(Real))	US$M	1,161
IRR Pre-Tax	%	29.4
IRR Post-Tax	%	25.0
Average annual steady state EBITDA at full production	US$M	178
Average annual steady state pre-tax cashflow at full production	US$M	155

Table 1: Summary of Study outcomes.

KEY STUDY ASSUMPTIONS

ITEM		UNIT	DESIGN VALUE
Financial Assumptions			
Inflation Rate		%	2.49
Discount Rate		%	8
HPMSM Sale Price:	Offtake Agreement #1	US$	Formula
	Offtake Agreement #2	US$	Cost-plus
	Spot or short-term contract sales	US$	Forecast
Processing Assumptions			
HPMSM Production Rate (Each Train)		tonnes/year	65,000
HPMSM Production Rate (Full Production)		tonnes/year	130,000
Feed Grade		% Mn	30 - 33
Product Grade		% Mn	>32
		% $MnSO_4.H_2O$	>99.9

Table 2: Key Study assumptions.

FINANCIAL MODELLING

A detailed project economic model was completed by an independent financial modelling company, Model Answer[4], as part of the Study with the following key assumptions:

- Capital and operating costs are in accordance with technical study outcomes.
- HPMSM processing plant ramp-up is based on a 24-month time frame to nameplate production.
- Financial modelling has been completed on a monthly basis, including estimated cash flow for construction activities and project ramp-up.
- Pricing information for HPMSM sales agreed offtake terms with Principal Offtake Partners 1 & 2 (POP1 & POP2) and a forecast price supplied by Project Blue.
- The financial model uses the same assumptions that were applied in the Life Cycle Assessment for carbon intensity described in the ESG section of this report.

A comprehensive economic model has been prepared for the HPMSM Project covering the first 25 years from commissioning of production train 2. The economic model is based on a monthly projection of capital costs and assumes that the full capital cost is spent across 24 months prior to commissioning of the chemical plant.

4 https://modelanswer.com.au/

CAPITAL COST ESTIMATE

The estimate is based on deliverables assembled and designated by area provided by Fides Consulting who is the consulting US engineer. Deliverables are based on scope documentation developed by Worley for a similar project in Malaysia and adjusted to reflect a design intended for a South Louisiana site. Scope documents provided include Process Flow Diagrams **(PFDs)**, Piping and Instrumentation Diagrams **(P&IDs)**, Mechanical Equipment List **(MEL)**, 3D Model and Material Take-Offs **(MTOs)** for all disciplines.

The Project comprises a processing facility in South Louisiana to process manganese concentrate ore to produce HPMSM and associated by-products.

	UNIT	MATERIALS	LABOUR	INDIRECT	TOTAL
Major Equipment	US$	71,157,964	3,506,047	21,203,638	95,867,648
Site Preparation	US$	4,641,487	6,162,371	3,229,525	14,033,383
Buildings	US$	34,369,594	41,425,580	22,605,382	98,400,555
Electrical & Instrument	US$	18,639,700	8,454,507	7,899,356	34,993,564
Total Capital Cost	**US$**	**128,808,744**	**59,548,505**	**54,937,901**	**243,295,150**
Escalation	US$				11,517,690
Total Capital including Escalation	**US$**	**128,808,744**	**59,548,505**	**54,937,901**	**254,812,840**
Contingency	US$				34,591,500
Total Capital including Contingency and Escalation	**US$**	**128,808,744**	**59,548,505**	**54,937,901**	**289,404,340**
First Fill/Spares	US$				4,021,660

Table 3: Capital cost estimate summary.

OPERATING COST ESTIMATE

Operating costs for the Louisiana HPMSM Project were derived from first principles based on the cost areas as defined in the study and described below. Costs have been derived from key inputs of ore, reagents, consumables, utilities, power, maintenance, waste disposal, labour and general overheads and summarised below.

Real Figures	Single HPMSM Train			Two HPMSM Trains		
Cost area	US$M p.a.	US$/t HPMSM	Percentage operating costs	US$M p.a.	US$/t HPMSM	Percentage operating costs
Materials & Reagents	34,431	530	41%	68,862	530	45%
Labour	16,201	249	19%	21,858	168	14%
Plant Operations	14,533	224	17%	28,182	217	18%
General & Administration	18,915	291	23%	35,517	273	23%
Total Operating Cost	84,081	1,294	100%	154,420	1,188	100%

Table 4: Operating cost model summary.

PRODUCT PRICING

The product sales prices used in the Study comprised three pricing models which have been derived as follows:

- Pricing for volumes committed under the Stellantis Agreement use the pricing formulas that form part of those contracts. Volumes committed under the contract comprise approximately 15% of train 1 output for the term of the contract.
- The Company has advanced negotiations underway with a second substantial offtake partner. Pricing for forecast volumes are aligned with the current stage of negotiations. Volumes expected to be committed under this agreement comprise up to 50% of train 1 output.
- The balance of the volumes are assumed to be sold into the spot market and the Study uses forecast pricing from the Project Blue market report.
- All volumes produced beyond the terms of the two offtake agreements are assumed to be placed in the spot market using the Project Blue forecasts.

SENSITIVITY ANALYSES

The concentrate operations and chemical plant components of the Study have been designed to a FS level of detail with an intended accuracy of ± 15%. Key inputs into the Study have been tested by pricing, capital cost and operating cost sensitivities. The impact to pre-tax net present value is presented in Figure below. Applying discount rates of 6% and 10% resulted in NPV_6 of $2,317M and NPV_{10} of $1,206M respectively.

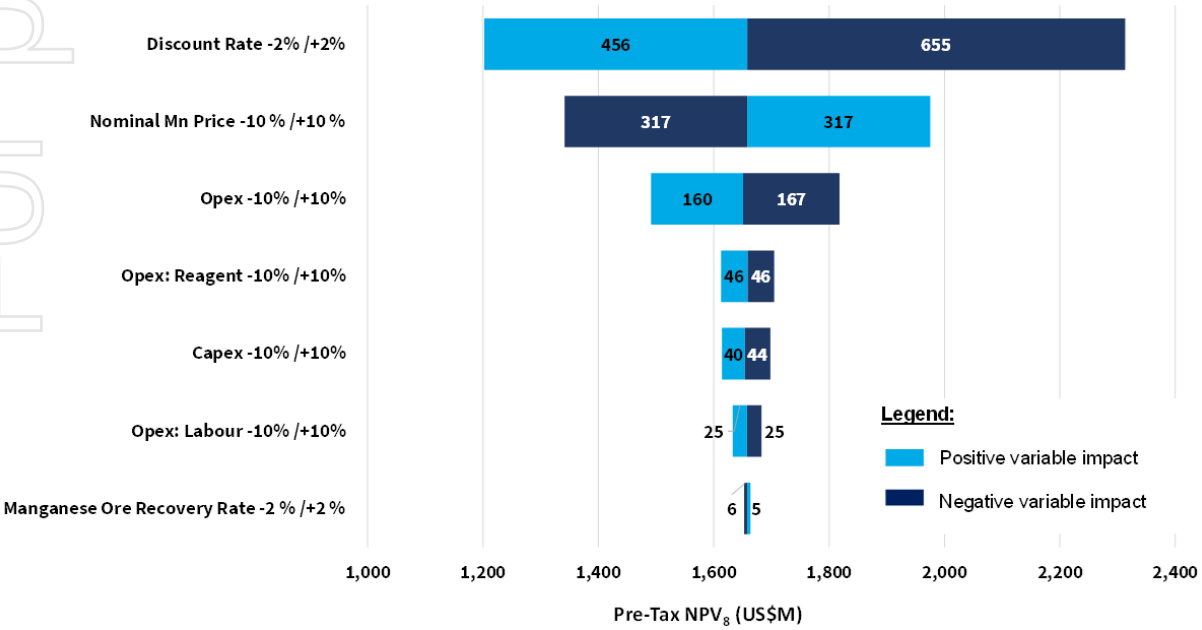

Figure 2: Pre-tax NPV Sensitivity.

ORE SUPPLY

The feed to the Process Plant is a manganese concentrate with nominally 30 - 33 % Mn content. The concentrate is being produced at E25's Butcherbird Manganese Mine (Butcherbird) in Western Australia and exported via the Utah Point common user facility located in Port Hedland, Western Australia. The concentrate will be shipped to the process plant in Louisiana using bulk carriers.

The ore will be delivered to Louisiana under an agreed offtake framework in one or two shipments per year.

The ore requirement for Train 1 of the HPMSM Facility is approximately 72,000 tonnes per annum of run of mine production from Butcherbird. This comprises approximately 35% of the current processing plant run rate over the last three operational quarters[5]. The expansion to the second train will require twice the ore volume which will comprise approximately 70% of the current processing plant run rate over the last three operational quarters.

Current Reserves at Butcherbird are sufficient to supply the proposed Facility for approximately 40 years, well in excess of the Study period comprising 28 years[6]. The ore pricing assumptions in the model provide for ore to be sourced in the open market if required.

REAGENTS

Most of the process reagents are commonly and readily available locally in the USA to service chemical Industries that are well established in the region. They are typically produced at multiple locations and therefore the risk of supply disruption is minimised. Costs can be negotiated by Element 25 on competitive terms due to the number of potential suppliers in the region.

PROCESSING

The HPMSM facility is designed to produce a nominal 65,000 tonnes of HPMSM per year from each production train. The Study assumes that the Facility will start up with one operational train and the second train will be commissioned in year 5 of the project, taking HPMSM production up to 130,000 tonnes per annum after ramp up.

The study assumes a design and construction period of 24 months and a ramp up of 2 years to reach nameplate HPMSM production volumes. The process flowsheet consists of multiple steps including ore comminution, leaching, purification, crystallisation, drying and packing.

A number of the steps in the process have been developed by E25 and are proprietary and subject to patent. These steps are a key differentiator of the process and allow for a reduction in reagent consumption and the production of solid by-products in a form which enables them to be used in other industrial applications thereby avoiding the need for a substantial solid waste landform. This contributes to the sustainability of the operation and allows a level of circularity in the use of raw materials that is not available to competitors using existing process flowsheets.

5 Reference: Company Quarterly Report dated 31 January 2023
6 Reference: Company Annual Report dated 30 September 2022

The implementation of the novel E25 process is based on the process flowsheet as shown below and the heat and mass balance generated by the SysCAD modelling of the metallurgical test results. All selected equipment and materials of construction are commercially available, proven technologies and in use by industry.

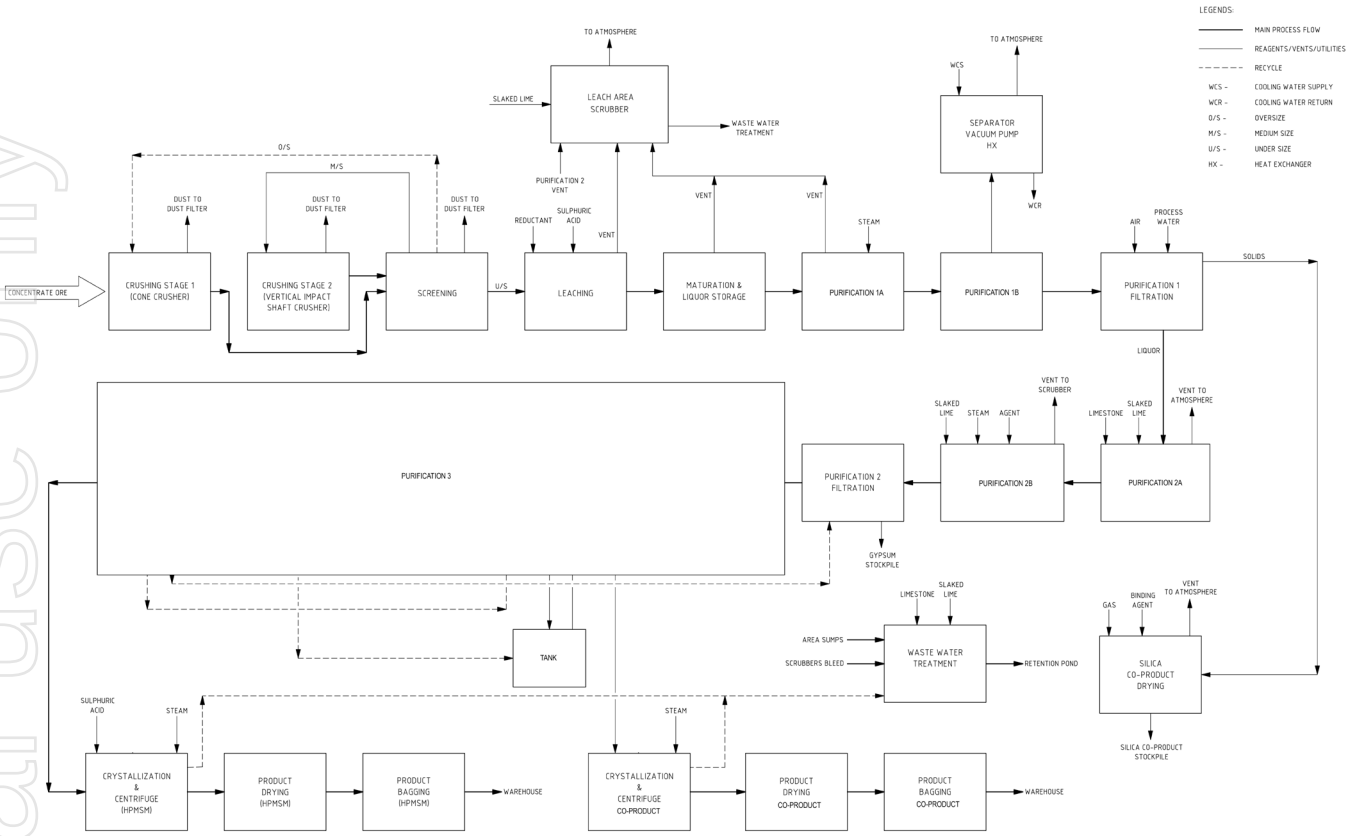

Figure 3: Schematic outline of the E25 HPMSM Process.

INDUSTRY LEADING SUSTAINABILITY PROFILE

An independent Life Cycle Assessment **(LCA)** for E25's battery-grade high purity manganese sulphate monohydrate **(HPMSM)** production process has been completed, confirming the mine to market carbon footprint for the production of E25 HPMSM as the lowest in the global manganese industry based on published data[7]. The LCA was based on the same assumptions as those used in the FS financial model for a proposed HPMSM Facility in Louisiana USA. The results have been compared to publicly available LCA reports from peers Euro Manganese **(ASX: EMN)** and Giyani Metals **(TSXV: EMM)**, which are also developing HPMSM projects as well as independently validated data on the carbon intensity of current Chinese production methods.

E25's HPMSM process is estimated to produce just **1.7kg CO_2 equivalent per kg of product**, which is ~ 67% lower than competitors in China, and up to 47% lower than planned projects located outside China. Peers included in the comparative analysis include Euro Manganese's Chvaletice project in the Czech Republic and Giyani Metals' K. Hill project in Botswana[8].

LCA Comparison for HPMSM – based on publicly available data

Impact Category	Element 25	Euro Manganese (Grid)	Euro Manganese (Renewable)	Giyani Metals	Units per Kg of HPMSM
Scope 1	0.07	0.4	0.4	0.2	kg CO_2 eq.
Scope 2	0.38	3.3	0.7	1.2	kg CO_2 eq.
Scope 3	1.21	1.2	1.2	1.8	kg CO_2 eq.
Global Warming Potential	1.7	4.8	2.3	3.2	kg CO_2 eq.

Table 5: HPMSM LCA published result comparison.

7 Reference: Company ASX release dated 16 February 2023.
8 https://www.mn25.ca/post/comparative-lca-study-results-show-emn-s-battery-grade-manganese-products-have-lowest-co2-footprint

Perth-based consultancy Super Smart Energy completed the cradle-to-gate study, which means the life cycle has been assessed from the point of resource extraction (cradle; including pre-extractive removal of overburden and waste rock) to end gate, which is HPMSM ready for distribution[9]. The study aims to assist in project development and improvement through identification of environmental hotspots, and it was carried out in accordance with ISO-14040/44:2006 and ISO-14044:2006 standards, with 16 Environmental Footprint 3.0 impact categories evaluated. Climate change and water scarcity footprint impacts were investigated in more detail via contribution analysis. The most significant contributors in the production of E25's HPMSM to climate change impact are the reagents required for the process and electricity associated with the plant.

The plant is initially expected to source electricity from the grid based on natural gas fired generation, which does not include optimization using renewable energy (RE) integration. The LCA has recommended that E25 focus on sourcing RE for the plant, which is expected to further reduce its carbon footprint. E25 intends to include RE in pre-construction optimization work, either sourced from the grid via established RE producers or by utilizing on site roof top solar and other similar technologies.

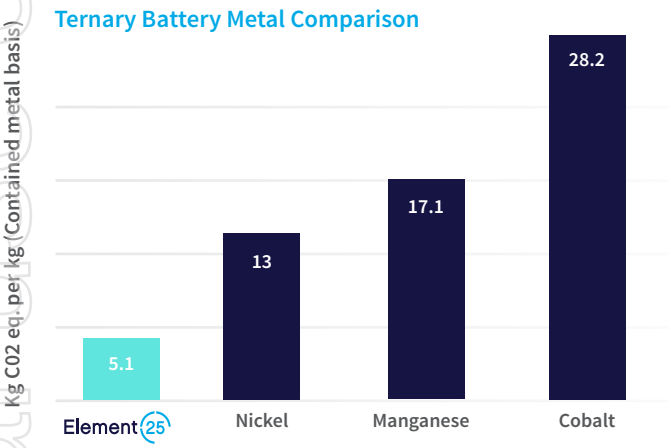

Figure 4: E25 HPMSM carbon intensity vs current cathode metal production.

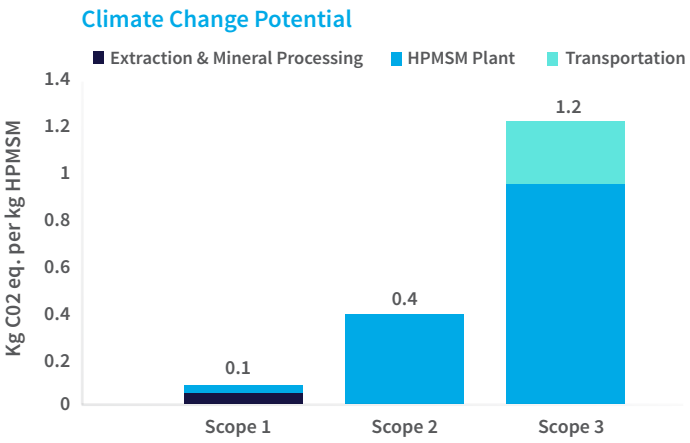

Figure 5: Climate change potential impact by scope 1,2 & 3 classifications.

There is also opportunity to consider the environmental impact of reagents by transitioning over time to reagents produced using RE and/or non petrochemical feedstocks. E25 will further investigate these opportunities as part of a longer term decarbonization strategy.

As a base case, this LCA has successfully shown the Element 25 process can produce HPMSM with the lowest global warming potential compared to all available competitors and there remains significant potential to further reduce the carbon intensity of the E25 HPMSM product.

For this LCA, the functional unit was one kilogram of HPMSM at >32% manganese content and the reference flow is 1kg of HPMSM at >32% manganese content produced at the HPMSM plant from manganese concentrate extracted and processed at E25's Butcherbird mine. The study was performed in accordance with ISO 14040/44:2006 standards[10,11].

The study is based on data from the operational E25 Butcherbird operations, and work completed as part of the feasibility study for the production of HPMSM. Background data was sourced from Ecoinvent 3.9.1 and some global averages were used for reagents, creating associated limitations to the study.

The LCA study was completed by Super Smart Energy and a subsequent critical review was carried out by two independent external experts, covering the required competencies relevant to the critical review. The critical review was performed at the end of the LCA study.

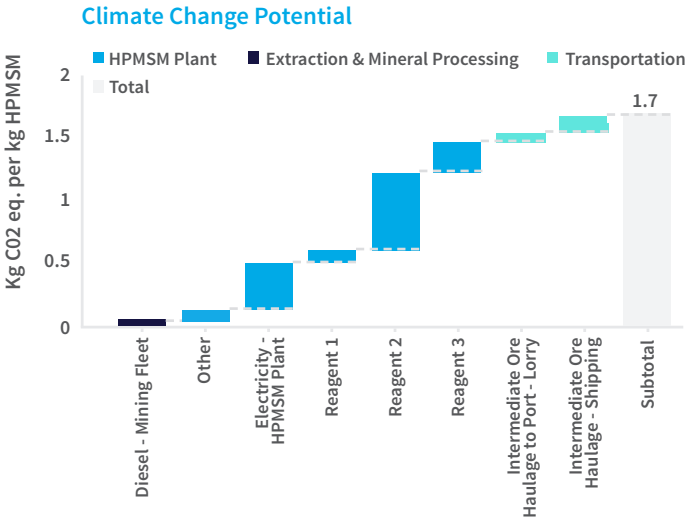

Figure 6: Climate change potential waterfall by supply chain segment.

9 Supersmart Energy: Prospective Life Cycle Assessment Study of Element 25's High Purity Manganese Sulphate Monohydrate Manufacturing - February 2023
10 International Standards Organisation (ISO). ISO 14040:2006 - Environmental Management - Life Cycle Assessment - Principles and Framework. (2006).
11 International Standard Organization (ISO). ISO 14044: Environmental Management — Life Cycle Assessment — Requirements and Guidelines. (2006).

BATTERY GRADE MANGANESE MARKET DYNAMICS[12]

The HPMSM industry is experiencing a period of very strong growth as the industrial world transitions to renewable energy, giving rise to an ever-greater need for energy storage by way of batteries. HPMSM plays a key role in battery manufacture as a key ingredient in the battery cathode. This is partly driven by technical requirements and partly by the economics.

The battery industry is currently reliant on the Chinese production infrastructure which creates undesirable dependencies on a single source. Supply disruptions relating to HPMSM can have serious downstream impacts on an EV manufacturer as a lack of manganese can mean that battery manufacturing comes to a halt with major impacts on the business. Historical export bans on critical materials (e.g. rare earths) has emphasised the risk of single country sourcing to many manufacturers in the EV space.

Additionally, EV manufacturers and other battery reliant industries are expected or required to ensure that their supply chains are transitioning to zero carbon and complying with social expectations and legislative frameworks around social and environmental impacts. The vertically integrated nature of the Element 25 business case satisfies most of these requirements, making the Element 25 HPMSM a good fit for non-Chinese battery supply chains.

E25's strategy for the first processing facility is to partner with EV OEMs, or potentially pCAM, CAM and battery makers combining offtake with a pro-rata capital contribution to support the project financing.

The EV revolution is a relatively recent development, and the move to Mn rich batteries is even more recent, however it is gaining significant momentum.

Traditionally HPMSM has been produced in China (>97% of world-wide production). The various drivers for governments and OEM's to "localise" production of key vehicle and battery components are well publicised.

The graphics below depicts the forecasted growth in battery plants in the US and Canada alone.

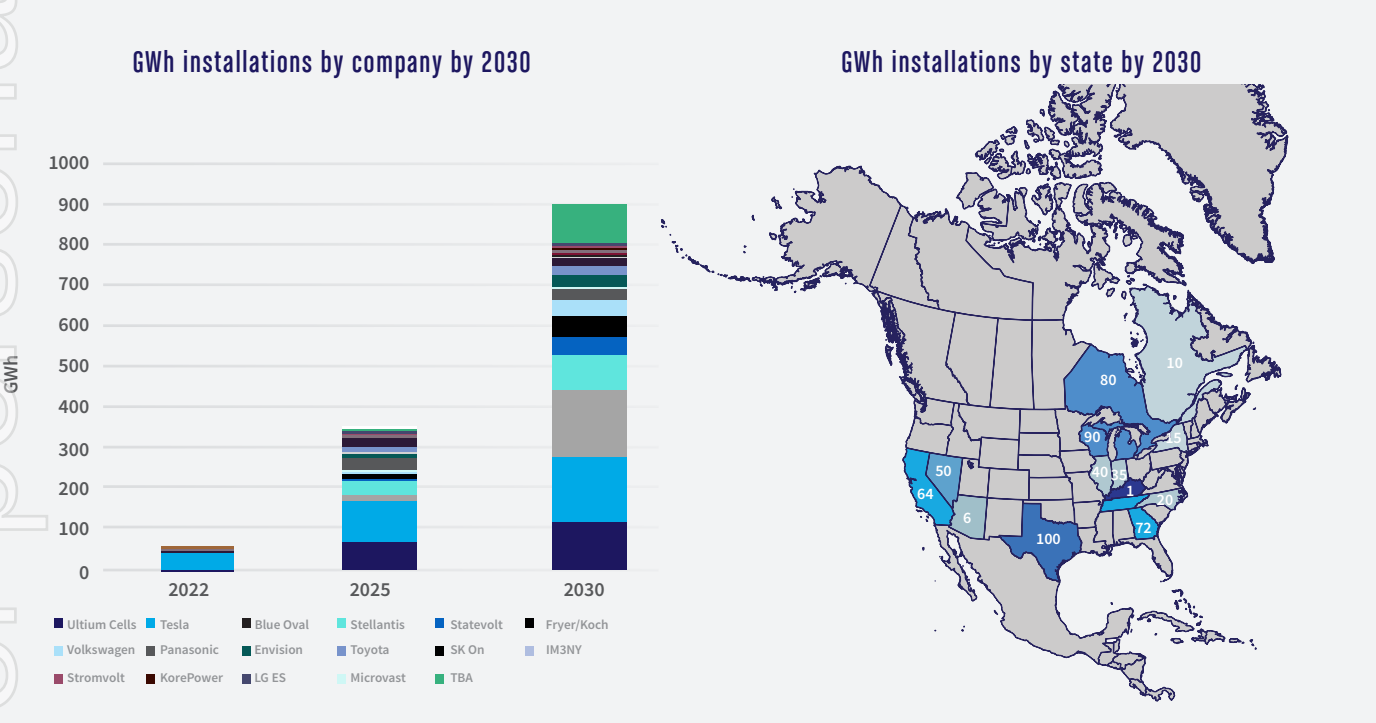

Figure 7: Forecasted growth in battery plants in the US and Canada[13].

As highlighted by Project Blue (an independent energy transition supply chain specialist), the relative recent increase in the manganese content in EV batteries and the previous China-centric pricing structures, means that no western reference pricing exists, and it may well take until 2030 for such a reference price to materialise. As a result, it is expected that initial supply contracts will be based on cost plus models or variants thereof. The consensus is that OEM's wishing to sell EVs into the USA will need to be prepared to go down this path to ensure the batteries in EVs comply with the recent legislation.

12 Reference: Project Blue, Element 25 Analysis of the HP MnSO4 Market, March 2023

13 Project Blue

The European Union (EU) has recently released in proposed legislation mirroring the intent of the US Inflation Reduction Act (IRA) and placing a significant emphasis on localisation.

Offtake assumptions:

- ~10kt pa with Stellantis
- Up to 32.5kt pa with an identified major investor and offtake partner
- ~10kt pa with a third offtake partner, a number of discussions are ongoing at present
- 12.5kt pa to be retained by E25 to place in the spot market and or supply agreements

E25 will market HPMSM directly to OEMs and/or pCAM and battery manufacturers. Discussions are ongoing with targeted representatives in a number of key markets.

This will also allow E25 to have clear visibility on the developing spot market and allow for direct price discovery.

Longer term it is envisaged that additional capacity will be added in different locations, with Malaysia the most likely second location to serve the Asian market and a location in Europe to serve local needs.

This strategy is party driven by the flowsheet which allows for the repurposing of all solid by-products, allowing the facility to be built in most industrial locations around the world. It is also driven by the Company's intent to have the lowest carbon footprint of all HPMSM producers. Bulk ore shipments have one of the lower carbon footprints of ocean transport, thus taking E25's unique Butcherbird ore to locations where key reagents are available and by-products can be placed with minimal transport and cost requirements, significantly reduces the carbon footprint.

FULLY INTEGRATED PROCESSING FACILITY

The Project contemplates a single, integrated site, comprising comminution, leaching, purification, crystallisation and by-products processing to produce battery grade HPMSM in crystalline form for consumption in the third-party production of pCAM. There are currently no such integrated sites operating anywhere in the USA to produce HPMSM, and the economic and environmental advantages of this strategy are compelling, including:

- Premier location in Louisiana near established chemical industries.
- Local grid power, gas, water supply and road infrastructure.
- Adjacent to an existing production facility to support potential synergistic development.
- Potential to integrate renewable energy to further reduce the already industry leading sustainability metrics.
- Creation of up to 150 permanent manufacturing, engineering, and management jobs (Train 1, increasing to approximately 200 with Train 2).

Figure 8: Element 25 Proposed HPMSM Facility Site.

PROCESSING DESIGN HISTORY

The Butcherbird Mine is currently in operation producing the concentrate that will supply the HPMSM Facility. The mine is exploiting a large manganese deposit discovered by Element 25 (formerly Montezuma Mining Company Limited) around 2008. The project followed the typical discovery pathway from prospecting through to surface sampling then drilling to define a resource[14].

Subsequent to the discovery of the deposit at Butcherbird, the Company spent several years developing processing methodologies to firstly mine and beneficiate the manganese to a useable grade of between 30-35% and then to further upgrade the manganese via hydrometallurgical methods to produce high purity manganese, as both metal and sulphate[15].

The Australian Federal Government co-funded various pioneering test work which was completed in conjunction with the Commonwealth Scientific and Industrial Research Organisation **(CSIRO)** and which was focussed on identifying technically and economically viable processing routes to produce high purity manganese products. The work with CSIRO concluded that Butcherbird ore could be beneficiated by a number of physical beneficiation processes which would yield a concentrate suitable for downstream chemical processing crushing, grinding, and magnetic separation and was amenable to reductive leaching using SO_2 to leach the Butcherbird Concentrate.

The early direct reductive leaching tests achieved encouraging results. The feed ore was amenable to SO_2 reductive leach over the particle size range of P80 75 –1000 µm with fast kinetics, obtaining > 95% manganese **(Mn)** extraction within 30 minutes with good selectivity for manganese over Iron **(Fe)** (only 4 – 6% Fe extraction) yielding 130 – 160 g/L Mn pregnant leach solution (PLS) at high feed solids densities.

Various hydrometallurgical options were also assessed for their potential to produce value added products and a number of overall flowsheets proposed involving leaching schemes, purification methods, and recovery options for these high purity manganese products from Butcherbird ores.

Products put forward for evaluation included electrolytic manganese dioxide **(EMD)**, electrolytic manganese metal **(EMM)**, chemical manganese dioxide **(CMD)** and manganese sulphate.

In summary at the conclusion of this initial test work it was clear that:

- Butcherbird ore could readily be leached, and some impurities readily removed but downstream processing options and final product selection required further development and economic assessment.
- Use of alternative leach reductants other than SO_2, should be investigated.
- Electrowinning to produce EMM is the normal treatment process to produce high purity manganese, however it is an energy intensive process and results in high operating costs putting such processes higher up the cost curve.
- The evolution of the electric vehicle battery industry has created new demand for high purity manganese sulphate normally produced via the dissolution of EMM into sulphate solution before crystallisation, however due to the inclusion of the electrowinning stage, this is a high-cost option.

The evolution of the EV battery industry has created new demand for HPMSM produced via hydrometallurgical leaching, purification and crystallisation.

Various direct reductive leaching processes have been studied and developed for processing manganese ores and ocean manganese nodules, including leaching with ferrous iron, sulphur dioxide, cuprous copper, hydrogen peroxide, nitrous acid, organic reductants such as bio- and electro-reductions.

The mineral being leached at Butcherbird is Cryptomelane with a generalised formula of $K(Mn^{4+},Mn^{2+})_8O_{16}$. The most prospective reagents identified by Element 25 in test work were SO_2 and certain plant-based reductants.

REDUCTIVE LEACH

Subsequent to the completion of the extensive SO_2 test work, efforts were made to find alternative reductants that would be suitable and which would reduce costs and eliminate the need for a capitally intensive sulphur burner.

The current flowsheet which been used as the basis for the Study uses a plant-based reductant has been selected due to the desire to use a renewable source of reductant to minimise the environmental impact and cost of the process

14 Reference: Company ASX Release dated 17 April 2017
15 Reference: Company ASX Release dated 28 October 2018

PURIFICATION AND RESIDUE REMOVAL

The Element 25 process uses a combination of established chemical processing techniques as well as a number of proprietary steps which improve the energy and reagent consumption of the process.

The net result of the flowsheet design is that the solid by products are removed via the production of three co-product streams that can be repurposed in other industrial applications thereby largely eliminating the need for a solid waste landform as part of the Facility.

SITE DESIGN

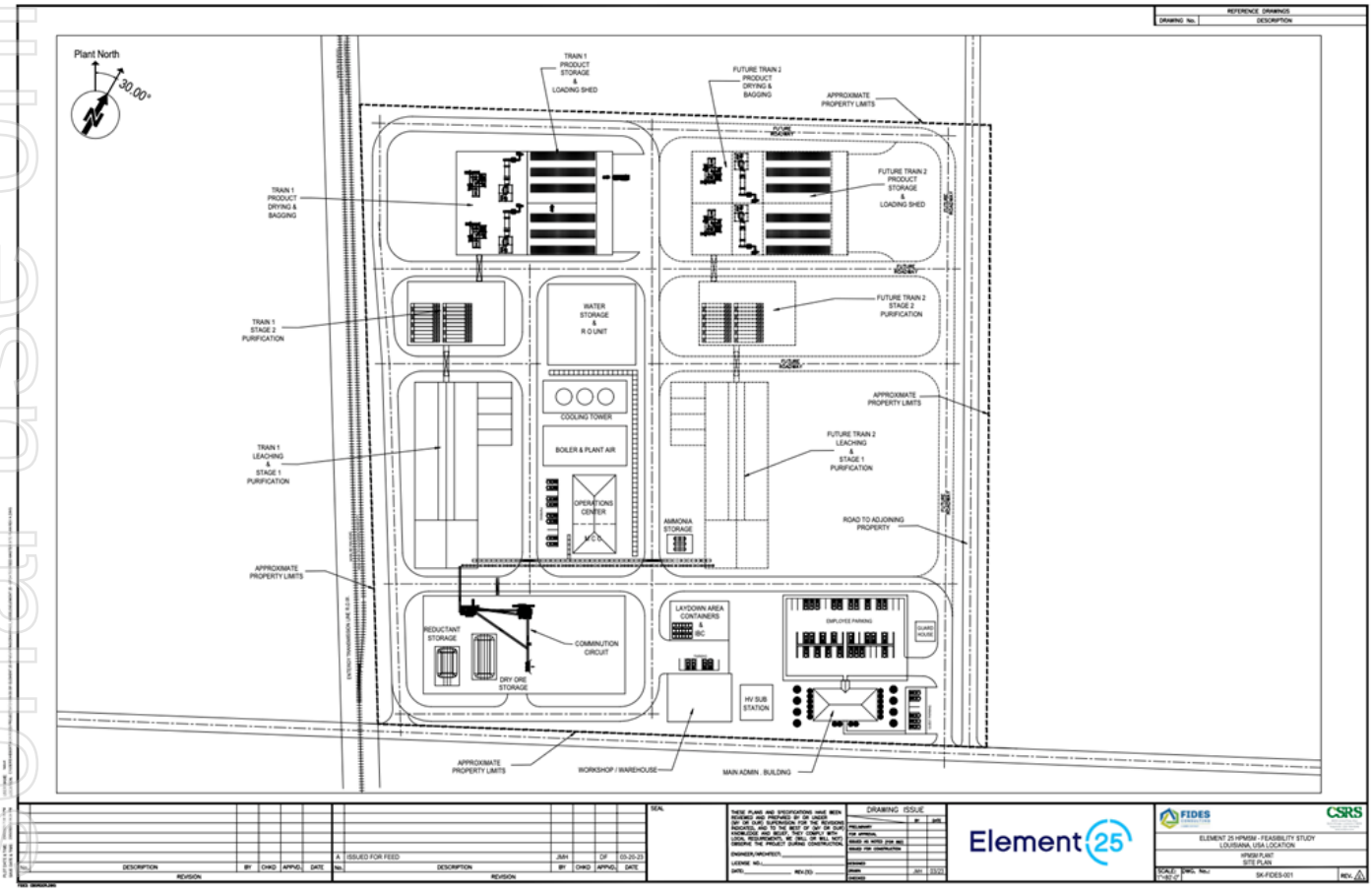

Figure 9: Site design to optimise proposed site.

PROJECT DEVELOPMENT SCHEDULE

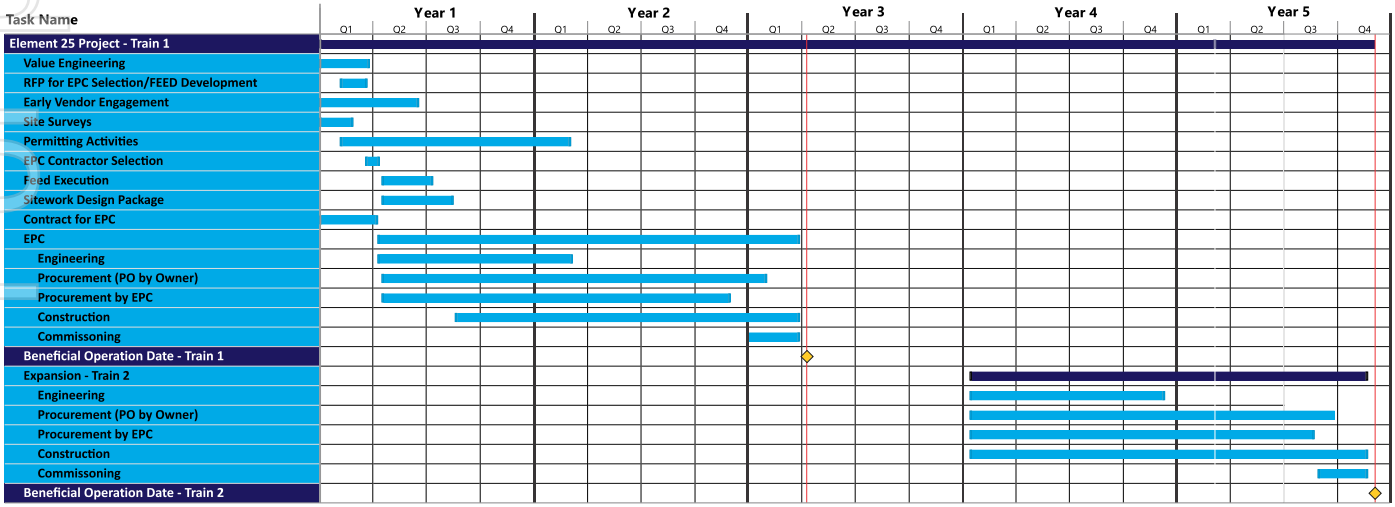

Figure 10: Project execution schedule.

WORKFORCE

The local area near the proposed site has a large number of chemical, petrochemical and refining facilities. Consequently, there is a depth of experience amongst the local workforce of operating industrial processing facilities of this type. There are also numerous local technical colleges, industry associations and private technical training schools that train process operators, instrumentation and electrical technicians, welders, fitters, millwrights, and mobile equipment operators. Equally available are professional employees for engineering, operations and maintenance management, logistics, environmental, safety and plant administration positions. This available workforce should be adequate to support the safe and environmentally sound operation of the facilities.

Staff costs and numbers have been derived from an organisation chart commensurate with the complexity of the HPMSM processing facility.

Labour rates for the operating cost estimate are based on the salary estimates sourced from the Louisiana Economic Development Authority **(LED).** Salary on-costs were supplied by CSRS.

Element 25 Ltd selected salaries based on the 75th percentile (P75) data set to ensure that suitably qualified and experienced personnel would be able to be sourced and retained.

Total production staffing requirements are 144 personnel for the start-up Train 1 with an additional 54 personnel required when the second expansion train is commissioned for a total permanent work force of 198 people at full production.

Element 25 intends to offer a competitive benefits package and has accounted for these costs in its planned indirect employee costs.

LOGISITCS

MANGANESE ORE

The Company has well established and existing logistics arrangements and access to deliver ore to and ship it via Utah Point in Port Hedland, Western Australia. Shipments will be done via Handymax or Supramax sized vessels for discharge in south Louisiana. Several bulk ports along the southern Mississippi river have expressed an interest and capability to discharge the product, with the Port of South Louisiana **(PoSL)** facility located ~ 27 miles to the south the most likely port of discharge. Terminal operators have provided indicative discharge, storage and reloading fees and the facilities can load both road trucks and rail wagons.

The final size of the vessel will be determined by the storage capacity available, the ability to share vessel space with other exporters of bulk commodities from Western Australia and ship availability at the time of shipment. E25 will have a reasonable level of flexibility when it comes to timing and size of the shipment which will assist to optimise freight rates.

SULPHURIC ACID

To be supplied locally and stored in a day tank. The intended supplier also has significant storage capacity for acid to ensure uninterrupted supply during planned outages, which can be further supplemented via the existing acid offloading facilities on the river.

OTHER REAGENTS

All of the required materials are produced in Louisiana, most within a 50 mile range of the site. Significant trucking capacity exists to transport the required materials via bulk tipper truck, pressurised, normal, and specialised tankers. A number of the items are also produced in the neighbouring states of Texas and Alabama, allowing for risk mitigation.

PRODUCT - HPMSM

HPMSM will be packed in lined bulk bags (FIBC/Supersacks) and strapped on pallets for transportation. Offtake partner arrangements will determine the point of transfer with some being loaded on trucks provided by the offtake partner at site and some being delivered via road to the designated facility in the US. Some deliveries for the US are planned to be barged or railed in the future and this will take place at one of several facilities located in the area which specialise in the transfer of material from road to rail or barge facilities (eg. PoSL).

Some material will be sold on a Free On Board (FOB), New Orleans, Louisiana (NOLA) basis. This material will be loaded into sea containers at site and delivered by road to whichever container terminal handles the relevant buyer's shipment. Alternatively, containers can also be packed by service providers operating in the existing container terminal precincts.

Direct container services between NOLA and Europe depart on a weekly basis.

BY-PRODUCTS

By-products will be delivered to the appropriate facilities in bulk trucks, or where appropriate in FIBCs.

PROJECT INFRASTRUCTURE

There are established roads that connect the site to the main Interstate 10 approximately 5 miles away therefore no additional road network development is required outside of the project location. There is also an existing rail line that runs alongside the property allowing the potential to access the rail network.

All the Process, Workshop and Storage buildings are steel framed with profiled steel sheet walls and roofs, except the substation which has a cellar deck and is reinforced concrete framed with in fill brick walls. The buildings are specified to comply with the local Louisiana requirements. Administration, Office and other supporting service buildings will be of modular design. For the purposes of the FS, the material take off's (MTO's) were considered for costing based on preliminary dimensions. The architectural design was excluded from the scope.

Provision for the development of any accommodation facilities is not required as the site is within a 15 minute drive of large regional towns and a 30 minute drive from the capitol city of Baton Rouge.

There are established gas, power, water and sewage services close by. Tie in points will be allowed for by the service providers to the edge of the site with connection to these locations included in the project scope.

The fire protection system will consist of a pressurised fire protection system comprising a fire water reserve, an electric driven jockey pump, an electric driven fire pump and an emergency diesel driven fire pump. The fire water reserve will be contained in a dedicated portion of the raw water tank in the process plant.

Various drives within the process plant must remain operational in the event of an unexpected loss of power. This is achieved using an emergency diesel generator (EDG). This is for reasons to prevent problematic bogging of equipment and for safety systems.

An uninterruptible power source (UPS) caters for both alternating and direct current (AC and DC) users via the emergency distribution board (DB) and maintains power to the control system and Human-Machine Interface (HMI) for one hour in the event of a power outage.

Emergency light fittings with backup batteries are included at specific places in the process plant and buildings. Once the Emergency Diesel Generator (EDG) starts, power is re-established to the UPS system for re-charging and continuous running.

PERMITTING

Permits for air, wastewater and storm water will be required from the State of Louisiana Department of Environmental Quality (DEQ). The following permit attainment activities are required for the plant:

- Secure an air emission permit.
- Determine requirements and if needed secure wastewater discharge permit.
- Secure construction stormwater discharge permit.

AIR EMISSIONS

It is expected that air emissions permit will be for the attainment of minor source permit. The air permitting process is underway with the regulated pollutant air emissions data being tabulated for review, calculations, and submission as part of the air permitting process.

The permit will be filed with DEQ as early as possible and at least four months ahead of the field construction efforts beginning. This work is being performed by SLR International Corporation and CSRS, Inc.

WASTE WATER

The wastewater from the plant process will be treated by neighbouring facility which already has a permitted wastewater discharge permit to discharge their wastewater into the Mississippi River. It is believed through preliminary discussions that the existing treatment facility and effluent line to the Mississippi River have capacity to handle Element 25's process wastewater.

The wastewater permit work will begin once the plant water balance and the wastewater composition are confirmed in the early design phase of the project.

STORMWATER DISCHARGE

Ahead of the mobilisation of construction resources a stormwater pollution prevention plan for the construction effort will be developed to secure the necessary construction stormwater discharge permit.

During the detailed design stage, the site stormwater system will be designed as part of the earthworks design. Once Construction begins, the overall site stormwater pollution prevention program will be updated in accordance with the requirements of the existing site Storm Water Multi-Sector General Permit.

STORMWATER POLLUTION PREVENTION PLAN

Construction of the proposed Element 25 facility will require compliance with Louisiana Department of Environmental Quality (LADEQ) stormwater discharge requirements. Prior to construction, a stormwater pollution prevention plan (SWPPP) must be developed, and a stormwater discharge permit received from LADEQ.

During the detailed design stage, the site stormwater management facilities will be designed and incorporated into the Multi-Sector General Permit required prior start-up and operations.

GOVERNMENT INCENTIVES

INFLATION REDUCTION ACT

The US Inflation Reduction Act **(IRA)** of 2022 establishes a New Advanced Manufacturing Production Credit to incentivise the domestic production of various components, including applicable critical minerals used in renewable energy generation, storage and related manufacturing including EV batteries containing manganese.

Under the regulation, a tax credit equal to 10% of the cost of production is awarded to the producer of the following applicable critical minerals used in such manufacturing: aluminium, antimony, barite, beryllium, cerium, caesium, chromium, cobalt, dysprosium, europium, fluorspar, gadolinium, germanium, graphite, indium, lithium, manganese, neodymium, nickel, niobium, tellurium, tin, tungsten, vanadium, yttrium and others. The credit for critical mineral production begins in 2023 and is exempt from the phaseout that is applied to other eligible components beginning in 2030.

LOUISIANA STATE GOVERNMENT

LED is pro-business and pro-manufacturing, offering incentives and tax breaks for companies building in the state. Element 25 will incorporate an operating entity in Louisiana, and with the support of local economic development and tax consultants, plans to maximise the incentives and tax breaks available to the project to enhance the economics of the facility and support its development.

The Louisiana Government is supportive of manufacturing facilities like that proposed by Element 25. Recently, for example, Governor Edwards established a Climate Initiatives Task Force to develop a Climate Action Plan with a goal of reaching net zero greenhouse gas emissions by 2050. As part of this plan, the Task Force adopted Strategy 9 which calls for Louisiana to “Accelerate adoption and accessibility of low- and zero-emission vehicles and fuels.” Further, Action Item 18.2 proposes to “Teach, re-train, and employ Louisiana residents in clean energy sectors” and proposes the development and implementation of industry certificate programs, 2-year degrees and 4-year degrees designed to support renewable energy industries in the areas of “information technology, electrical engineering, utility management and alternative fuel vehicles (manufacturing, operations, maintenance).”

LED also provides the FastStart Program which can offer several key services to facilitate the rapid establishment of the Element 25 business in Louisiana including recruiting, training and sustaining a skilled workforce for the Project.

Element 25 has received a proposal from LED which outlines the various incentives available to the Project and these have been included in the financial model.

FUNDING

Funding of approximately US$293M (excluding working capital and finance costs) is required to achieve the first production indicated by the FS.

The economic assessment for this FS has been undertaken on the assumption that the financing transactions which are tied to the offtake agreements are completed which consist of:

1. US$30M in equity prepay finance from Stellantis N.V. (NYSE / MTA / Euronext Paris: STLA) (Stellantis)[16] and;
2. Senior secured project debt from Principal Offtake Partner #2 (POP2) (in negotiation).

These principal offtake and funding agreements combine project financing in parallel with offtake commitments and pricing structures thereby de-risking the project economics.

The Study assumes that the balance of the project funding will be secured through equity raised in the market through the issue of the new shares in Element 25 Limited (ASX:E25) or via further debt financing. Equity funding will be provided as a loan at the same cost as the debt funding provided from POP2.

Subsequent to the completion of the FS, the Company will explore the option of raising the debt funding levels by entering into agreements with a third lender to reduce the dilution inherent in equity funding.

Commercial closing of the debt financing arrangements is contingent on a number of factors that will be addressed through the early phases of project execution including:

- Front end engineering and design (FEED);
- Project permitting.
- An established project team;
- A project governance and reporting framework;
- A clear project execution plan based on either an EPC or EPCM contract structure with a bankable counterparty.

The funding contracts with the principal offtake partners are dependent on Element 25 continuing to meet specific project goals, including the first production of material at agreed specifications and commercial terms.

There is potential to finance the project execution in phases. For example, one phased approach could be an initial phase of FEED and preparedness for construction, and a subsequent phase for the balance of project execution contingent on final satisfaction of conditions precedent to full financing availability. The debt financing with POP2 will likely follow this pattern, with the funding to be provided in multiple tranches, each tranche subject to certain project milestones.

Based on the strong financial metrics presented as part of the FS results, and the progress of various ongoing discussions, the Company considers there are reasonable grounds that the construction of the HPMSM Project outlined in this FS can be financed subject to continued favourable prevailing market conditions (being both the HPMSM markets and the wider equity and debt markets). Market studies outlined in indicate robust demand for HPMSM and geopolitical factors such as the US IRA provide supportive conditions for the development of the new HPMSM projects outside of the current producers in China. Consequently, the current funding conditions for both equity and debt sources of funding are favourable, however there is no guarantee these conditions will continue in the future.

It is also possible that funding may be dilutive to existing shareholders which may affect the value of the Company's existing shares. It is also possible that the Company will pursue other strategies to provide alternative funding options including undertaking a corporate transaction or seeking joint venture partner(s).

The ultimate financing structure for the Project will be dependent on several factors but will be determined on the basis of delivering an optimal outcome for shareholders. E25 is working with both offtake partners and Government financing agencies to conclude a comprehensive debt and equity package to fully fund the Project in a timeframe that satisfies offtakers' requirements for first production by 2025.

16 Reference: ASX Company Release dated 9 January 2023

CONCLUSIONS & NEXT STEPS

The Study results demonstrate the potential for the Project to become a major North American HPMSM producer on a fully integrated mine to market basis. The Company will now concentrate on the following initiatives to move the Project forward:

- Undertake bridging and optimisation engineering activities and launch FEED engineering.
- Negotiate with key major equipment suppliers to lock in supply and payment schedules.
- Finalise leasing arrangement for the proposed construction site.
- Complete pre-permitting surveys for heritage, wetlands, and geotechnical assessment of the site.
- Continue to advance permit approvals.
- Selection of EPC contractor for execution of the Project.
- Complete and submit an air permit application for the Project.
- Complete formal submission of the Company's Advanced Technology Vehicle Manufacturing program loan application.
- Finalise offtake agreements and project financing to progress to a final investment decision and commence construction.

RISKS & OPPORTUNITIES

MARKET RISK

Element 25 Offtake Partners will expect a consistent quality of the HPMSM product. To minimise the occurrence of off-specification product quality, various upstream process control measures are to be designed, and systems configured to achieve on-specification product quality and maintain consistency.

Market demand studies forecast significant growth in the required volume of HPMSM over the coming decade, which is directly correlated greater demand globally for lithium ion batteries. With demand for HPMSM being driven largely by EV demand, fluctuations can lead to some downstream risk. The two stage ramp up strategy allows the business to grow with the market.

MANGANESE ORE SUPPLY RISK

Element 25 has the security of the world class manganese resource base at its 100% owned Butcherbird Manganese in the Pilbara of Western Australia. The resource base is currently 263M tonnes of manganese ore, with reserves sufficient to operate for over 40 years. This will comfortably underpin supply to the Louisiana HPMSM Plant well beyond the 25 year Study period.

The HPMSM facility will require approximately 72,000 tonnes of manganese concentrate per annum which is approximately 35% of the current production at Butcherbird. Additionally, the Study uses a market price for manganese ore to allow for alternative supply if required.

The success of the plant will be based in part on maintaining the HPMSM chemical composition within specification limits. Variability test work on the sourced feed has been undertaken during the feasibility test work phase to provide flexibility and to be incorporated into detailed design.

TECHNOLOGY RISK

The technology being used in this process based on standard chemical processes used commonly within the chemicals industry around the world. Reagents are also commonly used within chemical processing industries. The specific combination of chemical processes, reagents and operating conditions is protected via patent applications.

Data collected during the chemical development phase of the study forms the basis of which the specific equipment vendors have addressed the technical uncertainties and have de-risked the technology. This type of plant with similar unit operations have been in operation around the world for many years and none of the unit processes are expected to present any significant technical risk.

PROCESS RISK

The process has been characterised qualitatively against McNulty's analysis of various process plants to predict ramp-up performance. A derived series 1.5 being part way between series 1 and 2 is the closest fit based on the following justifications. This has been applied to the ramp up schedule.

PROCESS SAFETY RISK

Hazard and Identification Studies **(HAZID)** levels 1 & 2 have been conducted on HPMSM process using the FS P&IDs as the base documents was conducted and a HAZID register created that identifies each risk and recommended mitigation actions.

During detailed design, a further detailed Hazard and Operability Workshop **(HAZOP)** will be conducted based on the construction issue revision P&IDs of all non-critical equipment. The selected vendors of the non-critical items will participate in this HAZOP with further recommendations and action statuses from earlier HAZOPs updated.

A quantitative risk assessment **(QRA)**, such as a layer of protection analysis **(LOPA)**, will be undertaken to assesses and judge the failure rate of the various layers of protection (e.g. instruments, alarms, procedures) which have been selected to ensure the process is safe.

A hazardous area classification **(HAC)** will be undertaken during detailed design to identify zones which must be designed with an explosion rating. This is based on an assessment of potentially explosive dust and vapour atmospheres.

DESIGN

There are several items that are pose a potential design risk:

- Materials selection;
- Material flow characteristics;
- Quality of product; and
- Supply of equipment quality mitigation.

During the Transition phase, a test work program has been specified to test materials of construction by inserting coupons[17] in the Phase 1 plant operations. Worley has also recommended dry end test-work to be completed in the laboratory for the dry end design. The crystalliser will be generating the final product and is to be quality tested before delivery.

QA/QC inspectors will be regularly inspecting the progress of equipment sourced from all sources to ensure quality is maintained.

CONSTRUCTION COST AND SCHEDULE RISK

The cost risk can be contained to a large extent by the completion of the transition work, which includes a register for deviations of the scope and FS estimate. The control estimate (+15% target accuracy) can be developed at the start of the detailed design phase.

Implementation of the project within the proposed schedule is a key risk. The transition through the transition phase and subsequent phases requires continuous momentum to enable schedule success. Delays and gaps will increase schedule risk. A detailed design and construction phases alignment session will be conducted in early 2023 to ensure a successful path forward.

17 Coupon Testing is a procedure for testing materials of construction against process conditions to confirm material selection. Material samples (coupons are tested under operating conditions to simulate corrosion levels to confirm suitability.

REGULATORY APPROVALS & INCENTIVES

Current regulations are unlikely to change, except for COVID-19 related advice should a particularly virulent variant emerge. The environmental regulations are well established within Louisiana, and unlikely to change within the timeframe of project execution. Corporate federal taxation and regulatory requirements may change with the change in Federal Government but cannot be quantified at this time. This may also apply to government incentive programs.

At this stage there are no significant risks in terms of permitting that are expected to delay the project, however this is pending the outcome of heritage and wetlands surveys currently being completed.

COUNTRY RISK

The USA has a stable financing, regulatory, taxation and operational environment. The initiative by the US to produce their own battery raw materials pursuant to the Inflation Reduction Act, reflecting a desire to be less reliant on supply of these materials from high-risk jurisdictions, is a major driver for the decision to consider the development of this Facility in the USA.

FLOODING

In the United States, the Federal Emergency Management Agency **(FEMA)** is the federal agency responsible for mapping the entire country for flood risks and designating flood zones. The different flood zones indicate different levels of flood risk.

Areas subject to inundation from the “Base Flood” (defined as the 1 percent annual chance flood or 100-year flood) are mapped as zone “A” or “AE”. Areas outside of zone “A” or “AE” are defined as Zone “X”.

According to the FEMA Flood Insurance Rate Map **(FIRM)** panel 22005C0120E, the site is located in flood zone “X”, i.e. an area with a reduced flood risk due to a levee. The nearest base flood elevation **(BFE)** (outside of the Mississippi River levee system) is roughly 4,000 feet east of the site and shown at an elevation of 6.0 feet. Inside the Mississippi River levee system, the Base Flood elevation is 33, but the site is protected by the federally operated and maintained MR&T levee system.

COVID-19 RISK

Although COVID-19 had an impact on construction activities through 2020 to 2022, a number of vaccines and high vaccination rates in the United States have diminished but not remove the impact that Covid 19 is likely to have on the Project. Element 25 will follow government health authority advice in regards to future COVID-19 or other pandemic outbreaks.

OPPORTUNITIES

The current feasibility addresses entry to market at 65ktpa of HPMSM production with consideration for further expansion to 130ktpa. Implementation of expansions will be dependent on market demand which will shape the staging for capacity increase.

On the basis of a 65ktpa first HPMSM train applied in the FS, expansion to 130ktpa may be implemented as discrete, back-to-back or over-lapping stages. Consideration has also been given to additional brownfield expansion options within the US or other world-wide jurisdictions although these plans are not quantified herein.

Element 25 understands that dynamic and continuous product development and improvement is critical for maintaining long term market share and margin growth and plans to undertake ongoing research & development programs both internally and via co-development partnerships where applicable.

The Element 25 development roadmap has been designed to support long term customer engagement within the battery and EV industries and focusses on meeting the evolving long-term manganese product performance and cost needs of customers.

Opportunities identified during the Study for future assessment include:

Zero Carbon Steam – Element 25 is investigating sourcing nominally Zero Carbon steam from an adjacent industrial site at Baton Rouge. This has the potential to reduce operating costs and lower the carbon footprint of the HPMSM project.

Waste Water Treatment – Element 25 is investigating the opportunity to use low level acidic waste water from an adjacent industrial site at Baton Rouge. This has the potential to reduce the consumption of fresh water, lower reagent consumption and reduce costs, whilst assisting a neighbour with a waste removal solution

Reagent Localisation – Element 25 is investigating sourcing reagents from a newly proposed renewable energy powered plant that is proposed to be built near to the Element 25 site. This has the potential to reduce operating costs and lower the carbon footprint of the HPMSM project.

Renewable Energy Integration – Element 25 believes that the addition of on-site renewable energy generation, most likely via the installation of roof-top solar panels at an estimated installation cost of $1.72/watt[18], has the potential to materially reduce both product life cycle carbon intensity and operating costs by reducing the overall cost of electricity[19].

18 https://www.nrel.gov/docs/fy21osti/77324.pdf

19 https://www.lazard.com/media/451419/lazards-levelized-cost-of-energy-version-140.pdf

FORWARD LOOKING STATEMENTS

This announcement may include forward-looking statements. These forward-looking statements are based on Element 25's expectations and beliefs concerning future events. Such forward-looking statements concern Element 25's anticipated results and progress of its operations in future periods, planned exploration and, if warranted, development of its properties and plans related to its business and other matters that may occur in the future. These statements relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management. All statements contained herein that are not clearly historical in nature are forward-looking, and the words "anticipate," "believe," "expect," "estimate," "may," "might," "will," "could," "can," "shall," "should," "would," "leading," "objective," "intend," "contemplate," "design," "predict," "potential," "plan," "target" and similar expressions are generally intended to identify forward-looking statements.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements. Forward-looking statements in this release include, but are not limited to, statements with respect to risks related to:

- Element 25's operations being further disrupted and Element 25's financial results being adversely affected by public health threats, including any renewed coronavirus pandemic;
- Element 25's limited operating history in the HPMSM industry;
- Completing required permitting, zoning and re-zoning activities required to commence processing operations for Project;
- Element 25's ability to achieve and maintain profitability and to develop positive cash flows from Element 25's mining and processing activities;
- Investment risk and operational costs associated with Element 25's exploration activities;
- Element 25's ability to enter into and deliver products under supply agreements;
- The pace of adoption and cost of developing electric transportation and storage technologies dependent upon lithium batteries;
- Element 25's ability to access capital and the financial markets;
- Recruiting, training and developing employees;
- Compliance with government regulations;
- Environmental liabilities and reclamation costs;
- Estimates of and volatility in HPMSM prices or demand for HPMSM;
- Element 25's share price and trading volume volatility; and
- Element 25's failure to successfully execute Element 25's growth strategy, including any delays in Element 25's planned future growth.

All forward-looking statements reflect Element 25's beliefs and assumptions based on information available at the time the assumption was made. These forward-looking statements are not based on historical facts but rather on management's expectations regarding future activities, results of operations, performance, future capital and other expenditures, including the amount, nature and sources of funding thereof, competitive advantages, business prospects and opportunities. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, known and unknown, that contribute to the possibility that the predictions, forecasts, projections or other forward-looking statements will not occur. Although Element 25 have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated, or expected. Element 25 cautions readers not to place undue reliance on any such forward looking statements, which speak only as of the date made. Except as otherwise required by the securities laws of Australia, Element 25 disclaims any obligation to subsequently revise any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. Element 25 qualifies all the forward looking statements contained in this release by the foregoing cautionary statements.

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.

FEASIBILITY STUDY CONTRIBUTORS

CONSULTANT/COMPANY	SCOPE
Ranhill Worley	Feasibility Study for the Malaysia HPMSM facility option.
CDI Engineering Solutions	Capital cost estimate for the base case Louisiana HPMSM facility.
CSRS Inc	Element 25's strategic advisor in the USA.
Fides Consulting	Element 25's consulting engineer in the USA.
Veolia HPD	Crystallisation test program.
SGS	Purification test program.
Project Blue	Manganese ore, manganese metal and HPMSM market dynamics and pricing forecasts.
Model Answer	Financial Modelling.
Ernst & Young	Taxation, government incentive programs.
Supersmart Energy	Life Cycle Assessment (LCA).

Element 25

The future has always been electric...