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Australian
VANADIUM
LIMITED

The Australian Vanadium Project

Corporate Presentation

June 2019 | ASX: AVL

DISCLAIMER

The views expressed in this presentation contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information.

COMPETENT PERSON REFERENCES

Competent Person Statement – Mineral Resource Estimation The information in this presentation that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd) and Mr Brian Davis (Consultant with Geologica Pty Ltd). Mr Davis is a shareholder of Australian Vanadium Limited. Mr Barnes and Mr Davis are members of the Australasian Institute of Mining and Metallurgy and Mr Davis is a member of the Australian Institute of Geoscientists and both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Barnes is the Competent Person for the estimation and Mr Davis is the Competent Person for the database, geological model and site visits. Mr Barnes and Mr Davis consent to the inclusion in this presentation of the matters based on their information in the form and context in which they appear.

Competent Person Statement – Ore Reserves The scientific and technical information in this presentation that relates to Ore Reserve estimates for the Project is based on information compiled by Mr Roselt Croeser, an independent consultant to AVL. Mr Croeser is a member of the Australasian Institute of Mining and Metallurgy. Mr Croeser has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Croeser consents to the inclusion in the presentation of the matters related to the ore reserve estimate in the form and context in which it appears.

Competent Person Statement – Metallurgical Results The information in this presentation that relates to Metallurgical Results is based on information compiled by independent consulting metallurgist, Brian McNab (CP, B.Sc Extractive Metallurgy). Mr McNab is a member of the Australasian Institute of Mining and Metallurgy. Mr McNab is employed by Wood Mining and Metals. Mr McNab has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken, 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 McNab consents to the inclusion in the presentation of the matters based on the information made available to him, in the form and context in which it appears.

The information is extracted from the announcement entitled "Gabanintha Pre-Feasibility Study and Maiden Ore Reserve" released to ASX on 19 December 2018 and is available on the Company website at www.australianvanadium.com.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 announcement.

FORWARD LOOKING STATEMENTS

This presentation may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to Resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes. For more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.



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Developing the Globally Significant High-Grade Australian Vanadium Project

- Pre-feasibility study completed showing strong economic fundamentals
- Definitive study well underway with a highly experienced vanadium expert team

Australian Vanadium Limited

Investment Highlights



At a vanadium price of US\$13/lb, the project has a post-tax NPV_{8%} of

NPV US\$616 million

- Globally significant project with high-grade Resources and Reserves hosted in magnetite-bearing rocks
- Pre-feasibility study completed with strong economic fundamentals through all price cycles
- Pilot Scale processing underway as part of definitive study - due for completion late 2019
- Highly experienced corporate and vanadium expert team
- Developing a vertically integrated vanadium business with exposure to vanadium applications in steel and energy storage
- Ongoing studies focused on de-risking and improving project valuation

Expert Vanadium Team

Vanadium expertise separates AVL from other explorers

At Australian Vanadium Limited, our management is committed to fast-track this significant global resource

Our team brings together experts in geoscience, mining, chemical engineering, marketing and corporate governance and has an extensive vanadium network and processing knowledge



Vincent Algar

Managing Director

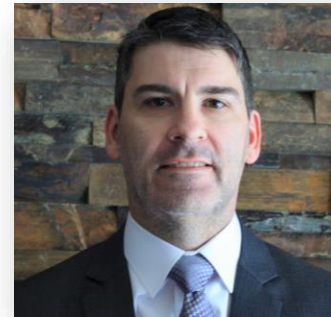
Geologist with over 25 years of experience in the mining industry across multi-commodities



Daniel Harris

Technical Director

Over 40 years of global vanadium experience including processing and operation



Todd Richardson

Chief Operating Officer

Expert in vanadium process design, commissioning and operations spanning over 22 years

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Expert Vanadium Team

Vanadium expertise separates AVL from other explorers










AVL is supported by a group of highly skilled external consultants which includes:





The Australian Vanadium Project



-  **HIGH-GRADE RESOURCE**
96.7MT at 1% V₂O₅
-  **MINERAL RESOURCE ESTIMATE**
183.6Mt at 0.76% V₂O₅
-  **MINE LIFE**
17+ Years
-  **OPEX**
US\$4.15/lb V₂O₅
-  **V₂O₅ FLAKE PRODUCTION**
22.5Mlbs per Annum
-  **60%**
Average Yield
-  **CAPITAL COSTS**
US\$354M
-  **PROVED RESERVE**
9.82Mt at 1.07% V₂O₅
-  **PROBABLE RESERVE**
8.42Mt at 1.01% V₂O₅

The Australian Vanadium Project

Project in active mining region close to road, rail, port and natural gas

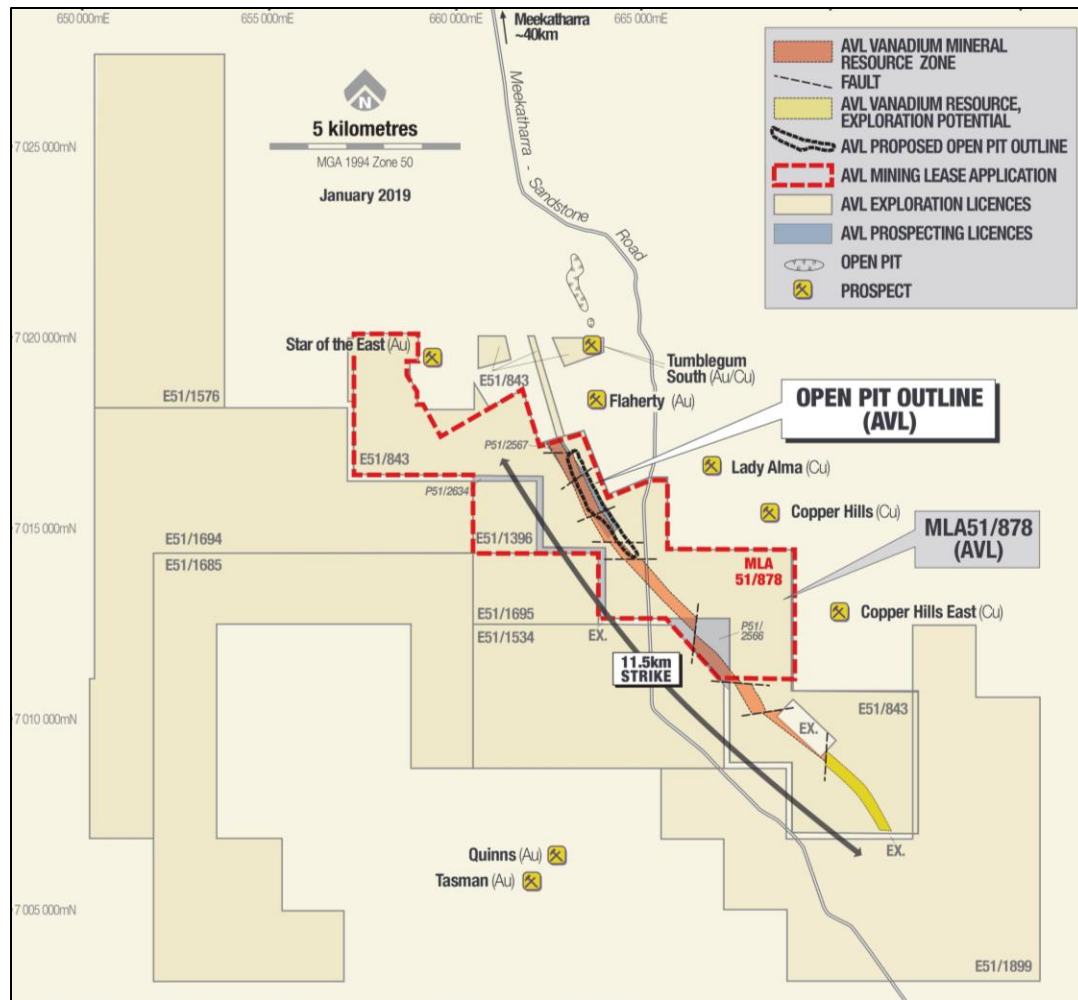
WA ranked 2nd in the list of world's best mining investment locations



The Australian Vanadium Project

Tenure and Location Plan

11.5km of known mineralisation under 100% AVL control

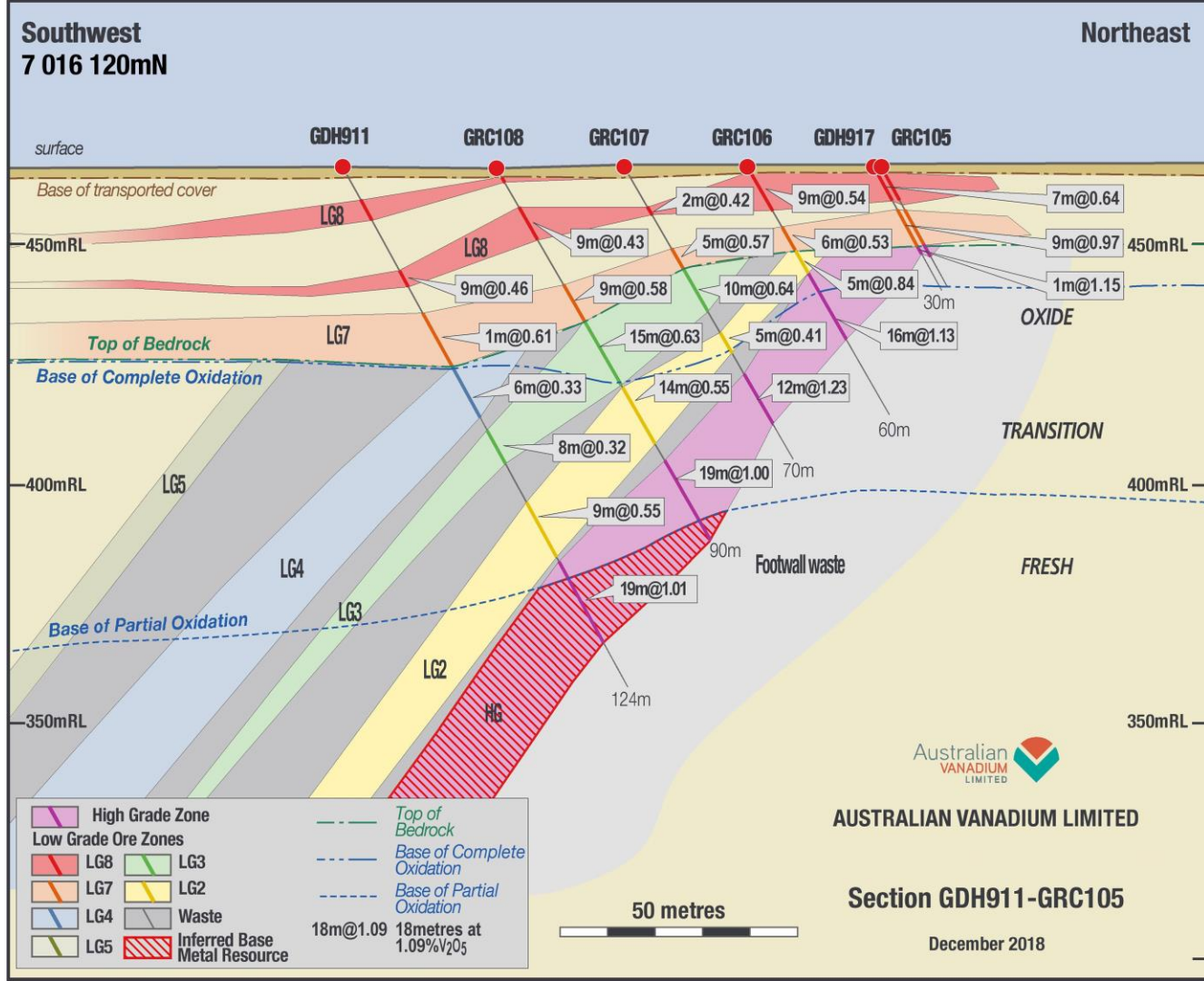


The Australian Vanadium Project

Geology

- Bushveld-type VTM deposit, drilled over 11km of AVL controlled strike
- AVL holds significant ground position for project development
- Highly consistent geology over 11.5km of AVL controlled strike
- Massive magnetite averaging 15–20m in true thickness

ASX: AVL



Highlights

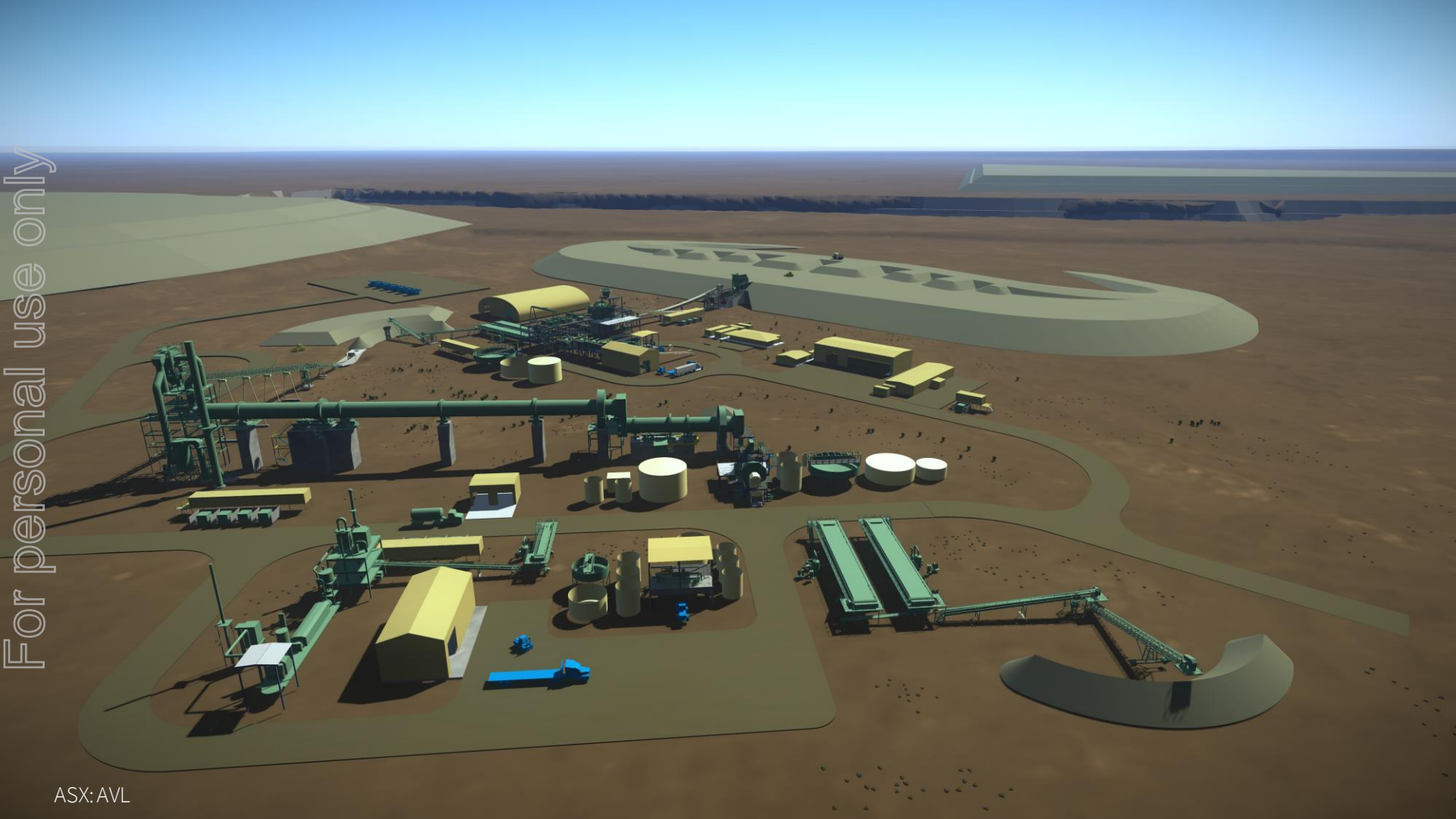
- Plant Capital US\$260M ($\pm 25\%$)
- Total project cost \$US\$354M
- Production rate of 22.5Mlb V_2O_5 or 5,650MTV
- Ability to produce high purity V_2O_5 powder for superalloys and energy storage
- 17-year initial mine life defined, potential for extension
- Resource strike covers 11km, current mine plan based on 2.5km
- Opex of \$4.15/lb V_2O_5 equivalent
- Low cost base metal (cobalt nickel copper) recovery circuit improves overall operating expenses



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Pilot Scale Testwork



AVL'S STANDARD V_2O_5 PRODUCT

- Pilot scale metallurgical test program on 30 tonnes underway
- Standard V_2O_5 product of 99.4% purity
- Improvements reported increasing PFS vanadium yields by 6% to 94%, using key processing improvements (pelletising and APV)
- Life-of-mine blends and recoveries being tested to confirm globally unique mass yields to magnetic concentrate of over 60%
- Testwork at scale a key differentiator of successful projects – de-risking final design
- Definitive Feasibility Study underway

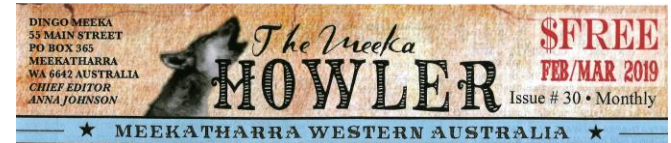
Social Responsibility

Alongside the legal responsibilities for native title claims and environmental regulations, AVL is keen to ensure that its mining activities in the Meekatharra region bring additional benefits to the community

AVL sponsors the Stephen Michael Foundation which helps to engage children in school and improve their lives through sport

Subsidiary VSUN Energy is sponsoring the inimitable *Meeka Howler* through ongoing advertising

AVL is continuously analysing its processes to see where emission reduction can occur, including the use of solar plus VRFBs and non-traditional fuel sources for haulage



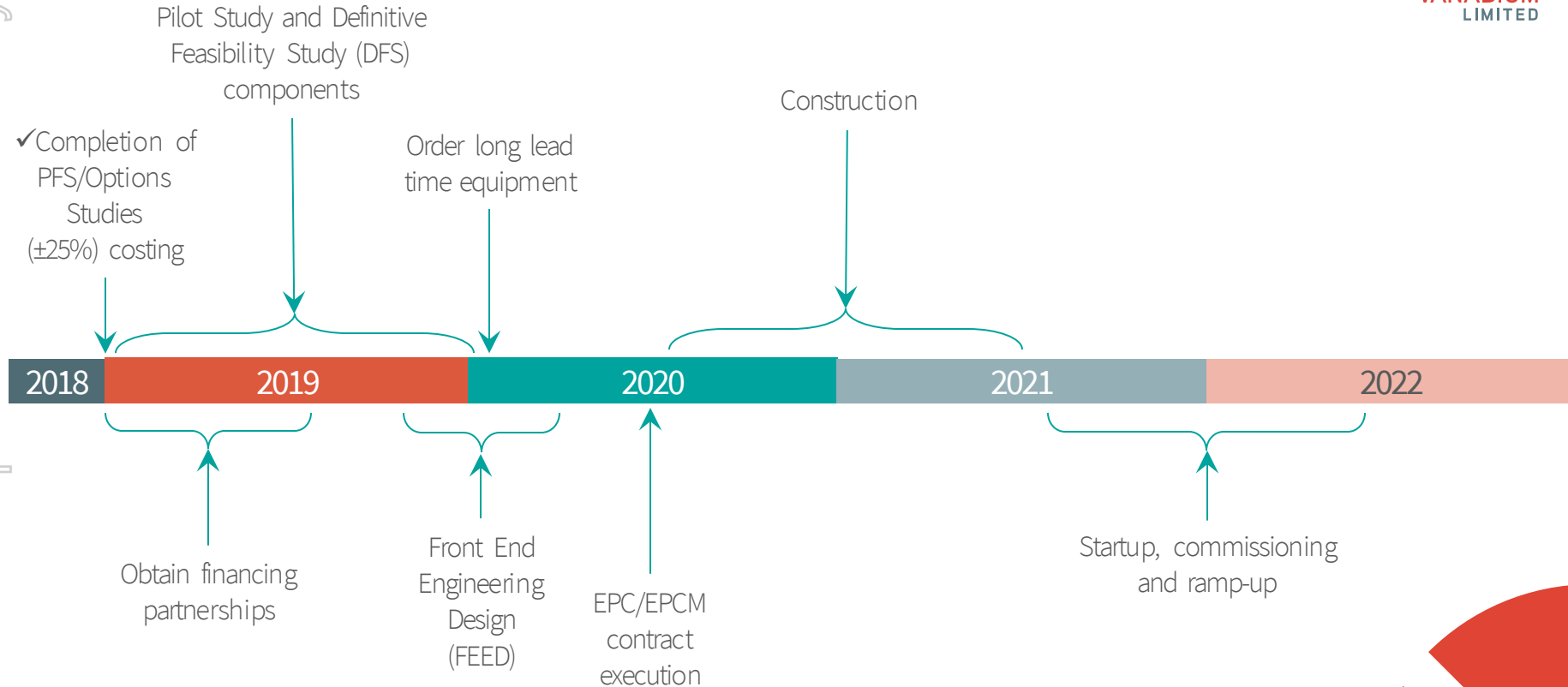
The Australian Vanadium Project Path Forward



- ✓ Completion of PFS, options studies, Mineral Reserve – completed December 2018
- ✓ Pilot Study sample collection (30t) – commenced January 2019
- Pilot Study, Environmental Impact Studies, Heritage review – August 2019
- Financing – partnership agreement /MOUs in place – August 2019
- Definitive Feasibility Study completion – December 2019
- Detailed design engineering completion – April 2020
- Order long lead time equipment – April 2020
- EPC/EPCM contract execution – June 2020
- Construction, startup, commissioning and ramp-up – 2020/2021

The Australian Vanadium Project Path Forward

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Vanadium Markets

Vanadium supply for steel currently in deficit, new markets for energy storage rapidly expanding

- Demand projections indicate market to remain in deficit in all sectors
- Increased demand from vanadium redox flow batteries (VRFBs) and other energy applications growing exponentially
- Tightened environmental and quality controls in steel supply chain in China supporting new supply
- Deposits with high in-situ grade combined with high concentrate grade will have the best chance of success

Status of VRFB market

Vanadium price rises have led to innovations from manufacturers, with new entrants also entering the market

- Stack technology advancements, utilising welded stack technology
- Leasing of electrolyte, reducing capex and transferring some of the cost to opex
- Changing power to energy ratio to compete directly with lithium
- Incorporating VRFBs into solar farms to provide dispatchable energy
- Government incentive programs in countries such as China and Korea



AVL Project Summary

- ✓ High-grade VTM deposit
- ✓ Conventional vanadium processing route
 - ✓ Strong project economics
- ✓ 30 Tonne pilot scale study well underway
- ✓ Team highly experienced in vanadium processing
- ✓ Offers exposure to steel and energy storage markets
- ✓ Ongoing studies to de-risk and improve project valuation
- ✓ Long life project projecting over 200 full time mining jobs
- ✓ Potential to become the world's lowest cost vanadium producer

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