



ASX ANNOUNCEMENT

17<sup>TH</sup> MARCH 2022

# LETTER OF INTENT FOR IRON TITANIUM COPRODUCT OFFTAKE SALES

Wingsing International Limited confirms interest in AVL FeTi coproduct for blast furnace application

# **KEY POINTS**

- AVL has signed a Letter of Intent (LOI) with Wingsing International Limited (Wingsing), the commercial arm of Tianzhu Steel, for offtake of the iron titanium (FeTi) coproduct to be produced from the Australian Vanadium Project.
- Tianzhu Steel has an annual steel production of 5 million tonnes per annum (mtpa) from its mill in Hebei Province, P.R. China.
- Wingsing to support the development of the Australian Vanadium Project through LOI for 100,000 tonnes per year.
- AVL plans to produce approximately 900,000 tonnes per annum (tpa) of FeTi coproduct from the Australian Vanadium Project, in addition to approximately 11,000 tpa of vanadium pentoxide from its proposed mine and processing facility in the Mid West region of Western Australia.
- Second LOI with direct end user follows the first LOI<sup>1</sup>, further validating AVL's strategic vanadium processing plant location, close to Geraldton Port<sup>2</sup>.

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce that it has signed a further Letter of Intent (LOI) for the supply of its iron titanium (FeTi) coproduct further validating the end user market for the proposed AVL co-product. The buyer for this LOI is Wingsing International Limited, the commercial arm of Tianzhu Steel.

Tianzhu Steel is a private owned enterprise (POE) with a mill located in the coastal Hebei province of China. It has an annual capacity of 5mtpa steel. Tianzhu Steel is also one of the top H section

<sup>&</sup>lt;sup>1</sup> See ASX Announcement dated 9<sup>th</sup> November 2021, '*First Letter of Intent for Iron Titanium Coproduct Offtake Sales*' <sup>2</sup> See ASX Announcement dated 25<sup>th</sup> February 2022, '*Joint Co-operation Agreement Signed with Mid West Ports Authority for Geraldton Port*'



steel producers in China, with an annual capacity of 1.2mtpa. Tianzhu Steel is innovative in using various types of ironmaking raw materials and is currently under relocation and expansion project to increase the steel capacity to approximately 7mtpa.

Managing Director, Vincent Algar, comments, "Through our consultant's tireless work in China we are building brand awareness for the FeTi coproduct AVL will produce along with its vanadium products. We are establishing relationships directly with some of the country's top steel producers. We look forward to working with Tianzhu Steel to supply this unique product which is able to cost effectively improve mill operational efficiency. These agreements further validate AVL's strategic decision to locate its vanadium processing plant close to Geraldton's port, strengthening the AVL pathway to funding and project development."



#### Figure 1 Location of Tianzhu Steel's steel mill in China

As part of the Australian Vanadium Project ("the Project"), AVL plans to produce approximately 900,000 tpa of FeTi coproduct, along with 11,000 tpa of  $V_2O_5$  from its operations in Western Australia. AVL's strategic location for its vanadium processing facility near Geraldton, enables the sale of the FeTi coproduct, enhancing the Project's economic resilience through the addition of a secondary revenue stream.

The price of AVL's FeTi coproduct will be tied to the Platts62 Fines Index Price (See Figure 2). The FeTi coproduct is ideally suited for use in iron sintering feeds, providing a low-cost titanium source and additional low-cost iron units to steel producers. Blast furnace operators often add titanium to sintering blends to improve furnace refractory protection and to minimise maintenance costs



associated with furnace relines. AVL's FeTi coproduct will enter the market as a stable alternative to existing reliable and unreliable sources of similar material.

Sale of the FeTi coproduct is part of the AVL strategy to reduce overall project risk. The iron ore and vanadium price have historically not moved together, offering unique opportunities for AVL to mitigate vanadium price risk and provide a secondary revenue source for the Project. Figure 2 below shows the historical pricing for 62% iron ore and  $V_2O_5$  pricing.



Figure 2 - Metal Bulletin V<sub>2</sub>O<sub>5</sub> Monthly Midpoint Average Price (Inflated May 2020 US\$/Ib) and Market Index Iron Ore Spot Price Fe 62% (US\$/tonne)

The LOI is non-binding and its intention is to record the interest of the buyer to support the development of the Project and for the parties to negotiate and agree a binding ore sale contract. Negotiations will commence at a mutually agreed timeframe, subject to the progress of the Project.

The parties intend to finalise the ore sale contract in 2023, at a yearly tonnage of 100,000.

The price of the FeTi coproduct will be referenced to the 62% Fe Platts Iron Ore Index, with a mutually acceptable price adjustment reflecting the market situation at the time and based on amicable consultation.

AVL will provide the buyer with a quarterly update on the Project's progress and will supply samples for testing at regular intervals for the buyer's feedback. Site visits will be undertaken when travel permits and Tianzhu Steel's management has kindly invited AVL's management to visit their new operation when the opportunity arises.



For further information, please contact:

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This announcement has been produced in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

## ABOUT AUSTRALIAN VANADIUM LTD

AVL is a resource company focused on vanadium, seeking to offer investors a unique exposure to all aspects of the vanadium value chain – from resource through to steel and energy storage opportunities. AVL is advancing the development of its world-class Australian Vanadium Project at Gabanintha. The Australian Vanadium Project is one of the most advanced vanadium projects being developed globally, with 239Mt at 0.73% vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>), containing a high-grade zone of 95.6Mt at 1.07% V<sub>2</sub>O<sub>5</sub>, reported in compliance with the JORC Code 2012 (see ASX announcement dated 1<sup>st</sup> November 2021 *'Mineral Resource Update at the Australian Vanadium Project*' and ASX announcement dated 22<sup>nd</sup> December 2020 *'Technical and Financial PFS Update'*).

VSUN Energy is AVL's 100% owned subsidiary which is focused on developing the market for vanadium redox flow batteries for energy storage.

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 have not been materially modified from the original market announcement.



## **APPENDIX 1**

The Australian Vanadium Project – Mineral Resource estimate by domain and resource classification using a nominal  $0.4\% V_2O_5$  wireframed cut-off for low-grade and nominal  $0.7\% V_2O_5$  wireframed cut-off for high-grade (total numbers may not add up due to rounding).

2021 Nov	Category	Mt	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
HG	Measured	11.3	1.14	43.8	13.0	9.2	7.5	3.7
	Indicated	27.5	1.10	45.4	12.5	8.5	6.5	2.9
	Inferred	56.8	1.04	44.6	11.9	9.4	6.9	3.3
	Subtotal	95.6	1.07	44.7	12.2	9.1	6.8	3.2
LG 2-5	Indicated	54.9	0.50	24.9	6.8	27.6	17.1	7.9
	Inferred	73.6	0.48	25.0	6.4	28.7	15.3	6.6
	Subtotal	128.5	0.49	24.9	6.6	28.2	16.1	7.2
Trans	Inferred	14.9	0.66	29.0	7.8	24.5	15.1	7.8
6-8	Subtotal	14.9	0.66	29.0	7.8	24.5	15.1	7.8
Total	Measured	11.3	1.14	43.8	13.0	9.2	7.5	3.7
	Indicated	82.4	0.70	31.7	8.7	20.7	12.0	5.4
	Inferred	145.3	0.71	33.0	8.7	20.7	12.0	5.4
	Subtotal	239.0	0.73	33.1	8.9	20.4	12.3	5.6

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### COMPETENT PERSON STATEMENT — MINERAL RESOURCE ESTIMATION

The information in this announcement 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 Barnes and Mr Davis are both members of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). 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 announcement of the matters based on their information in the form and context in which they appear.

## **COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND TARGETS**

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr Brian Davis (Consultant with Geologica Pty Ltd) and Ms Gemma Lee who is employed by Australian Vanadium Ltd as a Resource Geologist. Mr Davis is a member of the Australasian Institute of Mining and Metallurgy and Ms Lee is a member of the Australian Institute of Geoscientists. Both Mr Davis and Ms Lee 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 Davis and Ms Lee consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

#### **COMPETENT PERSON STATEMENT – METALLURGICAL RESULTS**

The information in this announcement that relates to Metallurgical Results is based on information compiled by independent consulting metallurgist Brian McNab (CP. BSc Extractive Metallurgy). Mr McNab is a Member of AusIMM. He 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 JORC 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McNab consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.

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## FORWARD-LOOKING STATEMENTS

This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of operations and business of AVL and certain of the plans and objectives of AVL with respect to these items.

These forward-looking statements are not historical facts but rather are based on AVL's current expectations, estimates and projections about the industry in which AVL operates and its beliefs and assumptions.

Words such as "anticipates," "considers," "expects," "intends," "plans," "believes," "seeks," "estimates", "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the industry in which AVL operates.

These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the control of AVL, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the 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.

AVL cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of AVL only as of the date of this release.

The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made.

AVL will not undertake any obligation to release publicly any revisions or updates to these forwardlooking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.

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