

ASX ANNOUNCEMENT

19<sup>TH</sup> NOVEMBER 2021

# GERALDTON REGION VANADIUM PROCESSING PLANT DEVELOPMENT UPDATE

*Progress underway at the Australian Vanadium Project processing plant site*

## KEY POINTS

- AVL has signed a one year extension to an option agreement for land to locate its processing plant near to the port city of Geraldton in Western Australia.
- Water drilling at the site has been completed and a secure water source identified to independently supply the site.
- Rezoning applications are underway as part of the next steps to development.
- Strong Federal, State and Local Government support for the location, offering increased Mid-West region employment opportunities.
- Ability to use existing gas, water, road and rail infrastructure.
- Close to Mid-West industry services platform.
- Benefits to flow through to the communities of Mullewa and Geraldton.

Australian Vanadium Limited (ASX: AVL, “the Company” or “AVL”) has signed a one year extension to its land purchase option agreement with the land owner of the location for its strategically located vanadium processing plant near Geraldton in Western Australia.

In October 2019<sup>1</sup>, AVL announced that it had signed an option agreement for land to locate the processing plant for the Australian Vanadium Project (“the Project”) near to the port city of Geraldton in Western Australia. A subsequent one year extension was signed in October 2020<sup>2</sup>.

Managing Director, Vincent Algar commented, “AVL is progressing towards production of vanadium products from the Australian Vanadium Project in Western Australia. Securing the option over the site is a key part of our development activity. Water supply, land rezoning, transport routes and final

<sup>1</sup> See ASX announcement dated 29<sup>th</sup> October 2019 ‘Option Agreement to Locate Vanadium Processing Plant near Geraldton, WA’

<sup>2</sup> See ASX announcement dated 21<sup>st</sup> October 2020 ‘AVL Extends Geraldton Region Vanadium Processing Plant Land Option’

approvals over the site and roads are important steps on the pathway to bring the Project into production.”

The Project mine site which will supply the processing plant with vanadium concentrate, is located approximately 40kms south of the mining town of Meekatharra in Western Australia. To ensure a low-cost operation AVL will undertake crushing, milling and beneficiation of vanadium bearing magnetite ore at the mine site location and transport the resulting concentrate to the proposed processing plant outside of Geraldton, where final refinement to high-quality, high-value vanadium products will take place.

A unique value proposition resulting from this arrangement is that the Company is able to sell the iron titanium coproduct (FeTi coproduct) generated after extraction of high purity vanadium products. The potential for sale of the bulk FeTi coproduct is one of the globally unique opportunities provided by the near coastal location of the plant and its proximity to the Geraldton port. The first Letter of Intent for the FeTi coproduct has been signed with Shenglong Metallurgy International Pte Limited, the commercial arm of a 12 million tonne per annum (Mtpa) steel producer located in southern China’s Fangchenggang port.<sup>3</sup>



**Figure 1 - Location of AVL Mining Project and Processing Plant**

The physical and infrastructure benefits of the processing plant’s location include:

- Access to cheaper natural gas.

<sup>3</sup> See ASX announcement dated 9<sup>th</sup> November 2021 ‘First Letter of Intent for Iron Titanium Coproduct Offtake Sales’

- Capital cost reduction by removing the need to build a gas pipeline to the mine site.
- The opportunity for power at the mine site to have a large component of renewable energy, including a vanadium redox flow battery.
- Significantly reduced mine site water requirements by as much as one third of total Project's water requirements.
- A smaller mine site camp due to reduced numbers of personnel required at the mine site and the ability for processing plant employees to live locally.
- Reduced construction costs for the processing plant and lower transportation costs of reagents.

The extension agreement provides a further one year extension of the original option agreement signed on 21<sup>st</sup> October 2019. The option payment of \$28,014 for the extension is equivalent to 1% of the Purchase Price, with half payable in cash and half in AVL shares. The number of shares issued was based on the volume weighted average share price over the previous five trading days prior to the option renewal date. The land size is calculated at 1,334 acres, with a purchase price of \$2,100 per acre. All terms in the original option agreement remain valid.

For further information, please contact:

**Vincent Algar, Managing Director** +61 8 9321 5594

*This announcement has been approved in accordance with the Company's published continuous disclosure policy and has been approved by the Managing Director Vincent Algar.*

## 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 currently one of the most advanced vanadium projects being developed globally, with 239Mt at 0.73% vanadium pentoxide ( $V_2O_5$ ), containing a high-grade zone of 95.6Mt at 1.07%  $V_2O_5$ , 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<sub>2</sub>O<sub>5</sub> wireframed cut-off for low-grade and nominal 0.7% V<sub>2</sub>O<sub>5</sub> 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 %
<b>HG</b>	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
	<b>Subtotal</b>	<b>95.6</b>	<b>1.07</b>	<b>44.7</b>	<b>12.2</b>	<b>9.1</b>	<b>6.8</b>	<b>3.2</b>
<b>LG 2-5</b>	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
	<b>Subtotal</b>	<b>128.5</b>	<b>0.49</b>	<b>24.9</b>	<b>6.6</b>	<b>28.2</b>	<b>16.1</b>	<b>7.2</b>
<b>Trans 6-8</b>	Inferred	14.9	0.66	29.0	7.8	24.5	15.1	7.8
	<b>Subtotal</b>	<b>14.9</b>	<b>0.66</b>	<b>29.0</b>	<b>7.8</b>	<b>24.5</b>	<b>15.1</b>	<b>7.8</b>
<b>Total</b>	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
	<b>Subtotal</b>	<b>239.0</b>	<b>0.73</b>	<b>33.1</b>	<b>8.9</b>	<b>20.4</b>	<b>12.3</b>	<b>5.6</b>

## 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 — 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.

## 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 forward-looking 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.