

ASX ANNOUNCEMENT

28<sup>TH</sup> JULY 2022

## QUARTERLY ACTIVITIES REPORT

*Period ending 30<sup>th</sup> June 2022*

### HIGHLIGHTS

#### Australian Vanadium Project, WA

- Bankable Feasibility Study released confirming AVL's Australian Vanadium Project as a potential globally significant primary vanadium producer.
- Third Letter of Intent for iron titanium coproduct offtake sales signed with significant Chinese steel producer Rizhao Steel.
- International Patent Application lodged for AVL's vanadium processing circuit.

#### Vanadium in Energy Storage

- MOU with NHCE for energy market vanadium redox flow battery (VRFB) project development.
- Water Corporation VRFB trial underway for water purification and pumping applications.
- Manufacture of VSUN Energy's VRFB-based standalone power system for IGO's Nova Nickel Operation completed and currently en route to Australia.
- Second VRFB ordered from Spanish VRFB manufacturer E22 for Victorian agricultural application.

#### Coates Nickel-Copper-PGE Project

- First stage drilling completed to provide a stratigraphic section as part of WA Government EIS and CSIRO programs.
- Sampling assay and interpretation underway.
- Sale of Coates Nickel-Copper-PGE and Nowthanna Uranium projects under option agreement to Mining Green Metals.

#### Corporate

- Placement and Share Purchase Plan raised \$20.571M.
- Cash position of \$26.45M as at 30<sup>th</sup> June 2022.

#### Management Comment

In April 2022 AVL released a robust bankable feasibility study (BFS), accurate to  $\pm 15\%$  and positioning the Company to proceed towards a Final Investment Decision in 2022. The completion of the BFS has allowed the commencement of debt funding introductions and due diligence, with assistance from AVL's international debt advisors HCF International and Australian advisors Grant Thornton.

Engineering design for the Project continues towards Front End Engineering Design (FEED) and Engineering, procurement and construction/management (EPC/M) contractor selection.

Approvals for the Project are progressing well, with acceptance on 15<sup>th</sup> July by the Western Australian Environmental Protection Agency (EPA) of an amendment to AVL's original project description for the Gabanintha site under s43A. Significant progress on the Tenindewa processing plant site approvals are expected during the September quarter.

AVL's 100% owned energy focused subsidiary, VSUN Energy has seen continued increased interest in VRFBs and has secured another new battery order as it develops this market in Australia.

The Company completed a capital raising in May 2022, with the assistance of corporate advisor Canaccord Genuity. The Company completed a placement to institutional, professional and sophisticated investors through a capital raising and share purchase plan (SPP), raising \$20.571 million. Funds raised under the placement and SPP will be used to finance ongoing work at the company's Australian Vanadium Project and to develop key downstream markets ahead of finalising debt finance and a final investment decision.

The Company ended the quarter in a strong cash position of \$26.45 million with no debt.

The Company continues to position itself as the world's next primary producer of the critical steel and battery material vanadium.

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Activities for the quarter ended 30<sup>th</sup> June 2022 for Australian Vanadium Limited ("AVL" or "the Company") are as follows:

## THE AUSTRALIAN VANADIUM PROJECT

### Bankable Feasibility Study for the Australian Vanadium Project Released

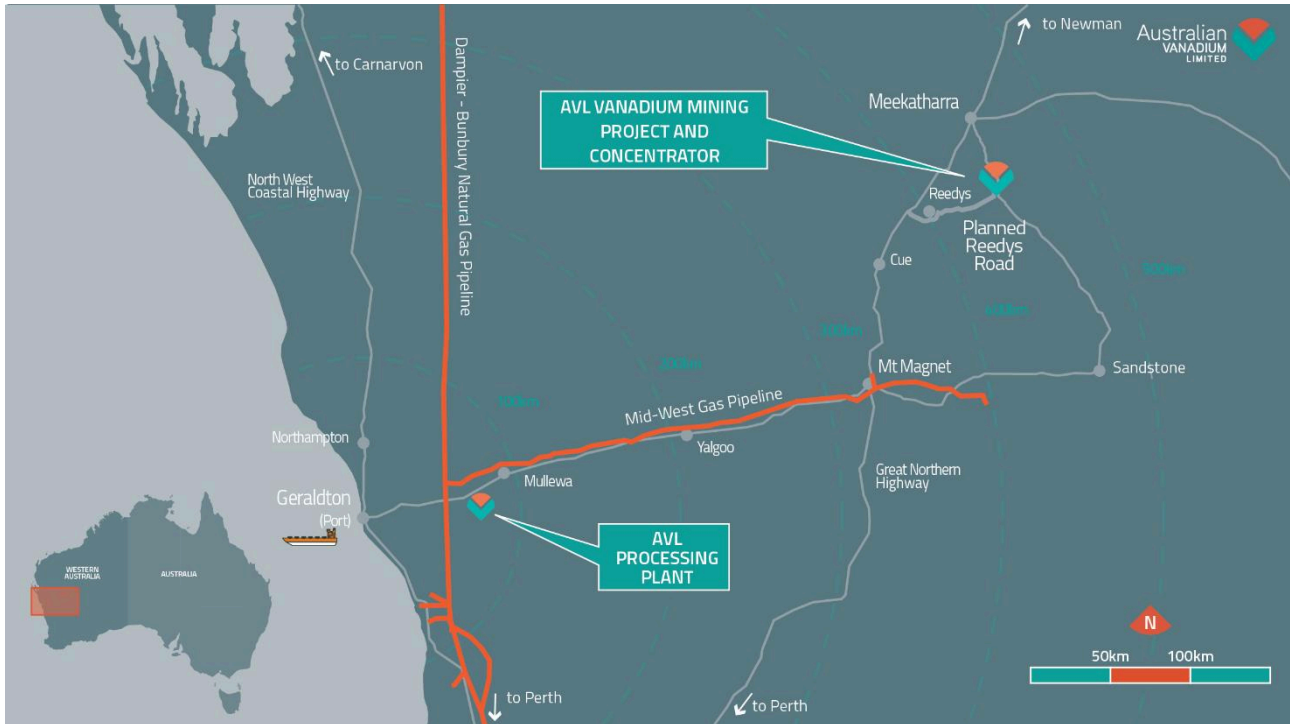
*See ASX announcement dated 6<sup>th</sup> April 2022 'Bankable Feasibility Study for the Australian Vanadium Project'*

AVL released its Bankable Feasibility Study (BFS) for the Australian Vanadium Project ("the Project") at the beginning of April. The Project consists of 15 tenements covering 200 sq km and held 100% by AVL. Mining Lease M51/878 has been granted for a period of 21 years and covers 87% of the Mineral Resource, with the balance of the Inferred Mineral Resource located on E51/843, overlain by Mining Lease Application MLA51/897, owned 100% by AVL.

The Project is based on a proposed open cut mine of the Vanadium Titanium Magnetite orebody, a crushing, milling and beneficiation (CMB) plant and a vanadium processing plant. Concentrate produced at the CMB will be transported to a vanadium processing plant located near Geraldton, for

final conversion to high quality vanadium pentoxide, for sale or further conversion and use in steel and energy storage, catalyst, chemical and defence applications.

The coastal processing plant location is a key strategic differentiator to all current global primary vanadium producers, utilising the unique gas, road and port infrastructure of the world class mining region of mid-western Western Australia (see Figure 1).



**Figure 1 - Location of the Australian Vanadium Project**

Key highlights from the BFS for the Project include:

- Confirmation of the Australian Vanadium Project as a potential globally significant primary vanadium producer targeting **critical mineral**, **steel** and **energy storage** markets.
- Australian Government grant of A\$49M awarded under the Modern Manufacturing Initiative Collaboration Stream<sup>1</sup> to support the Project to production.
- Technical studies completed, including three years of extensive piloting testwork, supporting robust processing flowsheets, de-risking the Project towards funding and delivery.
- Pre-tax **NPV<sub>7.5</sub> of A\$833M** and **equity IRR 20.6%** based on US\$10.50/lb **V<sub>2</sub>O<sub>5</sub>** price, **A\$604M** upfront pre-production capital excluding contingency.
- Updated **Ore Reserve of 30.9Mt at 1.09% V<sub>2</sub>O<sub>5</sub>** comprised of a **Proved Reserve of 10.5Mt at 1.11% V<sub>2</sub>O<sub>5</sub>** (vanadium pentoxide) and a **Probable Reserve of 20.4Mt at 1.07% V<sub>2</sub>O<sub>5</sub>**<sup>2</sup>.
- Anticipated initial **mine life of 25 years**, supporting a long-life, consistent ore feed operation on AVL's granted mining lease.

<sup>1</sup> See ASX announcement dated 16<sup>th</sup> March 2022 'AVL Awarded \$49 Million Federal Government Manufacturing Collaboration Grant'

<sup>2</sup> Rounding is applied

- Strategic separation of processing plant from minesite and concentrator allows access to competitive natural gas near Geraldton, local workforce and Iron Titanium (**FeTi**) coproduct sales opportunities through the Port of Geraldton.
- Average annual vanadium production of **24.7 Mlbs V<sub>2</sub>O<sub>5</sub> (11,200t)** as a **99.5% V<sub>2</sub>O<sub>5</sub>** high purity flake and **900,000 dry tonnes per annum of FeTi** coproduct.
- Forecast vanadium **recovery to concentrate** of **74.2%** life of mine, supported by pilot testing and comparable to current international primary vanadium operations.
- Innovative process flowsheet recovers **90%** of vanadium in concentrate, utilising tried-and-tested grate kiln technology, with valuable reductions in gas consumption and CO<sub>2</sub> emissions.
- Approvals well advanced and Environmental, Social and Governance (ESG) standards and action plans in place.
- Global critical mineral vanadium market seeing strong growth in demand and pricing (currently over **US\$12/lb V<sub>2</sub>O<sub>5</sub>**) with the battery sector showing accelerated uptake in vanadium redox flow batteries.

Financial outcomes from the study are robust and provide a strong commercial case for Project development<sup>3</sup>:

- Wood Australia Pty Ltd (Wood), a leading engineering firm with valuable expertise in vanadium and similar mineral processing, has undertaken the engineering and design, providing an overall accuracy for the capital and operating cost estimates of  $\pm 15\%$ .
- Level of study provides a basis for engagement with financing institutions including NAIF, Export Finance Australia and many of the international resource banks.
- Australian Government grant of A\$49M awarded under the Modern Manufacturing Initiative Collaboration Stream<sup>1</sup> provides strong additional support to Project funding requirements.
- Project pre-tax NPV<sub>7.5</sub> of A\$833M.
- Equity Project IRR 20.6%.
- Project payback of 7.3 years after first production.
- Project annual EBITDA average for 25 years of A\$175M.
- Total Project EBITDA of \$4.4B.
- Upside case offers pre-tax NPV<sub>7.5</sub> of \$1,287M assuming US\$12/lb V<sub>2</sub>O<sub>5</sub> price. This increases to \$1,450M with additional improvements in operating expense of 10%.
- C1 operating cost of US\$4.43/lb V<sub>2</sub>O<sub>5</sub> competitive with world primary vanadium producers, includes FeTi coproduct credit.
- Pre-production plant and associated infrastructure capital cost of US\$435M (A\$604M), excluding any grant payments and before contingency.

<sup>3</sup> Assumptions 0.72 USD/1 AUD; US\$10.50/lb long term average V<sub>2</sub>O<sub>5</sub> price; cost estimation at  $\pm 15\%$  level of accuracy; All \$ figures are A\$ unless stated otherwise



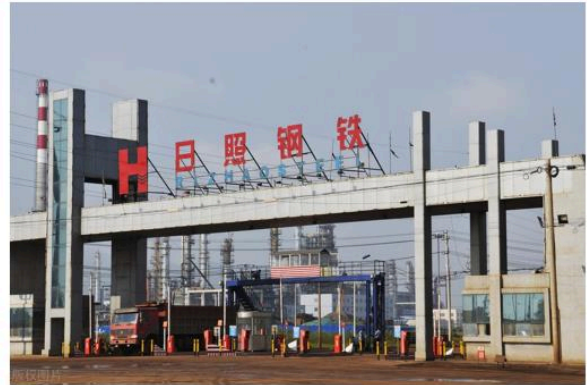


**Figure 2 - Top: CMB layout, Bottom: Processing Plant layout**

### **Third Letter of Intent for iron titanium coproduct offtake sales signed with Rizhao Steel**

*See ASX announcement dated 20<sup>th</sup> April 2022 ‘Third Letter of Intent For Iron Titanium Coproduct Offtake Sales’*

AVL signed a third LOI with Rizhao Steel Holding Group Co. Limited (Rizhao Steel). Rizhao Steel is ranked at the world’s 26<sup>th</sup> and China’s 15<sup>th</sup> largest integrated steel producer and produces 15 mtpa of steel from its steel mill in the Shandong Province in China. It is also the largest importer of titanium bearing concentrate.



**Figure 3 - Location of Rizhao Steel's steel mill in China**

### **International Patent Application lodged for vanadium processing circuit**

*See ASX announcement dated 27<sup>th</sup> April 2022 'AVL Lodges International Patent Application for Vanadium Processing Circuit'*

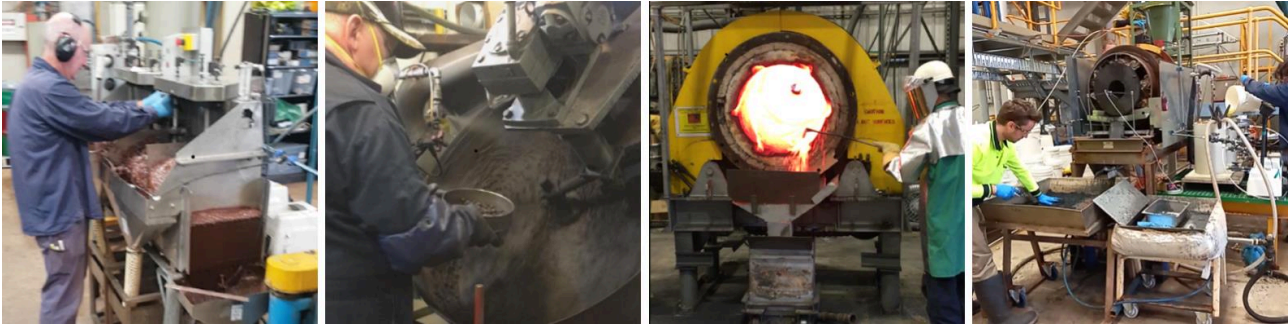
Following a provisional patent application submission in 2021<sup>4</sup> AVL has progressed to filing a full international patent application to assist with the protection of intellectual property (IP) generated during the BFS. The IP applies to AVL's processing circuit which comprises an innovative combination of processes to maximise vanadium recovery. The basis for the patent application is the specific sequence of beneficiation, pyrometallurgy and hydrometallurgy which combine to produce a high purity vanadium product with exceptional recoveries.

A distinctive feature of the patent application is the ability to economically recover vanadium from oxidised and transitional zones common to VTM deposits worldwide.

The pyrometallurgy process utilises pelletisation and a grate-kiln for roasting, which has been shown to considerably improve vanadium extraction in comparison to conventional roasting. The hydrometallurgy process includes a washing stage to produce a clean iron titanium coproduct. A combination of nanofiltration and solvent extraction generates ultra-high purity vanadium for specialty applications.

<sup>4</sup> See ASX announcement dated 12th April 2021 'AVL Lodges Patent Application for Vanadium Processing Circuit'

AVL has built on established beneficiation and roast-leach technologies, with step-change improvements to deliver superior vanadium recoveries. These processes have been demonstrated at pilot scale as shown in Figure 4.



**Figure 4 - AVL's process includes reverse flotation, pelletisation, salt-roasting and leaching; demonstrated at full pilot-scale from left-right**

The patent application also covers a nano-filtration and solvent extraction stage for producing an ultra-high purity vanadium as a value-added product. The feed for this operation is the wash solution generated in the previous step. The nanofiltration stage upgrades the vanadium content of the solution, solvent extraction removes impurities. The  $V_2O_5$  product from this process will have a purity of >99.9%.

The patent application is recognised across 156 countries through the Patent Cooperation Treaty (PCT). Work contributing to this patent application was partly funded by the Australian Government's CRC-P grant<sup>5</sup>.

## PROJECT DELIVERY

The AVL team has turned its focus fully towards Project delivery of the world's next primary vanadium production:

- Working with appointed debt advisers HCF International and Grant Thornton.
- Finalising an implementation plan, including contracting strategy for the processing plant, CMB, mine, logistics and power.
- Progression of environmental approvals towards final approval.
- Engagement with partners in the region, such as ATCO, for proposed green hydrogen supply to reduce greenhouse gas emissions from the processing plant.
- Ongoing advancement of vanadium offtake agreements for the steel and battery markets as announced with US Vanadium<sup>6</sup>.

<sup>5</sup> See ASX announcement dated 10<sup>th</sup> February 2020 'AVL Awarded \$1.25 Million Vanadium Research and Development Grant'

<sup>6</sup> See ASX announcement 11<sup>th</sup> September 2021 "AVL Secures Vanadium Electrolyte Manufacturing Technology"



- Confirmation of strategic value generation via further Letters of Intent for sale of FeTi coproduct after vanadium production through the Port of Geraldton.
- Building Australia's first commercial vanadium electrolyte manufacturing plant as part of downstream processing opportunities and early cash flows being pursued by AVL.
- Ongoing support of 100% owned renewable and vanadium battery subsidiary VSUN Energy and the active development of the vanadium redox flow battery market in Australia.

## VANADIUM IN ENERGY STORAGE

### MOU with North Harbour Clean Energy (NHCE) for VRFB project development

*See ASX announcement dated 26<sup>th</sup> May 2022 'MOU with NHCE for Energy Market Vanadium Battery Project Development'*

VSUN Energy signed a Memorandum of Understanding (MOU) with NHCE for collaboration on development and installations of VRFBs. NHCE is involved in the identification, investigation, development and operation of renewable energy and energy storage projects. It is particularly focused on long duration energy storage, including pumped hydro and VRFBs for stationary energy applications. NHCE is also involved in a joint collaboration with the University of New South Wales (UNSW) in the research and commercialisation of VRFBs. UNSW is the birthplace of the VRFB, with Emeritus Professor Maria Skyllas-Kazacos and her team still working on the product which was invented in the 1980s.

The MOU will allow VSUN Energy to help to facilitate development of VRFBs into existing and future projects being developed by NCHE. NHCE sees the need for long duration energy storage in the Australian market as being embryonic, but significant in size and that the VRFB is a proven, commercialised product that can help complement the company's use of pumped hydro energy storage. NHCE is interested in supply of vanadium electrolyte from AVL, product selection and project development support from VSUN Energy and the ability to position Australia as a centre of excellence and key player in the global VRFB supply chain.

### Water Corp trial progressing

AVL's 100% owned subsidiary VSUN Energy has installed a 5kW/30kWh VRFB for use on a trial basis at Water Corporation's Innovation Hub in Shenton Park, WA at its Water, Research and Innovation Precinct <sup>7</sup>. The VRFB is initially being trialled for use on a mobile water purification unit and will provide 100% renewable power to the system via a solar PV and VRFB SPS.

<sup>7</sup> See ASX announcement dated 29th December 2021 'VSUN Energy to Install VRFB at Water Corporation Site'



VSUN Energy is working with Water Corporation to test, collect data and provide suitable options for potential future use cases for VRFBs throughout Water Corporation's operations. Of particular interest are remote pumping applications and for supplying power to remote offgrid energy loads, currently powered by diesel generators.

Water Corporation is the principal supplier of water, wastewater, drainage and bulk irrigation services in Western Australia and is owned by the Western Australian Government. Water Corporation manages almost 35,000km of water mains across an area greater than 2.6 million kilometres. Water Corporation has a commitment to reducing its environmental footprint, with the use of renewable energy being one of the solutions for doing this.

### **IGO battery manufacture has been completed by E22 in Spain**

AVL, in conjunction with VSUN Energy, signed an agreement with ASX 100 listed mining company IGO Limited (IGO) for a project utilising an SPS based on VRFB energy storage technology<sup>8</sup>. An SPS supplies power independently to the electricity grid and typically comprises a combination of solar, wind, battery and backup generation from diesel or gas.

The SPS being installed at IGO's nickel operation will be based around a 300kWh VRFB from E22 which has been built and is now being shipped to Fremantle Port (see Figure 5). The system has been designed to provide a 100% renewable energy supply for much of the year for a bore field, with periods of long cloud cover being supported by a diesel genset. Total renewable penetration of 85-90% is being targeted for the trial of the VRFB based SPS system. The SPS can be redeployed for use on multiple mines sites and locations over its 20+ year service life. The target of long periods with diesel-off will not only significantly reduce the carbon emissions of diesel generator powered bore fields, but also offer substantial reductions in operating hours for service personnel. These two significant benefits indicate a potentially rapid growth market segment for this robust technology.

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<sup>8</sup> See ASX announcement dated 11th November 2021 'IGO's Nova Nickel Operation to Trial VSUN Energy Vanadium Battery Standalone Power System'



**Figure 5 - VRFB for standalone power system at IGO's Nova Nickel Operation under construction**

The SPS forms part of the project partly funded through the Modern Manufacturing Initiative (MMI) Australian Government grant that AVL was awarded in July 2021<sup>9</sup>.

On arrival in Fremantle the VRFB will undertake testing near to Perth, allowing VSUN Energy to showcase the system to multiple interested parties from government, utilities, the energy community and the media.

### **Second battery ordered from E22**

VSUN Energy has ordered a second VRFB from E22 which is now being built. The battery is a 20kW/80kWh which will be paired with 100kW of solar and is destined for an agricultural client in Victoria. The system will be grid connected and help to achieve greater renewable energy penetration for our client.

## **COATES NICKEL-COPPER-PGE PROJECT**

*See ASX announcement dated 8<sup>th</sup> June 2022 'Drill Completion at Coates Nickel-Copper-PGE Project'*

Initial stratigraphic drilling of Reverse Circulation (RC) and diamond drilling at Coates Mafic Intrusive Complex was completed during the quarter. This formed partial completion of a drill program at the Coates Mafic Intrusive Complex near Wundowie, 80km NE of Perth in Western Australia. Drilling

<sup>9</sup> See ASX announcement dated 21<sup>st</sup> July 2021 'AVL Awarded \$3.69M Federal Government Manufacturing Grant'

followed a successful SkyTEM Airborne Electromagnetic (AEM) survey which identified three conductors, with the largest having a strike length of 1,900 metres<sup>10</sup>.

An 11 hole program of RC pre-collar and diamond tail drilling was undertaken, with all pre-collars completed for 840.6 metres of RC. Partial completion of the diamond drilling portion of the project was achieved, with 169.6 metres of diamond coring over three holes and cessation of the program early due to budget limitations. Two diamond tails were finished and one abandoned before the full planned depth, due to bogged rods. An additional nine diamond tails are required to complete the stratigraphic fence, including re-drilling of the hole that was abandoned. The drill line remains open and the Program of Work (PoW) approval remains active. Drilling of the diamond tail portion of the program will be completed pending sale of the project to Mining Green Metals (see below), subject to its successful listing on the Australian Securities Exchange (ASX)<sup>11</sup>.

Drilling was co-funded through the Western Australia Government Exploration Incentive Scheme (EIS), to identify new nickel-copper-PGE discoveries in the prospective wheatbelt region NE of Perth. The grant was for up to \$112,500, representing half of the cost of the program.

Despite being stopped early due to budget limitations, the program as completed to date provides a significant section of geochemical samples in the percussion components of the drill holes. Importantly, the diamond core now available for the Australian Government's Commonwealth Scientific and Industrial Research Organisation (CSIRO) Nickel Indicator Study of the Coates Mafic Complex extends 350 to 500 metres further northeast into the intrusion and approaching the zone of the SkyTEM and surface Ni, Pt and Cr anomalism previously identified<sup>12</sup>. Other historical diamond core from the 1970s being utilised for the CSIRO study is restricted to the magnetite gabbro portion of the deposit which was drilled extensively for vanadium mineralisation by Garrick Agnew Pty Ltd and Mt Dempster Mining.

## CORPORATE

### Capital Raising

The Company completed a capital raising in May 2022<sup>13</sup>, with the assistance of Corporate Advisor Canaccord Genuity. The Company completed a placement to institutional, professional and sophisticated investors through a capital raising and SPP, raising \$20.571 million. Funds raised

<sup>10</sup> See ASX announcement dated 14th October 2021 '*Electromagnetic Conductors at Coates Nickel-Copper-PGE-Project*'

<sup>11</sup> See ASX announcement dated 11<sup>th</sup> May 2022 '*Sale of Coates Nickel-Copper-PGE and Nowthanna Hill Uranium Projects*'

<sup>12</sup> See ASX announcement dated 5th August 2021 '*Nickel Chrome Copper PGE anomalies identified at Coates Project*'

<sup>13</sup> See ASX Announcements dated 20<sup>th</sup> May 2022 and 23<sup>rd</sup> June 2022 '*Placement and SPP to Raise up to \$27.5M and 'Share Purchase Plan Results*'

under the placement and SPP will be used to finance ongoing work at the company's Australian Vanadium Project and to develop key downstream markets ahead of finalising debt finance and a final investment decision.

## **Appendix 5B – Quarterly cash flow report**

The Company's consolidated cash was \$26.45M as at 30<sup>th</sup> June 2022 (31<sup>st</sup> March 2022: \$5.09M).

The increase in cash over the period reflects the \$20M received from the Placement completed in May 2022, \$0.47M received for the balance of partly paid-up shares, and \$3.5M in proceeds from the exercise of options (exercise price \$0.025, expiry 18<sup>th</sup> December 22).

The aggregate amount of payments to related parties and their associates included in the current quarter cash flows from operating activities were \$191k, comprising Directors' fees, salaries and superannuation.

During the quarter \$1,281k exploration and evaluation expenditure was capitalised, of which \$782k was spent on activities to advance the Australian Vanadium Project, \$180k related to development of the electrolyte plant, and \$227k was spent on drilling at Coates (co-funded by the Exploration Incentive Scheme). The balance of exploration and evaluation expenditure comprised of other consultants and labour, transportation costs and tenement expenses.

No production and development activities were undertaken during the quarter.

## **Sale of non-core assets**

In May 2022 AVL signed an option agreement with Mining Green Metals Limited (MGM) for acquisition of a 100% interest in the Coates and Nowthanna Hill projects.<sup>14</sup>

The Option will provide the following benefits to AVL and its shareholders:

- AVL to receive 6,500,000 fully paid ordinary shares in MGM
- A 0.75% net smelter return royalty from the value of the minerals mined (Coates Project)
- A cash payment of \$190,000.

The tenements included in the Option are:

- E70/4924-I (Coates Project)
- E70/5588 (Coates Project)
- ELA 70/5589 (upon grant); (Coates Project) and
- M51/771 (Nowthanna Hill Project).

<sup>14</sup> See ASX announcement dated 11<sup>th</sup> May 2022 'Sale of Coates Nickel-Copper-PGE and Nowthanna Hill Uranium Projects'



MGM may exercise the Option by giving written notice exercising the Option to AVL at any time between the period commencing on the execution date and ending 12 months after the execution date. If the Option is not exercised by MGM during the option exercise period, the Option shall lapse.

## Marketing

During the June quarter AVL and VSUN Energy attended or presented at:

- Paydirt Battery Minerals Conference, Perth (presented and exhibited)
- Vanitec Meeting, Salzburg, Austria (attended)



**Figure 6 - Vincent Algar with Fortune Mojapelo from Bushveld Minerals in Salzburg at the Vanitec meeting**

- International Flow Battery Forum, Brussels, Belgium (attended)
- Governor's Roundtable on 'Critical mineral supply chains: comprehending, mobilising and optimising Australia's vital contribution to AUKUS'. AUKUS is a trilateral security pact between Australia, the United Kingdom and the United States, Perth (attended)
- Austrade India briefing, Perth (attended)
- Sydney Energy Forum, Sydney (attended)

- Australian Government Department of Industry, Science and Resources 'Roundtable discussion on Critical Minerals', Perth (attended)
- African Professionals of Australia, Succeeding Beyond Borders Conference, virtual (presented)
- Australian Clean Energy Summit, Sydney (attended)

Upcoming conferences and events for the September quarter are:

- Diggers and Dealers, Kalgoorlie (presenting and exhibiting)
- Energy in WA, Perth (attending)
- Mineral Resource Institute of WA (MRIWA) Net Zero Emission Conference, Perth (presenting, attending and sponsoring)
- Critical Minerals & Energy Investment, Perth (presenting and attending)

Managing Director Vincent Algar presented to potential investors and offtake partners in Frankfurt, Germany. He has also been invited to be part of the Australian India Chamber of Commerce National Industry Group (Critical Minerals).

AVL has joined the ANZ India Business Chamber and the German Australia Business Council to help foster business relationships in India and Germany.

The Company maintains a strong presence on social media platforms and through its mailing lists, summarising Company and vanadium related news and developments. The Company is promoted under Australian Vanadium, AVL and VSUN Energy brand names.

For further information, please contact:

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

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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.*

## MINERAL RESOURCE

**Table 1 The Australian Vanadium Project Mineral Resource Estimate as at November 2021 by Domain and Resource Classification<sup>15</sup>**

Zone	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
	<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>
LG	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	15.4	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>
Transported	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>
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	21.2	13.5	6.2
	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>

**Table 2 The Australian Vanadium Project - Ore Reserve Statement as at April 2022, at a cut-off grade of 0.7% V<sub>2</sub>O<sub>5</sub>**

Ore Reserve	Mt	V <sub>2</sub> O <sub>5</sub> %	Fe%	TiO <sub>2</sub> %	SiO <sub>2</sub> %	LOI%	V <sub>2</sub> O <sub>5</sub> production kt	Ore Reserve	Mt
Proved	10.5	1.11	61.6	12.8	9.5	3.7	70.9	Waste	238.5
Probable	20.4	1.07	63.4	12.2	9.2	3.0	152.9	Total Material	269.4
<b>Total Ore</b>	<b>30.9</b>	<b>1.09</b>	<b>62.8</b>	<b>12.4</b>	<b>9.3</b>	<b>3.2</b>	<b>223.8</b>	Strip Ratio	7.7

<sup>15</sup> 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).

**Table 3 Tenement Schedule**

Tenement information as required by Listing Rule 5.3.3 for the quarter ended 30<sup>th</sup> June 2022

Project	Location	Tenements	Economic Interest	Notes	Change in Quarter %
Western Australia	The Australian Vanadium Project	E 51/843	100% Granted <sup>1</sup>		Nil
		E 51/1534	100% Granted <sup>1</sup>		Nil
		E 51/1899	100% Granted <sup>1</sup>		Nil
		E 51/1943	100% Granted <sup>1</sup>		Nil
		E 51/1944	100% Granted <sup>1</sup>		Nil
		E 51/2067		100% <sup>1</sup> on Application	Nil
		L 51/116		100% on Application	Nil
		L 51/119		100% <sup>1</sup> on Application	Nil
		M 51/878	100% Granted		Nil
		M 51/888	100% Granted <sup>1</sup>		Nil
		M 51/897		100% <sup>1</sup> on Application	Nil
		P 51/3073	100% Granted		Nil
		P 51/3074	100% Granted		Nil
		P 51/3075	100% Granted		Nil
		P 51/3076	100% Granted		Nil
		P 51/3248		100% <sup>1</sup> on Application	Nil
Western Australia	Nowthanna	M 51/771	100% Granted <sup>2</sup>		Nil
Western Australia	Peak Hill	E 52/3349	0.75% NSR Production Royalty		Nil
Western Australia	Coates	E 70/4924-I	100% Granted <sup>2</sup>		Nil
		E 70/5588	100% Granted <sup>2</sup>		Nil
		E 70/5589		100% on Application <sup>2</sup>	Nil
South Africa	Blesberg	(NC) 940 PR	10%		Nil

Note 1: Australian Vanadium Limited retains 100% rights in V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore on The Australian Vanadium Project. Bryah Resources Limited holds the Mineral Rights for all minerals except V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore only.

Note 2: Option agreement signed with Mining Green Metals. See ASX announcement dated 11<sup>th</sup> May 2022 'Sale of Coates Nickel-Copper-PGE and Nowthanna Hill Uranium Projects'



## ASX CHAPTER 5 COMPLIANCE AND CAUTIONARY AND FORWARD-LOOKING STATEMENTS

### *ASX Listing Rules 5.19 and 5.23*

#### **ASX Listing Rule 5.19**

The information in this announcement relating to production targets, or forecast financial information derived from a production target, is extracted from the announcement entitled 'Bankable Feasibility Study for the Australian Vanadium Project' released to the ASX on 6<sup>th</sup> April 2022 which is available on the Company's website [www.australianvanadium.com.au](http://www.australianvanadium.com.au).

The Company confirms that all material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the original market announcement continue to apply and have not materially changed.

#### **ASX Listing Rule 5.23**

The information in this announcement relating to exploration results and mineral resource and ore reserve estimates for the Australian Vanadium Project is extracted from the announcement entitled 'Bankable Feasibility Study for the Australian Vanadium Project' released to the ASX on 6<sup>th</sup> April 2022 which is available on the Company's website [www.australianvanadium.com.au](http://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 that all material assumptions and technical parameters underpinning the estimates in the original 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.

### **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.