

ASX ANNOUNCEMENT 4 JUNE 2024

# APPOINTMENTS TO ACCELERATE SCALE UPTAKE OF VANADIUM FLOW BATTERIES IN AUSTRALIA

#### **KEY POINTS**

- AVL continues to build a team with world leading expertise across the full value chain, from mining through processing, electrolyte production, battery systems and into energy markets
- Steve Banning joins the team bringing deep energy market expertise to drive scale uptake of vanadium flow battery based long duration energy storage services
- Dr Yifeng Li, a world leading battery energy storage system and vanadium flow battery expert, brings a proven track record in cost effective commercialisation strategies for integration of long duration energy storage technologies

Australian Vanadium Limited (ASX: AVL, 'the Company' or 'AVL') is pleased to welcome Steve Banning as Principal Advisor and Dr Yifeng Li as Product Development Manager for its 100% owned subsidiary VSUN Energy Pty Ltd ('VSUN Energy'). These appointments are pivotal to unlocking AVL's ambition to accelerate the uptake of vanadium flow batteries (VFBs) for use in large scale long duration energy storage systems.

Steve brings 25 years of deep energy market experience, including as Managing Director of Epic Energy. Steve has led the delivery of complex energy projects and has a deep understanding of energy customer needs, as well as having delivered a considerable amount of complex energy supply agreements. At AVL, Steve will lead the deployment of strategies to commercialise and scale VSUN Energy's energy storage solutions, services and customer engagement.

Dr Li is a battery energy storage system and VFB expert with significant experience, committed to enabling the scale adoption of VFBs. His strong technical and economic expertise in long duration energy storage covers a wide range of aspects for VFB developments, including the fundamental electrochemistry, battery stack/module design and optimisation, large scale system integration, in addition to the operational control and energy management systems of VFB based long duration energy storage solutions.



AVL CEO, Graham Arvidson comments: "We are really excited to welcome Steve Banning and Yifeng Li who will both play key roles in enabling AVL's pit to battery value creation strategy. Steve's Australian energy market track record will be pivotal in accelerating VSUN Energy's long duration energy storage solutions for the burgeoning long duration market. Yifeng brings a proven track record in VFB based long duration energy storage systems and optimising the technical aspects of these VFB based systems to successfully integrate with energy markets and deliver maximum value to customers.

"Ultimately, these two appointments are about growing our capability within VSUN Energy to deliver outsized value to existing and future customers within Australian energy markets. With these two appointments, we have world leading expertise at every point in our value chain, from mine to battery. We believe that the strength of our team is now unparalleled globally. Coupled with our Tier 1 vanadium asset in Western Australia, our team will continue to be the source of enduring competitive advantage for AVL, as we grow our vertically integrated business model."

### Biography for Steve Banning and Dr Yifeng Li

Steve has a strong understanding of energy markets across Australia, having worked in advisory and executive roles for a variety of energy-focused companies. Key career highlights include overseeing the construction and operation of gas pipelines as Managing Director of Epic Energy, connecting Queensland to the southern gas markets for the first time. Also served as Managing Director of engineering service company, LogiCamms and has worked on capital-intensive projects worth over A\$1 billion. A graduate of Nottingham Trent University in the UK, with a Bachelor of Science in Chemistry and Biology. Steve is currently a Non-Executive Director of Solstice Energy Holdings Pty Ltd.

Dr Li most recently worked for global energy company Voith Group in Germany, with a focus on the integration of VFB modules into large scale systems, performance improvement and cost reduction of VFBs and the standardisation of vanadium electrolyte. His return to Australia provides VSUN Energy with the valuable opportunity to secure his skills, as the company develops VFB projects for organisations such as Western Australian utility, Horizon Power. Dr Li graduated from the University of New South Wales (UNSW) with a Bachelor of Engineering (Hons) and a PhD in Chemical Engineering. His doctoral thesis project focused on process modelling, optimisation and control for VFB systems.

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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 395.4Mt at 0.77% vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>), containing a high-grade zone of 173.2Mt at 1.09% V<sub>2</sub>O<sub>5</sub>, reported in compliance with the JORC Code 2012 (see ASX announcement dated 7 May 2024 '39% Increase in High Grade Measured and Indicated Mineral Resource').

VSUN Energy is AVL's 100% owned renewable energy and energy storage subsidiary which is focused on developing the Australian market for vanadium flow batteries for long duration energy storage. VSUN Energy was set up in 2016 and is widely respected for its VFB expertise. AVL's vertical integration strategy incorporates processing vanadium to high purity, manufacturing vanadium electrolyte and working with VSUN Energy as it develops projects based on renewable energy generation and VFB energy storage.



#### **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).

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> %
HG	Measured	30.6	1.14	46.3	12.9	7.4	6.2
	Indicated	74.8	1.11	47.5	12.6	7.0	5.7
	Inferred	67.9	1.06	45.3	12.1	9.0	6.6
	Subtotal	173.2	1.09	46.5	12.5	7.8	6.1
LG	Indicated	61.8	0.55	26.1	7.1	26.6	16.3
	Inferred	142.5	0.48	24.9	6.6	28.9	15.2
	Subtotal	204.3	0.50	25.3	6.8	28.2	15.5
Transported	Inferred	17.9	0.65	31.0	7.3	24.1	14.4
	Subtotal	17.9	0.65	31.0	7.3	24.1	14.4
Total	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	136.6	0.85	37.8	10.1	15.8	10.5
	Inferred	228.2	0.66	31.4	8.3	22.6	12.6
	Subtotal	395.4	0.77	34.8	9.3	19.1	11.4

Note: Totals may not add up due to rounding



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

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

The information in this announcement relating to mineral resource estimates for the Australian Vanadium Project is extracted from the announcement entitled '39% Increase in High Grade Measured and Indicated Mineral Resource' released to the ASX on 7 May 2024 which is available on the Company's website <a href="https://www.avl.au">www.avl.au</a>.

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.