



ASX ANNOUNCEMENT

12<sup>TH</sup> JUNE 2020

## VSUN ENERGY INCLUDED IN MICROGRID GRANT RECIPIENT GROUP

*Federal grant for Regional and Remote Communities with project evaluation to include vanadium redox flow battery modelling*

### KEY POINTS

- Queensland Farmers' Federation has received a grant from the Federal Government's Regional and Remote Communities Reliability Fund
- VSUN Energy is included in the recipient group to provide energy analysis and modelling for vanadium redox flow batteries (VRFBs) as a potential battery storage solution
- Project to consider the benefits of microgrids and energy storage to Queensland and New South Wales agricultural energy consumers and networks
- Analysis will commence on four virtual microgrids
- VSUN Energy's storage opportunities continue to grow, as focus shifts to sustainable, long duration storage alongside renewable generation deployment

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Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce that its 100% owned subsidiary, VSUN Energy is part of a group of companies working with Queensland Farmers' Federation (QFF) which has been awarded \$654,807 to assess the advantages of microgrids through the Federal Government's Regional and Remote Communities Reliability Fund. VSUN Energy will receive payment for the modelling work it undertakes, with a portion of in-kind contribution to assist the project.

Other members of the group include Cotton Australia, ReAqua and Constructive Energy.

AVL's Managing Director, Vincent Algar commented, "We are delighted that the QFF project has been chosen to receive this grant and will enable information to be provided to their members about the way renewable energy and potential storage technologies such as vanadium redox flow

batteries, can provide security of cost and energy supply. VSUN Energy has seen a significant increase in enquiries and interest for microgrids and stand-alone power systems (SPS) in agricultural settings and in the mining sector in 2020. VSUN Energy's focus on building strong relationships with major VRFB manufacturers over the last few years has enabled the company's ability to provide robust and detailed modelling of various microgrid and SPS opportunities."

Ben Lee, Managing Director of ReAqua says that the grant is great news for industry and 'We look forward to the opportunity to work with the Project Partners and VSUN Energy to understand how solar pumping and battery storage can make solar irrigating within a microgrid more viable.'

VSUN Energy and ReAqua built a relationship through the inaugural National Renewables in Agriculture Conference and Expo held in Wagga Wagga, NSW last year. The agricultural sector was a perfect fit for the Federal Government's grants to assess microgrid capability, and VSUN Energy provided a letter of support to the project for the grant application.

For further information, please contact:

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

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

## ABOUT AUSTRALIAN VANADIUM LIMITED

AVL is an Australian-owned resource company focused on production of high value vanadium products in Australia. AVL is 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 and intends to produce a value-added vanadium product in Australia prior to sale to steel, battery and specialty chemical customers.

The Australian Vanadium Project is currently one of the highest-grade vanadium projects being advanced globally, with 208.2Mt at 0.74% vanadium pentoxide ( $V_2O_5$ ) and containing a high-grade zone of 87.9Mt at 1.06%  $V_2O_5$  reported in compliance with the JORC Code 2012 (see ASX announcement dated 4th March 2020 '*Total Vanadium Resource at The Australian Vanadium Project Rises to 208 Million Tonnes*').

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.

AVL has developed a local production capability for ultra-high purity vanadium electrolyte, which forms a key component of vanadium redox flow batteries (VRFB). AVL, through its 100% owned subsidiary VSUN Energy Pty Ltd, is actively marketing the VRFB in Australia.

## 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).

2020 Feb	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	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	25.1	1.10	45.4	12.5	8.5	6.5	2.9
	Inferred	52.7	1.04	44.6	11.9	9.4	6.9	3.3
	<b>Subtotal</b>	<b>87.9</b>	<b>1.06</b>	<b>44.7</b>	<b>12.2</b>	<b>9.2</b>	<b>6.8</b>	<b>3.2</b>
<b>LG 2-5</b>	Indicated	44.5	0.51	25.0	6.8	27.4	17.0	7.9
	Inferred	60.3	0.48	25.2	6.5	28.5	15.3	6.7
	<b>Subtotal</b>	<b>104.8</b>	<b>0.49</b>	<b>25.1</b>	<b>6.6</b>	<b>28.0</b>	<b>16.1</b>	<b>7.2</b>
<b>Trans 6-8</b>	Inferred	15.6	0.65	28.4	7.7	24.9	15.4	7.9
	<b>Subtotal</b>	<b>15.6</b>	<b>0.65</b>	<b>28.4</b>	<b>7.7</b>	<b>24.9</b>	<b>15.4</b>	<b>7.9</b>
<b>Total</b>	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	69.6	0.72	32.4	8.9	20.6	13.2	6.1
	Inferred	128.5	0.73	33.5	8.8	20.2	11.9	5.4
	<b>Subtotal</b>	<b>208.2</b>	<b>0.74</b>	<b>33.6</b>	<b>9.0</b>	<b>19.8</b>	<b>12.1</b>	<b>5.6</b>

## 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.