ASX ANNOUNCEMENT 6 NOVEMBER 2024

REALISING AVL'S UTILITY-SCALE VANADIUM FLOW BATTERY STRATEGY

KEY POINTS

- **The Company's wholly owned subsidiary, VSUN Energy Pty Ltd (VSUN Energy), has commenced Project Lumina, the development of a modular, scalable, turnkey, utility-scale battery energy storage system (BESS) using vanadium flow battery (VFB) technology, for use in Australian energy markets.**
- **Analysis completed by VSUN Energy indicates the merits of a 4-hour 100MW VFB BESS with a levelised cost of storage (LCOS) of A$274/MWh (± 30%). Such an LCOS for a VFB BESS would be competitive with the LCOS of similar lithium-ion BESS products currently in the market.**
- **Project Lumina is an important next step in VSUN Energy's ongoing objective of developing solutions to address Australia's growing requirement for long duration energy storage, while providing AVL with an opportunity for offtake of its planned production of vanadium oxides from the Australian Vanadium Project and Australian-manufactured vanadium electrolyte, as part of the Company's 'pit to battery' strategy.**
- **AVL is considering a range of funding options for Project Lumina at either parent company or asset level within the AVL group, which is expected to include debt supported by strategic equity or cornerstone equity funding, including from Australian Government agencies.**

Australian Vanadium Limited (ASX: AVL, the Company or AVL) is pleased to announce Project Lumina,[1] targeting the development by VSUN Energy of a BESS that is modular, scalable, turnkey and suited for medium to long duration battery storage applications of utility scale, employing well-established VFB technology[2] optimised for local conditions.

VSUN Energy has completed Phase 1 of Project Lumina,[3] indicating that the LCOS of a 100MW VFB BESS would be competitive with the LCOS of lithium-ion BESS products of similar capacity that are currently available in the market. Figure 1 below compares Project Lumina's LCOS estimated range for a 4-hour and an 8-hour 100MW VFB BESS with that for a similar utility scale lithium-ion BESS.[4]

[1] See Section 1 for more details on the purpose of Project Lumina.
[2] See Section 2 for details of the selected battery technology.
[3] See Section 3 for more details on the scope of Phase 1 of Project Lumina.
[4] See Section 4 for details of the Phase 1 LCOS calculations, having regard to the LCOS modelling approach and the Project Lumina LCOS vs Li-ion LCOS comparison approach set out in Appendix A, the core assumptions set out in Appendix B and the conclusions detailed in Appendix C.

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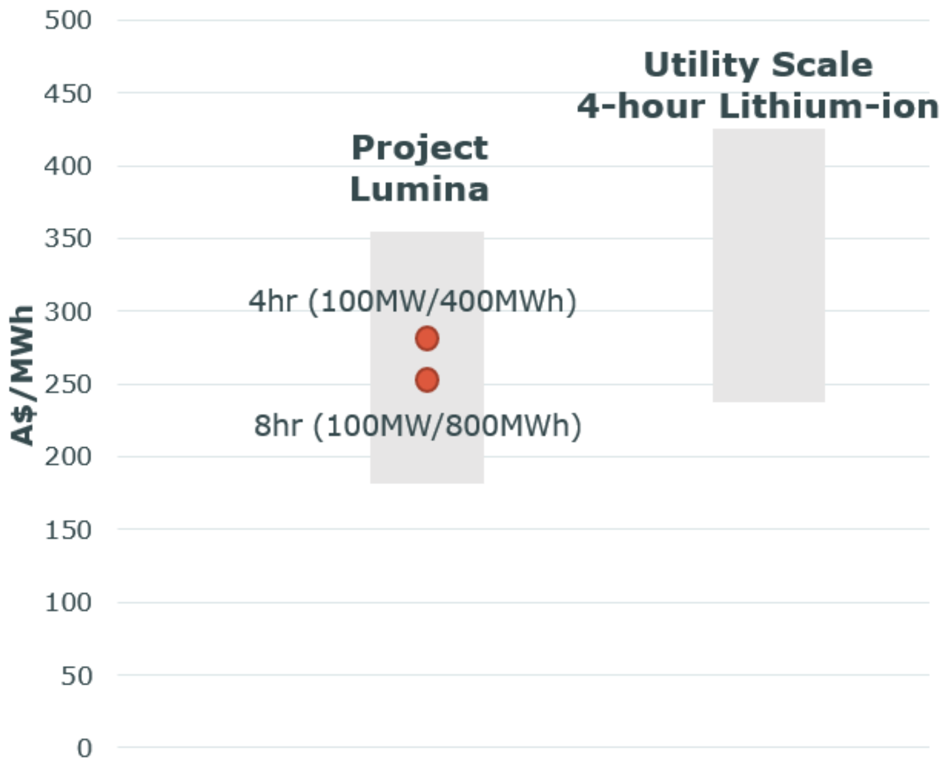

Figure 1 - Project Lumina LCOS range compared to lithium-ion LCOS range[5]

This work has given the Company confidence to proceed with Phase 2 of Project Lumina,[6] being the detailed design of a VFB BESS solution. Should this satisfy the Company's gated development process, it would deliver a utility scale energy storage solution for deployment to address Australia's growing requirement for long duration energy storage for the energy transition.[7]

AVL's Chief Executive Officer, Graham Arvidson comments, "*We are pleased to be able to share the significant steps that we have taken to develop the downstream value of our business. The need for long duration energy storage in Australia is rapidly growing and the work the team is undertaking with Project Lumina is a key enabler to create a platform for us to deliver competitive long duration battery energy storage solutions.*

"The scale of the projects VSUN Energy is pursuing aims to provide AVL with the ability to utilise our own manufactured vanadium electrolyte, ultimately unlocking the development pathway and full value of the Australian Vanadium Project."

[5] Based on utility-scale battery without subsidies (100MW, 4-hour / 400MWh and 100MW, 8-hour / 800MWh compared to a 100MW, 4-hour / 400MWh lithium-ion battery).
[6] See Section 6 for more details of the next steps of Project Lumina.
[7] See Section 5 for details on the battery energy storage market.

Details of Project Lumina are set out below, with the aim of Phase 1 of the project to assess the likely cost competitiveness of a VFB BESS solution and Phase 2 to undertake engineering design and funding for project execution of a VFB BESS solution:

1. Purpose of Project Lumina

As part of the Company's vertically integrated 'pit-to-battery' strategy,[8] Project Lumina is focused on growing the VFB BESS market in Australia through the Company's wholly owned subsidiary, VSUN Energy. This strategy is designed to create an offtake pathway for vanadium oxides produced from the Company's proposed Australian Vanadium Project. These vanadium oxides would be utilised in the midstream production of vanadium electrolyte,[9] supporting VSUN Energy's downstream VFB BESS installation, operation and maintenance business.[10]

In growing the VFB BESS market, Project Lumina aims to develop a modular, scalable, turnkey, utility-scale BESS using VFB technology.

AVL's upstream exposure to future vanadium production from its high-grade Tier-1 Australian Vanadium Project is a key competitive advantage for Project Lumina. In the early stages of VFB BESS deployment, third-party vanadium oxides can be used to advance the battery strategy independently of the Australian Vanadium Project's timeline. However, longer term, the Company's strategy remains focused on utilising its own high purity vanadium oxides in future VFB BESS deployments.

2. Battery technology selection

Project Lumina proposes to use proven technology provided by leading international VFB original equipment manufacturers (OEMs) and engage Australian based engineering and design expertise to optimise the design and delivery for Australian conditions to assist in derisking deployment of VFB BESS at utility scale.

One of the major benefits of VFB BESS, compared to lithium-ion BESS, is their ability to conduct multiple full and partial charge and discharge cycles per day without significant degradation over time. That flexibility allows the optimisation of the pricing arbitrage between charge and discharge cycles, as well as increasing the available hours of discharge potential throughout the day.

Further benefits of VFB BESS include:

- Proven technology with a history of nearly 20 years of grid-connected VFB BESS.
- Ability to expand discharge duration to over 4 hours, highly suited to 8-12 hour applications.
- The potential for full depth of discharge through life of battery.

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[8] See ASX announcement dated 5 August 2024 *'Diggers & Dealers Mining Forum Presentation'*
[9] See ASX announcement dated 19 March 2024 *'Battery Ready Vanadium Electrolyte Produced'*
[10] See ASX announcement dated 16 September 2024 *'Electrolyte Successfully Deployed in VFB for Horizon Power'*

- The operating life of a conventional VFB BESS has traditionally been estimated at 30+ years. As part of Phase 2 of Project Lumina, VSUN Energy is proposing to design the VFB BESS to extend this to 40+ years in a 'deconstructed' form.[11]
- Non-flammable technology.
- High temperature tolerance, with minimal requirements for heating and cooling infrastructure.
- Potential for positive end-of-life environmental impact, with the likelihood of over 99% of commercial end-of-life reuse and recyclability.[12]

3. Phase 1 of Project Lumina

VSUN Energy recently completed Phase 1 of Project Lumina, an internal analysis which has undergone an independent external review, to assess whether a VFB BESS solution is likely to be competitive in the energy storage market.

The outcome of Phase 1 indicates the merits of a modular, scalable, turnkey, utility-scale 100MW VFB BESS solution capable of delivering LCOS of A$274/MWh for a 4-hour VFB BESS and LCOS of A$251/MWh for an 8-hour VFB BESS.[13] The LCOS calculations used scoping study level capital and operating cost estimates and inputs to calculate a LCOS at ± 30%.

Phase 1 has determined that a 100MW VFB BESS is likely to be the optimal base unit for deployment. VSUN Energy is developing a modular unit to allow for a VFB BESS solution that could be scaled in terms of power and/or duration to meet specific demand requirements. With growing demand for grid-scale energy storage to support the transition to renewable energy, this storage solution is anticipated to ultimately be scaled and deployable on a gigawatt-hour scale.

VSUN Energy will run parallel work for both a 4-hour (100MW/400MWh) VFB BESS and an 8-hour (100MW/800MWh) VFB BESS based on the Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) projections that battery discharge requirements will increase to 8 to 12 hours over the next 5 to 10 years.[14]

4. Phase 1 LCOS calculations

For the technical, capital and operational metrics that support the LCOS calculations, VSUN Energy sought expressions of interest from leading international VFB OEMs and Australian engineering,

[11] 'Deconstructed' VFBs retain the modularisation benefits of conventional VFBs but may potentially offer more economical maintenance and expansion options, lower operating costs and increasing operating life.
[12] '*Advancements & Development of Sumitomo's Flow Battery Technology*', 40th Anniversary Flow Battery Symposium, October 2024
[13] See Section 4 for details of the Phase 1 LCOS calculations, having regard to the LCOS modelling approach set out in Appendix A, the core assumptions set out in Appendix B and the conclusions detailed in Appendix C.
[14] https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp

procurement and construction companies, to deliver initial cost estimates for a fully deployed and grid connected 100MW VFB BESS.

The key technical specifications used for calculating the LCOS in Phase 1 are shown in Table 1.

Table 1 - Key technical specifications used for calculating LCOS

	4-hour VFB BESS	8-hour VFB BESS
Power	100 MW	100 MW
Capacity	400 MWh (non-degrading)	800 MWh (non-degrading)
Duration	4 hours	8 hours
Utilisation (cycle days / year)	350 days/year[15]	350 days per year
Depth of discharge	90%[16]	90%
Cycles per day	1.25[17]	1
Round trip efficiency	75%[18]	75%
Targeted battery life	40 years[19]	40 years

The outcome of Phase 1 of Project Lumina provided an LCOS calculation of A$274/MWh for a 4-hour VFB BESS and A$251/MWh for an 8-hour VFB BESS to a scoping study level accuracy of ± 30%, based on the modelling approach set out in Appendix A and the core assumptions set out in Appendix B.

VSUN Energy engaged an independent external consultant to undertake a detailed review of the LCOS model, using Project Lumina's base case battery specification, including the basis for the model, the calculation methodology, the key inputs and assumptions, the key output from the model (i.e. the VFB BESS LCOS range for different scenarios) and an assessment of how the VFB BESS LCOS compares to the LCOS for similar competing lithium-ion based BESS, on that the basis the LCOS model uses scoping study level capital and operating cost estimates and inputs to calculate

[15] Lazard Levelized Cost of Energy Report, June 2024, https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024-_vf.pdf
[16] Based on OEM technical data, which is conservative given that VFBs are capable of discharging 100%.
[17] VSUN Energy's initial analysis has determined that the operating parameters of the proposed 4-hour 100MW VFB BESS could potentially be deployed a minimum of 1.25 cycles per day (i.e. five hours of discharge per day, comprising a four-hour evening peak discharge and a one-hour morning peak discharge). VFBs have no limitation on the number of cycles while Li-ion batteries are typically limited to one cycle per day. In theory a VFB could perform three cycles per day, meaning 1.25 cycles per day is relatively conservative.
[18] Based on OEM technical data.
[19] As part of Phase 2, VSUN Energy is pursuing a VFB BESS design that extends this to 40+ years in a 'deconstructed' implementation. 'Deconstructed' VFBs retain the modularisation benefits of conventional VFBs but may offer more economical expansion options, lower operating costs and longer operating life.

the LCOS (±30% accuracy). The conclusions of the review support VSUN Energy's analysis of Phase 1 of Project Lumina, as detailed in Appendix C.

5. Battery energy storage market

AEMO's 2024 ISP forecasts the requirement for medium duration (four to 12 hours as defined by AEMO) storage in the National Electricity Market (NEM) to grow from approximately 13GWh in 2024/25 to an estimated 32GWh by 2030, and 81GWh by 2040 (excluding deep storage requirements already allocated to large scale pumped hydro projects).[20]

The South-West Interconnected System Demand Assessment (SWISDA) forecasts an additional 50GWh of growth to 2040 for the Wholesale Electricity Market (WEM) in Western Australia (excluding smaller regional networks and microgrid systems).[21]

Combined, the NEM and the WEM are expected to require an average of 7GWh of new installed medium storage per annum. The implied average duration for AEMO's forecast energy storage capacity, excluding pumped hydro, is approximately 11 hours.

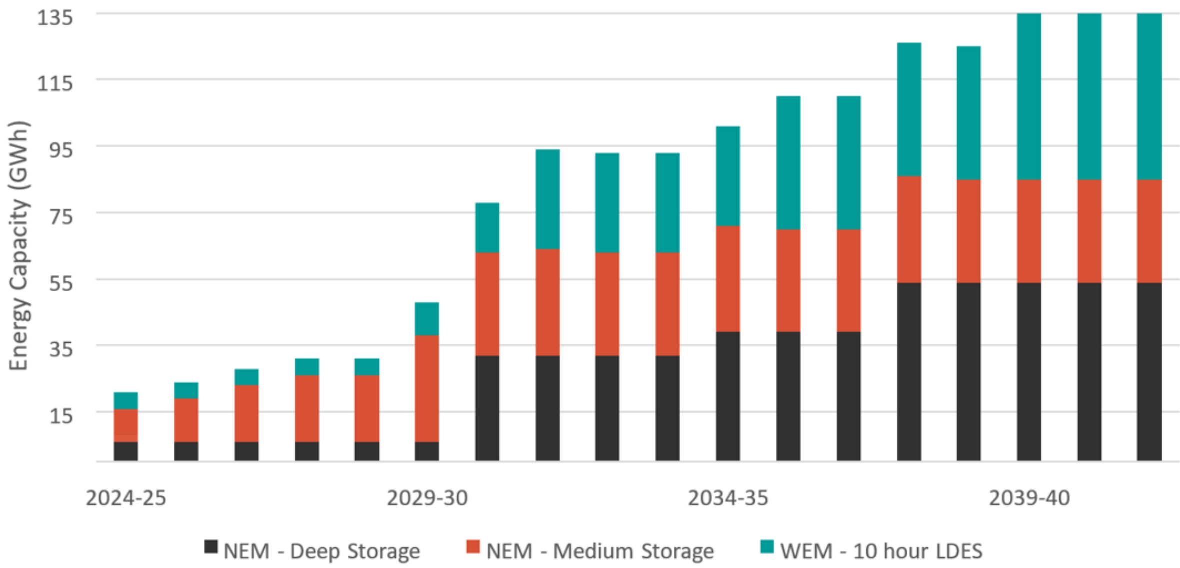

Figure 2 - AEMO NEM and WEM Deep and Medium Storage Forecasts 2024 to 2042[22]

The inherent ability to scale VFB BESS power and duration separately is a key differentiator to lithium-ion BESS, allowing VFB BESS systems to be expanded to add duration to meet AEMO requirements, which may drive an improved LCOS.

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[20] https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp
[21] Energy Policy WA (EPWA), 2024. SWIS Demand Assessment. p. 8, fig. 3.
[22] Source: Australian Energy Market Operator (AEMO), 2024. 2024 Integrated System Plan. p. 66, fig. 20.

VSUN Energy is currently in discussions with several sophisticated energy offtakers for the potential deployment of VFB BESS solutions in Australia.[23] VSUN Energy is continuing to progress these discussions, with the aim of having a developed pipeline of projects for the deployment of utility scale VFB BESS solutions.

6. Next steps

The work completed in Phase 1 has given the Company confidence to proceed with Phase 2 of Project Lumina, to deliver the detailed design of a VFB BESS solution, which is expected to refine the Phase 1 assumptions and develop an executable delivery strategy. Key aims of Phase 2 include the:

- Development of a construction-ready, detailed design and delivery strategy for modular, commercial, turnkey, utility-scale 100MW VFB BESS on a 4-hour (100MW/400MWh) and 8-hour (100MW/800MWh) duration.
- Delivery of a definitive basis for estimates of LCOS, capital cost, operating cost and revenue opportunities, refining from the Phase 1 accuracy of ± 30%.
- Exploration of the option of a 'deconstructed' VFB BESS to drive optimised economic returns and to potentially extend operational life to 40 years and beyond.
- Optimisation of the design with a cost-effective means of independently scaling either power (MW) or duration (MWh of discharge) to capture opportunities emerging from the evolution of the Australian energy markets and deliver a competitive advantage via in-built optionality.
- Advancement of conversations with potential energy offtake partners for the deployment of energy storage solutions.
- Progression of discussions on land access for the future deployment of energy storage solutions.
- Continued development of a funding strategy (debt and equity) to allow for the rapid deployment of energy storage solutions.
- Determination of the merits of deploying a VSUN Energy Build-Own-Operate (BOO) business model as well as delivering on an engineering, procurement and construction (EPC) basis.

VSUN Energy has a team of leading VFB industry experts to support the development of Project Lumina and the execution of this strategy.[24]

The intention of Phase 2 is for the Company and potential third-party investors to be able to make a final investment decision (FID) on the deployment of utility scale VFB BESS solutions by VSUN

[23] These discussions remain confidential and preliminary in nature and should not be taken to be indications that any discussions will result in a binding agreement.
[24] See ASX announcement dated 4 June 2024 *'Appointments to Accelerate Uptake of Vanadium Flow Batteries'*

Energy in Q3 CY2025. The Company recognises that, as the work progresses and options are explored, the timeline may change.

The Company is considering a range of funding options for the deployment of VFB BESS from Project Lumina, which is expected to be funded by a mix of debt and strategic equity or cornerstone equity funding options, including Australian Government Agencies. AVL will continue to progress discussions, with the aim of delivering funding options with the project FID.

VSUN Energy will develop projects through gated development stages and projects will only be progressed if they meet investment hurdles, such as an acceptable internal rate of return (IRR).

Project Lumina has the potential to position the Company as a globally competitive supplier of BESS solutions and battery materials, realising its vertically integrated business model in Australia. This facilitates the delivery of value across the supply chain from the Company's upstream Australian Vanadium Project, through its operational midstream vanadium electrolyte production capability and into VSUN Energy's downstream activities in energy markets. The successful implementation of this strategy would assist in providing a secure and resilient domestic battery supply chain, in alignment with the Australian Government's National Battery Strategy which is part of its Future Made in Australia agenda.[25]

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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.

[25] https://treasury.gov.au/publication/p2024-526942

APPENDIX A – Levelised Cost of Storage

Overview, definition and modelling approach

LCOS can be described as the total lifetime cost of the investment in an energy storage technology divided by its cumulative delivered electricity (where delivered electricity can refer to electrical energy or electric power).[26]

It reflects the average price at which electricity can be sold for the investment's net present value to be zero (i.e. its revenue requirement) and is therefore analogous to the concept of Levelised Cost of Energy (LCOE) for generation technologies.

VSUN Energy has used the LCOE and LCOS modelling approach[27] used by the Australian Energy Regulator (AER) and other industry participants to calculate the LCOS of energy storage systems. This modelling approach has undergone an independent external review.[28]

LCOS comparison approach – Project Lumina LCOS vs Li-ion LCOS

Lazard regularly publishes LCOE and LCOS data to the market and is recognised as one of the industry benchmarks for both metrics. In its latest publication, Lazard's LCOS for a comparative utility scale lithium-ion 4-hour battery is between US$170/MWh (A$240/MWh) and US$296/MWh (A$423/MWh).[29]

The Lazard Li-ion LCOS is calculated using some different input assumptions to the assumptions used by Project Lumina, including:

- the Lazard LCOS calculation is post-tax whereas the calculation for Project Lumina is pre-tax;
- depreciation in the Lazard LCOS calculation is taken over 5 years while the Project Lumina calculation is taken over 20 years;
- the Lazard LCOS calculation assumes 20% debt funding, whereas the Project Lumina calculation is on an unlevered basis;
- the Lazard LCOS calculation assumes a significant Australian Federal Government tax credit; and
- a real discount factor of ~9.0% is used in the Lazard LCOS calculation whereas Project Lumina uses a 7.5% discount factor.

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[26] Lazard, Levelized Cost of Energy, June 2024. Levelised Cost of Storage Comparison—Methodology page 43.
[27] https://www.aer.gov.au/system/files/Wholesale%20electricity%20market%20performance%20report%202022%20-%20LCOE%20%26%20LCOS%20modelling%20approach%2C%20limitations%20and%20results_0.pdf
[28] See Appendix C for details.
[29] Lazard, Levelized Cost of Energy, June 2024, https://www.lazard.com/media/gjyffoqd/lazards-lcoeplus-june-2024.pdf

Addressing the differences in input assumptions:

- the Australian Federal tax credit plus depreciating 100% of capex over 5 years in the Lazard model largely offsets the net impact of debt funding costs and tax payments in the same model; and
- a 9.0% discount factor would increase Project Lumina base case LCOS for a 4-hour VFB from A$274/MWh (± 30%) to A$313/MWh for a net impact of A$39/MWh.

APPENDIX B – Assumptions for VFB LCOS calculations

Details of the core assumptions made in calculating the LCOS in Project Lumina's Phase 1 are as follows:

- the battery acts as a load when charging, and as a generator when discharging;
- charging occurs at the lowest possible daily spot prices;
- forced outages are assumed to be 0% because the battery is inactive for about 60% of the day;
- batteries are assumed to be fully discharged each day i.e. 100 MW discharged for 4 hours;
- the capital cost perimeter is the boundary of the site, including capital cost for engineering, procurement, construction and commissioning to get the site 'generation ready';
- all capex, opex and revenue numbers in the LCOS model are derived from the throughput, capacity and duration specifications in Table 1 above;
- the cell stack is replaced after the battery design life of (20 years);
- capital cost estimates are based upon:
  - battery cell stack and OEM technical and commercial submissions that VSUN Energy has received from leading international VFB OEMs with long term, proven track records in delivering successful VFB solutions; and
  - balance of electrical systems, including power conversion system (PCS), based on budget pricing for Australian based NEM compliant BESS systems;
- operating cost estimate of A$1.86/kWh with a 40-year operating life and full battery stack replacement after Year 20;
- vanadium electrolyte costs are derived from the following key parameters and utilise AVL's knowledge of electrolyte conversion costs as an electrolyte producer:

Input Parameter	Input Value	Comment
V_2O_5 cost US$/lb	10.0	Base case is assumed to be US$10/lb
Electrolyte concentration V_2O_5 mol/litre	1.7	Equivalent to 0.155 kg V_2O_5/litre or 0.342 lb V_2O_5/litre
V_2O_5 energy equivalent per tonnes/MWh	7.9	7.9 tonnes/MWh calculated from electrolyte concentration of V_2O_5 that AVL is currently producing

- economic assumptions used for the 100MW, 400MWh VFB battery LCOS calculation are summarised in the table below:

Input Parameter	Input Value	Comment
Discount rate/ weighted average	7.5% (real)	AEMO engaged Synergies Economic Consulting to recommend the discount rate for the 2021 and 2022 ISP

Input Parameter	Input Value	Comment
cost of capital (WACC)		(focused on the NEM). Synergies Economic Consulting recommended a discount rate of 7.2% for ISP/NEM projects. AEMO engaged Oxford Economics to review and validate Synergies Economic Consulting WACC recommendations. Oxford Economics' Cost of Capital survey 2023 for AEMO validated Synergies Economic Consulting WACC recommendations and gave actual examples of WACC for battery storage projects, ranging from 6% to 8.5%.
Foreign exchange rate (AUD:USD)	0.7	AVL internal assumption, consistent with the market and other industry benchmarks.
Project life	40 years	Model period assumption of 40 years, with cell stack life of 20 years and a significant percentage of system electrics replaced after 20 years. Vanadium electrolyte is reused or recycled at end of battery life.
Depreciation	20 years	OEM life span for VFB batteries is 20 to 25 years.
Debt amount (%) Cost of debt (%)	Unlevered	The model is assumed to be unlevered (equity funded) for simplicity.
Tax (%)	N/A	LCOS is calculated pre-tax. Post-tax LCOS will depend on project funding structure and potential tax incentives, benefits and/or subsidies.
Inflation (%) (nominal case)	3.00%	AVL assumption based on CPI forecasts which are consistent with external benchmarks and long-term CPI forecasts.
Terminal value	-	A perpetuity model has been used for terminal value. A salvage value model recovering electrolyte was calculated as an alternative. Both the terminal value perpetuity model and salvage value model give similar results and are not material to the calculated LCOS value.

APPENDIX C – Conclusions

VSUN Energy engaged an independent external consultant to undertake a detailed review of the LCOS model, using Project Lumina's base case battery specification, including the basis for the model, the calculation methodology, the key inputs and assumptions, the key output from the model (i.e. the VFB BESS LCOS range for different scenarios) and an assessment of how the VFB BESS LCOS compares to the LCOS for similar competing lithium-ion based BESS. The review was conducted on the basis that the LCOS calculations used scoping study level capital and operating cost estimates and inputs to calculate LCOS at ± 30%. The key conclusions reached were as follows:

- **LCOS model**: The LCOS model used by VSUN Energy is consistent with industry benchmarks and precedents for calculating LCOS for battery storage.
- **Base case 4-hour 100MW (400MWh) VFB BESS**:
  - **Model assumptions and inputs**: VSUN Energy obtained external advice from subject matter experts and consultants and/or obtained quotes from credible industry suppliers to support all key data inputs and assumptions. The independent external consultant concluded that all the input data feeding into the model is likely to be within the scoping study level cost estimate target of ±30%.
  - **Model outputs**: The model calculates an LCOS of A$274/MWh (with a A$192/MWh to A$356/MWh range for a ±30% accuracy). The key drivers impacting the LCOS are the number of discharge cycles, the battery cell stack capital cost, the discount rate/WACC and the price of V_2O_5.
  - **Sensitivity analysis**: Changing each of the above key variables by ±30% individually still results in an LCOS within the calculated range of A$191.6/MWh to A$355.9/MWh.
- **Base case 8-hour 100MW (800MWh) VFB BESS**:
  - **Model assumptions and inputs**: VSUN Energy's 8-hour battery case model uses the same model inputs and assumptions as for LCOS calculations for the base case 4-hour 100MW (400MWh) VFB, with the following key changes:
    - capex and installation costs are adjusted using the same methodology as the base case for the larger 8-hour battery;
    - charge costs are increased based on the larger 8-hour battery; and
    - the number of cycles is reduced from 1.25 to 1.00 cycles per day based advice from internal and external subject matter experts.
  - **Model outputs**: The model calculates an LCOS of A$251MWh (A$175/MWh to A$325/MWh range for a ±30% accuracy). The inputs and assumptions were reviewed by the independent external consultant and it was confirmed that they are based on the

same methodology, source data and assumptions used for the 4-hour VFB, with the required adjustments to upgrade to an 8-hour VFB. It was concluded that the calculated LCOS is likely to be within the scoping study level cost estimate target of ±30%.

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_2O_5), containing a high-grade zone of 173.2Mt at 1.09% V_2O_5, 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 VFBs 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.

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 www.avl.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

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future matters. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results and may cause AVL's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in technology development, mine development and production, technology advancement, battery development, geological, mining and processing technical problems, skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations a including labour stoppages, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. There can be no assurance that forward-looking statements will prove to be correct.