



ASX ANNOUNCEMENT

31 March 2026

DEVELOPMENT OF ELECTROLYTE PRODUCTION TECHNOLOGY

AVL advances its technology platform targeted at lowering the delivered cost of electrolyte

KEY POINTS

- **AVL is progressing the development of its V-NOMAD™ electrolyte production technology platform, which is intended to reduce the delivered cost of vanadium electrolyte for gigawatt-hour scale vanadium flow battery (VFB) applications**
- **The technology platform incorporates a range of internally developed design features and process approaches with the objective of reducing electrolyte logistics and storage requirements, supporting a range of vanadium feedstocks and reducing VFB commissioning costs, while maximising Australian local content**
- **The Company has applied for Industry Attraction Fund support to progress design and construction and is targeting the proposed Kalgoorlie VBESS project¹ as a potential initial deployment, with further applications possible across AVL-developed projects and third-party VFB installations**
- **AVL has appointed Sedgman to support detailed engineering, modularisation and execution readiness planning for the technology platform as it progresses toward potential deployment**

Australian Vanadium Limited (ASX: AVL) (“AVL” or “the Company”) is pleased to advise that it is progressing the development of its V-NOMAD™ technology platform, a vanadium electrolyte production technology which incorporates internally developed know-how, intended to support lower delivered cost of vanadium electrolyte for gigawatt-hour (GWh) scale VFB applications.

The technology platform forms part of AVL’s broader strategy to develop a vertically integrated vanadium mining, processing, electrolyte production and VFB deployment business. It is being developed with the objective of addressing cost, logistics and deployment considerations associated with large-scale VFB projects, including applications in remote, off-grid and high-temperature environments, as well as behind-the-meter applications such as data centres and industrial energy systems.

Traditional centralised electrolyte production models typically involve significant logistics, storage and working capital requirements at GWh scale, particularly for remote or staged project deployments.

¹ See ASX announcement dated 1 February 2026 ‘AVL’s Integrated Capability Underpins Kalgoorlie VBESS EOI Submission’ and ASX announcement dated 16 February 2026 ‘Agreement with Sumitomo Electric - Kalgoorlie VBESS Project’

The Company’s Chief Executive Officer, Graham Arvidson comments, *“The development by AVL of the V-NOMAD™ technology platform is a significant advancement in our long-term strategy to support the deployment of utility-scale vanadium flow batteries as long-duration energy storage and other use cases, such as AI data centres, continue to gain momentum globally.*

“At gigawatt-hour scale, electrolyte logistics and storage requirements are a material component of overall project cost and complexity. V-NOMAD™ is being developed to address this challenge directly by enabling electrolyte production to occur at or near the point of use.

“The technology is being developed to effect more efficient production and delivery of electrolyte by reducing logistics and handling requirements at scale across a wide range of applications and operating environments, particularly in remote locations.

“The progression of our V-NOMAD™ technology platform is aligned with our broader development activities, including the proposed Kalgoorlie VBESS project, which if awarded to AVL, would provide an opportunity to utilise the technology in a large-scale application.”

Through a program of testing, engineering design and feasibility work, AVL is progressing the development of a flexible and scalable electrolyte production technology incorporating a range of internally developed design features and process approaches. These include aspects of process flowsheet design, feedstock flexibility, quality management, deployment and logistics strategy, and final electrolyte product format. The technology platform is intended to convert vanadium feedstocks into finished electrolyte product at or near the point of use with the objective of reducing electrolyte logistics and storage requirements, maintaining product quality standards, supporting a range of vanadium feedstocks, reducing VFB commissioning costs and seeking to maximise Australian local content.

A key feature of the technology platform is its architecture which is being developed to enable deployment at or near VFB installation sites (see Figure 1). This approach is intended to reduce electrolyte logistics, handling and storage requirements that may otherwise impact delivered electrolyte costs at scale. The deployment model is being designed to support utilisation of the platform across multiple projects with efficient scalability to meet the needs of specific projects.



Figure 1: Render of a conceptual V-NOMAD™ technology platform

The technology platform is being developed with the objective of supporting lower electrolyte delivered cost while maintaining product quality standards. It is also intended to support flexibility in vanadium feedstock selection and to maximise Australian local content, consistent with AVL's commercial objectives and broader industry and policy settings.

The ability to utilise the technology platform across multiple projects is intended to support VFB deployments in a range of operating environments, including remote mining regions, hot climates, off-grid power systems, data centres and behind-the-meter energy applications. This is intended to position AVL to respond to increasing demand for long-duration energy storage, noting that further development and validation will be required.

The technology platform is being developed with potential application across both AVL-developed projects and third-party VFB installations, subject to further development, validation and commercial arrangements.

To progress the next phase of development, AVL has appointed Sedgman Pty Ltd² (Sedgman) to support detailed engineering and execution readiness planning for the technology. Sedgman's scope includes advancing the technology toward a level of definition suitable for potential construction and deployment, with a focus on scalability, repeatability and disciplined project delivery.

The Company has applied for support under the Industry Attraction Fund to progress the design and construction of an initial large-scale unit using the technology platform and is targeting the proposed Kalgoorlie VBESS project as a potential initial deployment. This approach is intended to align with Australian and State Government objectives to localise critical minerals value chains and support the deployment of long-duration energy storage infrastructure.

The Company continues to pursue appropriate intellectual property protection strategies in support of its development program. This includes the protection of its know-how and, where appropriate, the filing of patent applications that are progressing in the ordinary course. There is no certainty that any patent application will be granted or, if granted, that it will provide commercially meaningful protection.

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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.

² A CIMIC Group company

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.

MINERAL RESOURCE ESTIMATE

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_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
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 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 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.