

BANKABLE FEASIBILITY STUDY UPDATE

Richmond Vanadium Technology Limited ("**Richmond Vanadium Technology**" or the "**Company**") (**ASX: RVT**) is pleased to provide an update on the Bankable Feasibility Study ("**BFS**" or "**Study**") and associated environmental and statutory approvals work for the Richmond - Julia Creek Project.

Key elements of the Study commenced in the June Quarter 2023 with the appointment of DRA Global as the engineering services consultant and Epic Environmental as lead consultant to deliver the Environmental Impact Statement (EIS) under the terms of reference released in April 2023. The terms included:

- Assisting with the delivery of an Environmental Authority and Progressive Rehabilitation, and;
- Delivering a Closure Plan to support a future Mining Lease grant for the project.

The Richmond - Julia Creek Project hosts the world's largest undeveloped vanadium resource of its type and was awarded "co-ordinated project" status by the Queensland Government's Office of the Coordinator General (OCG) in 2022, highlighting its strategic significance to the state¹.

Extensive geological, mineralogical and metallurgical test work commenced early in 2023 at four laboratories in China and Australia.

Following a detailed review of initial results from all work programs and the current vanadium market, the Company has decided to extend the timeframe for completion of the BFS by 6 months, with an expected completion in the June Quarter 2025. Regulatory approvals and a final investment decision are expected in the September Quarter 2025.

The timetable extension has been driven by several internal and external factors including²:

- Expected delays in securing essential services including power, water, reagents, transport logistics and critical non-process infrastructure;
- Additional mineralogical and metallurgical test work including pilot scale testing at the planned Queensland Resources Common User Facility in Townsville;
- Further infill drilling across the resource base and sampling for industrial scale test work and provision of concentrate and final product samples for potential offtake partners;
- Identification of the type of ore that performs best in our existing process flowsheet;
- Refining and optimising the process flowsheet and its location, detailed engineering design, equipment selection and updated capital and operating costs in a volatile cost environment;
- Completing baseline environmental monitoring, technical field work and regional socioeconomic evaluation in partnership with Critical Minerals Queensland and the OCG; and
- Current vanadium market dynamics that are expected to grow significantly from 2026 onwards driven by the global adoption of flow batteries for long duration energy storage.

¹ Refer ASX announcements dated 3 March, 11 April 21 June 2023

² Refer Forward-Looking and Cautionary Statements on Page 6



Richmond Vanadium Managing Director, Mr Jon Price said,

"Richmond Vanadium Technology is focussed on contributing to the creation of a new industry for Australia, the development and global implementation of vanadium redox flow batteries. We need to ensure we have the technical, ESG and financial assessments capabilities, as well as the expected rise in vanadium price to take advantage of the forecast growth in demand for grid-scale energy storage in 2026 and beyond".

"To enable a new industry from raw material to end user product, all levels of government, the investment community and all Australians need to get behind the vanadium sector to make it a global player".

"RVT has a strong balance sheet and is fully funded up to an investment decision next year. We look forward to keeping all stakeholders fully informed as we progress the BFS and approvals according to this updated timeline."

Vanadium Market

Current vanadium supply is dominated by China, Russia and South Africa with ~135,000t produced annually. Demand has historically come from the steel and specialty alloy industry accounting for over 90% of production. Future demand growth is forecast to be driven by the global adoption of the vanadium redox flow battery ("VRFB") that is now in mainstream use around the world stabilising existing power grids and storing renewable energy. These large utility scale long duration battery energy storage systems ("BESS") are seen as a key solution for the energy transition. VRFBs are fully scalable, have no risk of fire or explosion, have a long life of over 25 years and are recyclable with the vanadium electrolyte having an infinite life. As battery production and scale ramps up, the latest generation of VRFBs are also the lowest cost on a levelised cost of storage basis.



Figure 1: Projected supply shortage to meet future demand







As shown in Figure 1, it is forecast that existing and latent sources of supply will not meet growth in demand in 2026 onwards with a projected shortfall of 74,000 tonnes per annum.

New sources of supply will be required if global energy transition targets are to be met. Australia is not currently a producer of vanadium but hosts the third largest resource globally.

Geology, Metallurgy and BFS

A detailed geological and mineralogical assessment has been completed across the project area and identified variability within the ore zones that requires further work. Vanadium grades remain very consistent both along strike and at depth with the host minerals varying in composition from coarse mica material to very fine clay material with varying calcium contents.

This work has identified the type of ore that performs best in our process flowsheet and provided an opportunity to define a lower calcium, high vanadium coarse ore feed that is optimal for the conventional flowsheet developed in the Pre-Feasibility Study. Calcium is a high reagent consumer and fine material is more expensive to process.

Forecast timing of future work programs for 2024 – 2025 has been completed and includes:

- Continuation of extensive metallurgical test work at both laboratory and pilot plant scale
- Further infill drilling, mineralogical and geological modelling
- Updated mine design, economic evaluation and Mining Lease application
- Refinement and optimisation of the concentrator and recovery plant flow sheets
- Securing key infrastructure and services including power, water, reagents and labour
- Detailed process design, engineering, equipment lists and tender packs
- Updated capital and operating costs and assessment of locations for plant infrastructure
- Baseline environmental monitoring and EIS preparation
- Vanadium market assessment and negotiation with potential offtake partners and financiers.

The timetable to complete the above works has been extended with completion of the BFS and approvals expected in the June Quarter of 2025.

This announcement has been authorised by the Board of Directors of RVT.

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About Richmond Vanadium Technology

Richmond Vanadium Technology Limited (**RVT**) is an Australian minerals company currently advancing its 100% owned Richmond – Julia Creek Vanadium Project (the Project) in North Queensland.

The 1.8Bt Richmond – Julia Creek Vanadium Project has a completed Pre-Feasibility Study demonstrating a technically viable and financially attractive development project. The Project has a completed process flowsheet using conventional techniques with a provisional patent application lodged with IP Australia covering the method for the concentration of vanadium.

RVT is completing a Bankable Feasibility Study and progressing approvals for the Project. Situated between the towns of Julia Creek and Richmond in Queensland, the Project is 500km west of Townsville and 400km east of Mt Isa along the Flinders Highway and Great Northern railway linked to Townsville Port, and close to existing infrastructure.

The Queensland Government declared the Richmond – Julia Creek Vanadium Project to be a Coordinated Project in May 2022, making it the first critical minerals project to be awarded this status.

The Company's Mineral Resource comprises three main prospects - Lilyvale, Manfred and Rothbury, across 5 tenements. Following resource definition drilling on the Lilyvale deposit in Q3 2019, RVT conducted a Mineral Resource update (compliant with the JORC 2012 code) and a maiden Ore Reserve³.

Richmond – Julia Creek Project Mineral Resource and Contained Metal (at 0.30% V ₂ O ₅ cut off)				
Deposit	Category	Tonnage (MT)	V ₂ O ₅ (%)	V ₂ O ₅ (MT)
Rothbury	Inferred	1,202	0.30	3.75
Lilyvale	Indicated	430	0.50	2.15
Lilyvale	Inferred	130	0.41	0.53
Manfred	Inferred	76	0.35	0.26
Totals and Averages		1,838	0.36	6.65

Table 1: Richmond – Julia Creek Project Mineral Resource and contained metal

Note:

Reported in accordance with JORC Code (2012), at cut-off grade 0.3% V_2O_5 .

Metal contents calculated using grades with 3 decimal places.

Metal Content varies from Mineral Resource Update by HGS (IRC:ASX "Intermin announces world-class Vanadium Resource", 20 March 2018, due to arithmetic errors. The table above reflects the correct results for Manfred.

³ Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022





Figure 2: Richmond – Julia Creek Tenement Location Map

JORC Compliance Statement

The information in this announcement that relates to Minerals Resources and Ore Reserves referable to Richmond Vanadium Technology is extracted from the reports titled 'Prospectus' dated 14 October 2022 (which includes an Independent Technical Assessment Report at Schedule 1) and 'Supplementary Prospectus' dated 21 October 2022 released to the ASX on 9 December 2022 and available to view at richmondvanadium.com.au and for which Competent Persons' consents were obtained (together, the **Original Reports**).

Richmond Vanadium Technology confirms that it is not aware of any new information or data that materially affects the information included in the Original Reports and that all material assumptions and technical parameters underpinning the Mineral Resources and Ore reserves estimates in the Original Reports continue to apply and have not materially changed.

Richmond Vanadium Technology confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Original Reports and that each Competent Person's consent remains in place for subsequent releases by Richmond Vanadium Technology of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.



Forward Looking and Cautionary Statement

Certain statements contained in the announcement, including information as to the future financial or operating performance of the Company and its business operations, are forward looking statements. Such forward looking statements are:

- necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies;
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward looking statements; and may include, among other things, statements regarding estimates and assumptions in respect of prices, costs, results and capital expenditure, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions.

The Company disclaims any intent or obligation to publicly update any forward-looking statements, whether as a result of new information, future events or results or otherwise.

The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward looking statements.

All forward looking statements contained in the announcement are qualified by the foregoing cautionary statements. Recipients are cautioned that forward looking statements are not guarantees of future performance and accordingly recipients are cautioned not to put undue reliance on forward looking statements due to the inherent uncertainty therein.