

# POWERING THE FUTURE



ASX : RVT

INVESTOR PRESENTATION



FEBRUARY 2023

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## COMPETENT PERSON STATEMENT

Where the Company refers to the results of the Prefeasibility study, the Mineral Resource Estimate and the Ore Reserve Estimate as outlined in this presentation and as disclosed in the Independent Technical Assessment Report in the Company's Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 and released to the ASX on 9 December 2022, it confirms that it is not aware of any new information or data that materially affects the information included in that Report and that all material assumptions, including the forecast financial information, and technical parameters continue to apply and have not materially changed.

Information on historical exploration results and Mineral Resources and Ore Reserves presented in this presentation, together with JORC Table 1 information, is contained in the Company's Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 and released to the ASX on 9 December 2022.





# BOARD OF DIRECTORS

## JON PRICE

### NON-EXECUTIVE DIRECTOR

Jon has over 30 years' experience in Australia and overseas across all aspects of the industry including exploration, development, construction and mining operations in the gold and advanced minerals sectors. Jon graduated as a metallurgist and holds a Masters in Mineral Economics from the Western Australian School of Mines. He then worked in various gold and advanced mineral operations including general manager of the Paddington gold and St Ives gold operations in the Western Australian goldfields.

More recently, Jon was the founding Managing Director of Phoenix Gold Limited which was acquired by Evolution Mining Limited (ASX:EVN).

Jon is currently a director Horizon Minerals Limited (ASX:HRZ) and a former director of Kingwest Resources Limited (ASX:KWR).

He is a member of the AusIMM.

## DR SHUANG (SHAUN) REN

### MANAGING DIRECTOR

Shaun completed his PhD in Economic Geology at the Australian National University and has over 35 years industrial experience in exploration, project assessment and feasibility studies. He has worked for a list of international mining companies including Rio Tinto, BHP and AngloGold-Ashanti in senior technical and management positions. Since 2016, Shaun has focussed on the Richmond Vanadium Project leading the team to successfully complete the Pre-Feasibility Study.

He is a member of the AusIMM.

## BRENDON GRYLLS

### NON-EXECUTIVE CHAIR

Brendon brings extensive relationships and networks at all levels of business and government.

After 16 years as a state MP and senior cabinet minister in Western Australia his Grylls Group business has grown to include strategic consulting work within the iron ore and gold industry, civil contracting, agriculture, First Nations partnership, aviation and innovative research into carbon abatement and developing new carbon offset projects.



# CORPORATE OVERVIEW

**RVT**

ASX Code

**\$23.4m**

Cash  
(as at 31/12/2022)

**\$52.13m**

Market Cap  
(as at 23/1/2023)

**221.8m**

Shares  
on Issue

**13.1m**

Options  
on Issue<sup>1</sup>

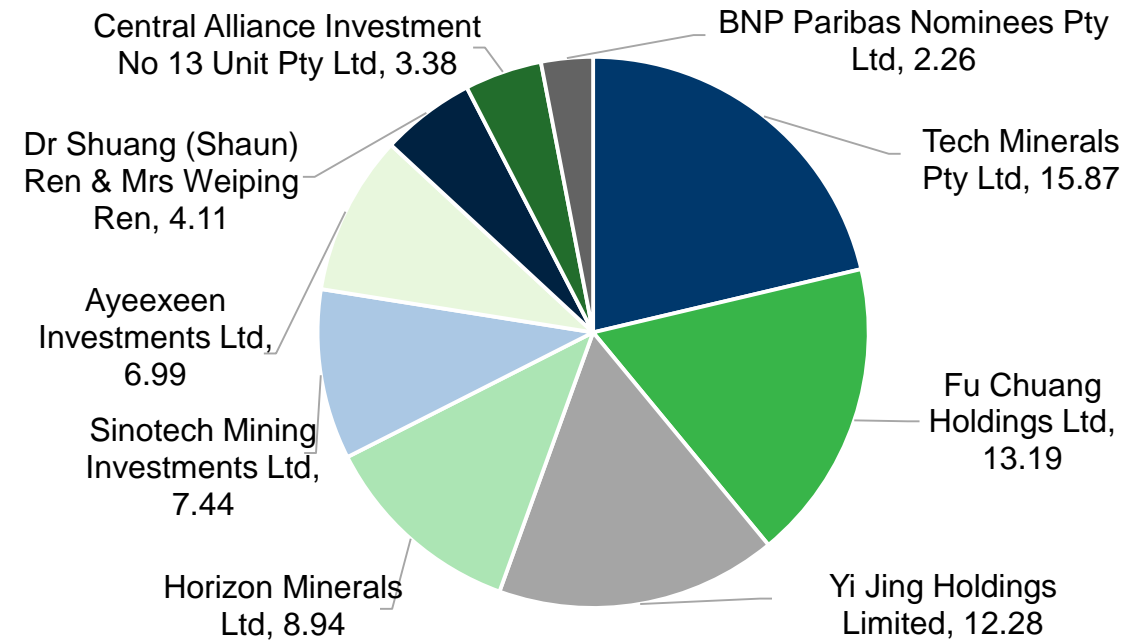
**2.5m**

Performance  
Rights<sup>2</sup>

## Board and Management

Brendon Grylls	Independent Non-Executive Chair
Shuang (Shaun) Ren	Managing Director
Jon Price	Non-Executive Director
Joanne Day	Administration Manager & Company Secretary
Lingli (Lily) Zhao	Chief Project Engineer
Warwick Nordin	Chief Resource Geologist

## Top 10 Shareholders



<sup>1</sup> Includes 6.5m director options and 6.65m Lead Manager options, all of which are escrowed for 2 years to 13 December 2024

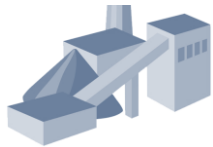
<sup>2</sup> Includes 1.8m director performance rights which are escrowed for 2 years to 13 December 2024

# INVESTMENT HIGHLIGHTS



## World Class Project

One of the largest undeveloped oxide vanadium resources in the world capable of supporting a vanadium operation for +100 years at current throughput rates<sup>1</sup>



## Tested metallurgy with proven technology

Proven metallurgical solution via conventional processing resulting in concentrate grades of 1.82% V<sub>2</sub>O<sub>5</sub><sup>1</sup>

Completed process flowsheet, provisional patent application lodged



## Located in Queensland with good access to infrastructure

Close to existing infrastructure including gas pipeline, HV network line, major highway and railway linked to Townsville Port



## PFS delivers compelling financial returns

Refining recovery at 86.1% produces average production of 12,700t V<sub>2</sub>O<sub>5</sub> pa<sup>1</sup>

At US\$9.60/lb V<sub>2</sub>O<sub>5</sub>, project generates NPV10 of A\$613M with IRR of 38% and payback of 3.2 years<sup>1</sup>



## Promising long-term outlook for Vanadium

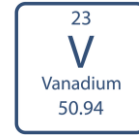
Vanadium poised to play a pivotal role in commercialisation of renewable energy

Vanadium consumption for VRFBs is forecast to grow at an average 20.7% a year from 2020 - 2029<sup>2</sup>



## Lower carbon footprint compared to titanomagnetite projects

Mineralisation located at average depth of 2m to 25m below surface in soft marine sediment - no drilling, blasting, grinding or roasting required<sup>1</sup>



## Critical Mineral – attracts funding

Queensland Government contributing towards constructing a vanadium common-user facility to process vanadium



## Co-ordinated Project Status Awarded

The only critical minerals project to be awarded Coordinated Project status by the Queensland Government

<sup>1</sup> Refer RVT Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022

<sup>2</sup> Outlook for selected critical minerals in Australia 2021 Report, Dept of Industry, Science, Energy & Resources, Australian Government





# WHY VANADIUM

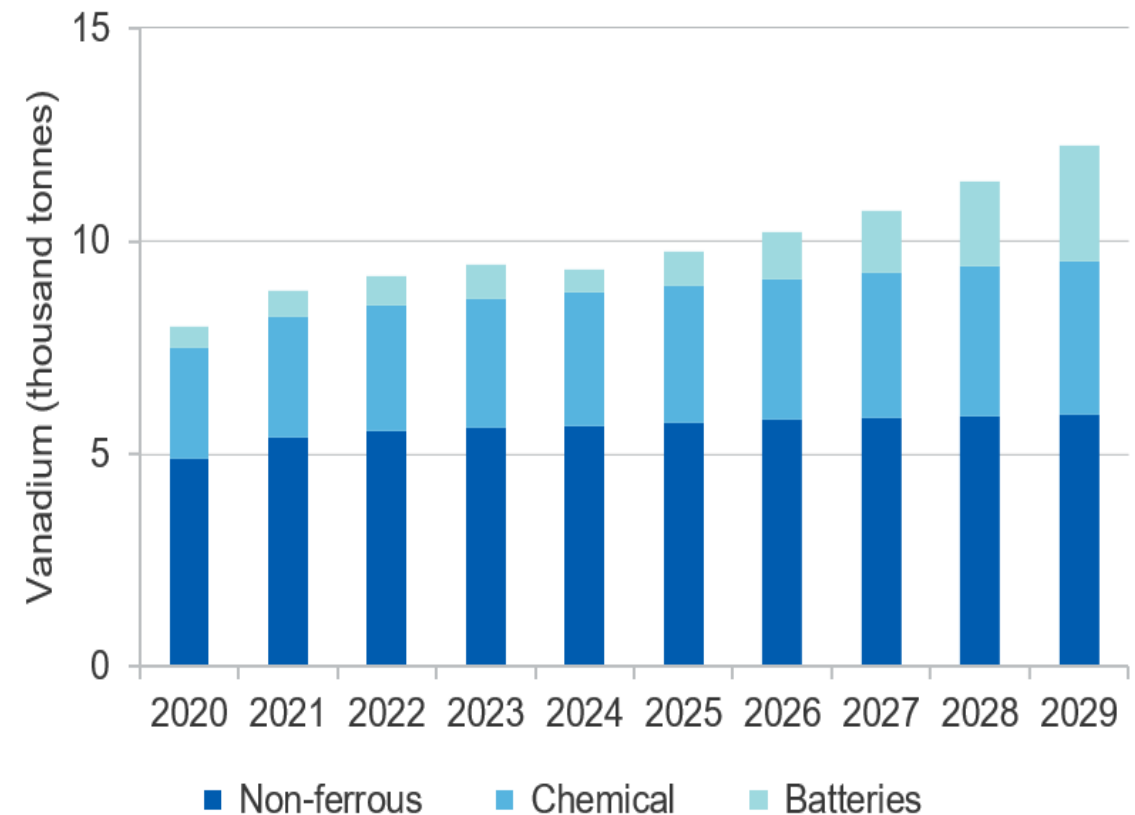
## Critical Mineral

- Listed by the Australian and US Governments as “Critical Mineral”
- China, Russia and South Africa account for almost all worldwide production
- Australian resources are 3rd largest in world, accounting for 18% of economic demonstrated resources but current production levels are negligible<sup>1</sup>

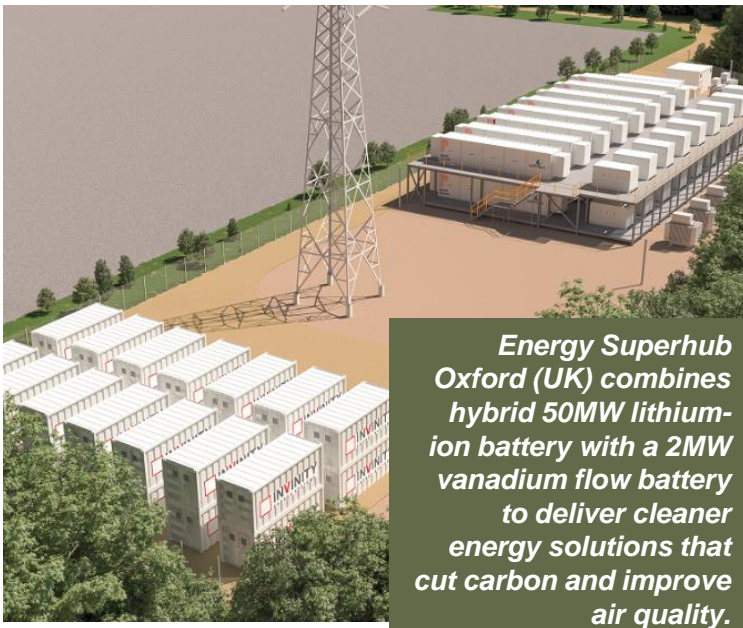
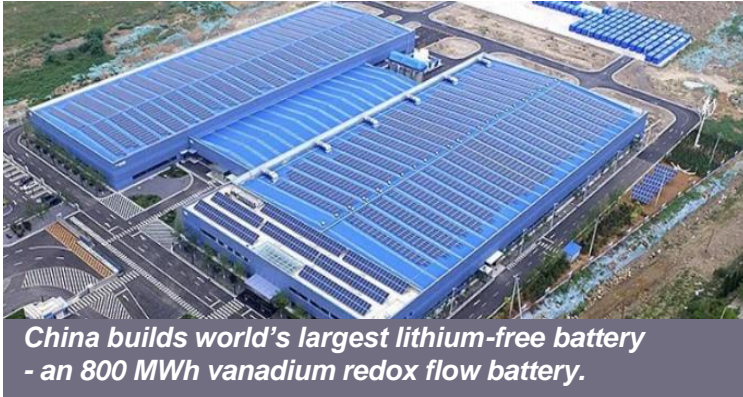
## Demand / Supply

- Majority of vanadium produced as by-product of magnetite or uranium processing - limited supply of battery material
- >90% of global vanadium supply consumed by steel mills<sup>1</sup>
- Promising long-term potential use in vanadium redox flow batteries (VRFBs) for grid-scale electricity applications
- Consumption for batteries forecast to grow on average 20.7% a year over 2020-2029<sup>1</sup>

## Projected vanadium consumption by end-use (excluding steel)<sup>1</sup>



# VANADIUM REDOX FLOW BATTERIES (VRFBs)



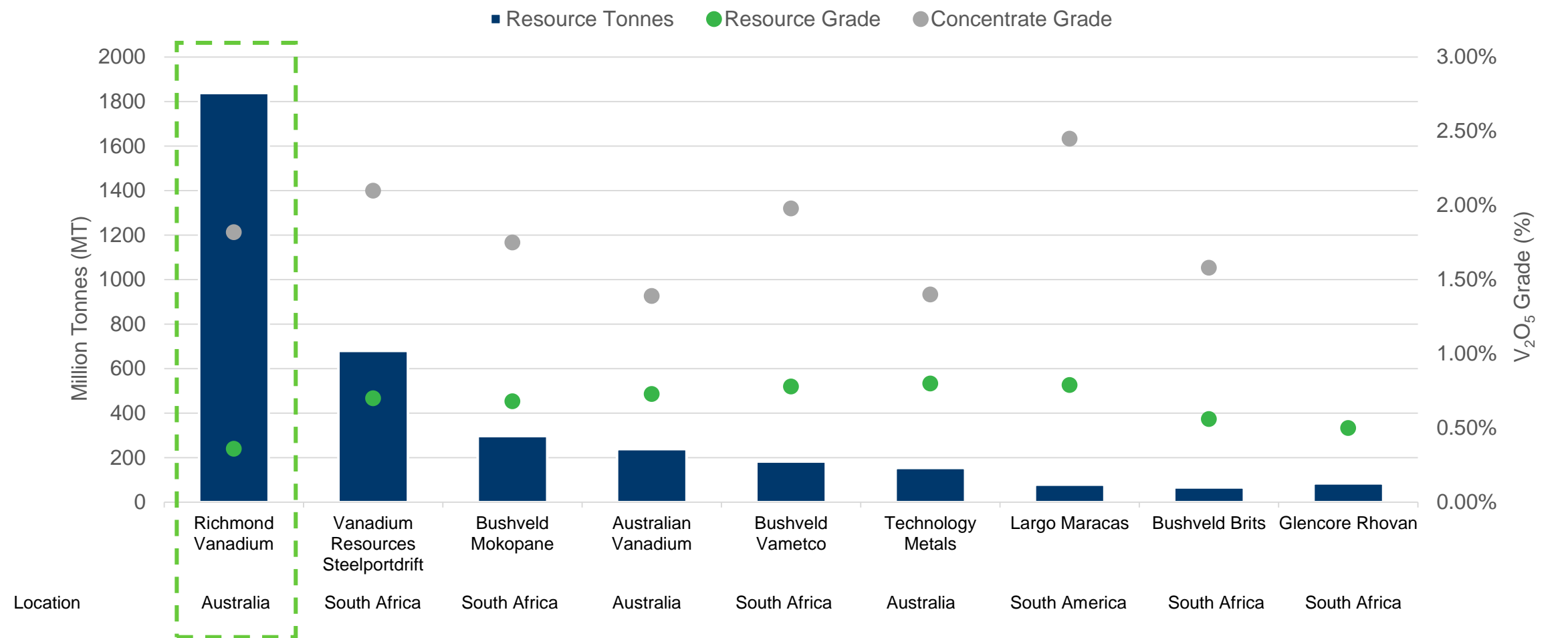
- Adoptable energy storage system ideal for residential and commercial applications
- Megawatt capacities for the power grid and standalone storage systems for solar and wind farm installation
- Non-flammable compared with lithium batteries with longer service life of around 20 years – compared with 10 years for lithium batteries – and can discharge 100% of stored energy<sup>1</sup>
- VRFBs and lithium batteries can be complementary technologies. Lithium batteries typically discharge over 4-5 hours, whereas the discharge profile for VRFBs is often longer<sup>1</sup>
- Electricity from renewable sources could provide 65% of world's electricity supply by 2030, potentially decarbonising 90% of power sector by 2050<sup>2</sup>

*Ultra Power Systems has stand-alone power system at Second Fortune Gold Mine and will deploy to IGO's Silver Knight camp.*



*Plans unveiled for Australia's biggest vanadium flow battery and gigawatt factory. North Harbour Clean Energy backed by Aware Super and CellCube will build a 4MW, 16MWH VRFB for an industrial customer.*

# GLOBAL PRIMARY MINERAL RESOURCES



*The above chart compares Mineral Resources reported under different codes and companies at different stages of development. Only Resources with a cut-off grade of  $\geq 0.30\%$  and an average resource grade of  $>0.35\%$  are shown. All comparative data has been sourced from public company disclosures – please refer to Appendix 2 “Peer Comparison Table” attached to this presentation.*



# ENVIRONMENTAL, SOCIAL & GOVERNANCE

*We aim to serve as a catalyst for local economic development through transparent and respectful engagement, and as responsible stewards of the environment*

## ENVIRONMENT

- Epic Environmental Pty Ltd commissioned to undertake environmental studies to attain the environmental approvals required for development
- Epic has significant local experience - delivering an Environmental Impact Statement (EIS) for a vanadium project near Julia Creek
- Preliminary Environmental Assessment indicates no major environmental constraints to preclude project from proceeding
- Wet and dry season flora and fauna surveys conducted across life-of-mine area
- Project to be assessed under bilateral agreement between Queensland and Commonwealth governments providing pathway for approvals
- EIS Terms of Reference released for public comment in December 2022



## SOCIAL

- Use of local business, civil, accommodation, services and meals
- Regular engagement with community and key stakeholders

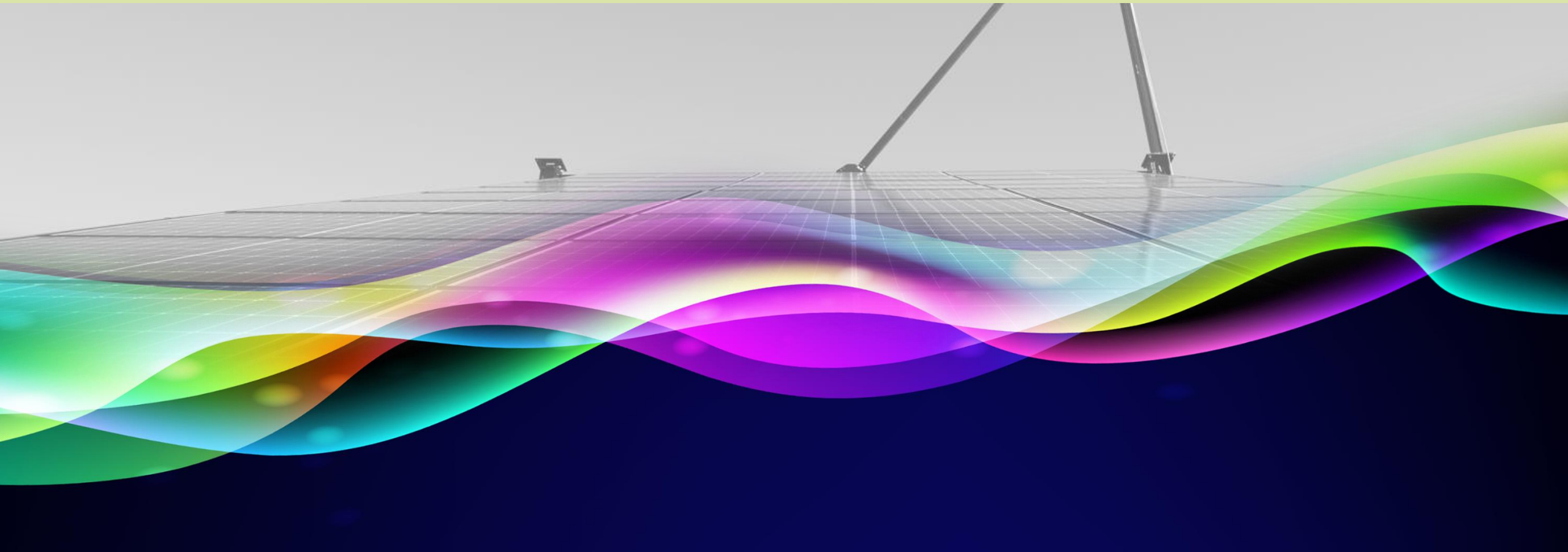


## GOVERNANCE

- RVT established as reputable, modern, exploration and development company with strong ESG principles
- Best practice standards and corporate governance principles integrated
- First critical minerals project declared a Coordinated Project



# PROJECT DETAILS



# RICHMOND VANADIUM PROJECT OVERVIEW

## Location

- Located in mining friendly jurisdiction of North Queensland
- Close to existing infrastructure including gas pipeline, proposed Copper String 2.0 HV network line, Flinders Highway and Great Northern railway link to Townsville Port
- Three main prospects – Lilyvale, Manfred and Rothbury covering ~1,400 km

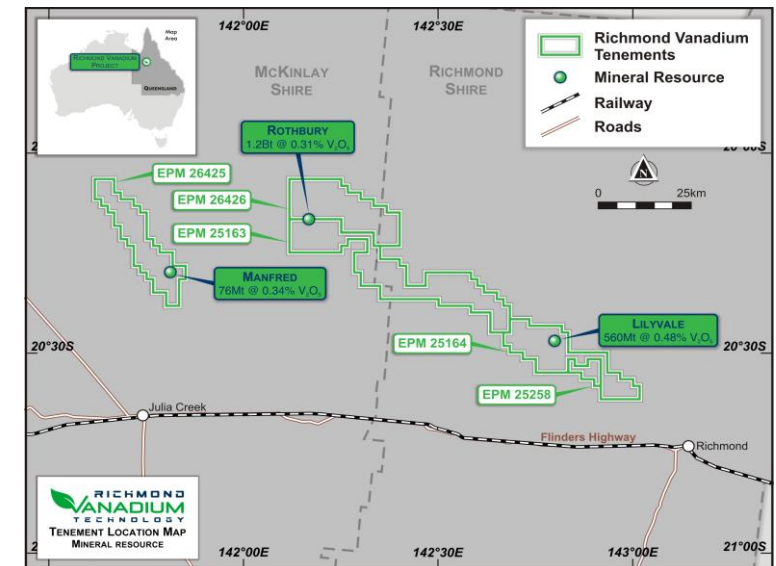
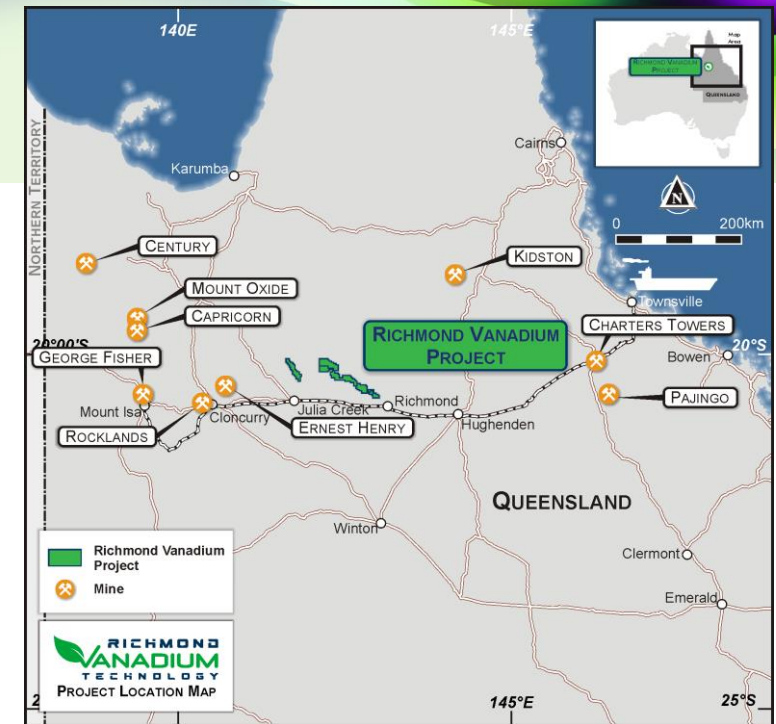
## Mineral Resource & Ore Reserve

- Global Mineral Resource estimate stands at **1.8Bt @ 0.36% for 6.65Mt  $V_2O_5$  at 0.30% cut-off<sup>1</sup>**
- Maiden Ore Reserve for Lilyvale Deposit of **459.2Mt @ 0.49% for 2.25Mt  $V_2O_5$ <sup>1</sup>**

## Geology & Mineralisation

- One of the largest non-titanomagnetite vanadium deposits of its kind (soft marine sediments) globally
- Vanadium mineralisation at an average depth of between 2m and 25m below surface
- Soft sediment means no drilling, blasting, grinding (milling) or roasting - significantly reducing power requirements, capex and operating costs

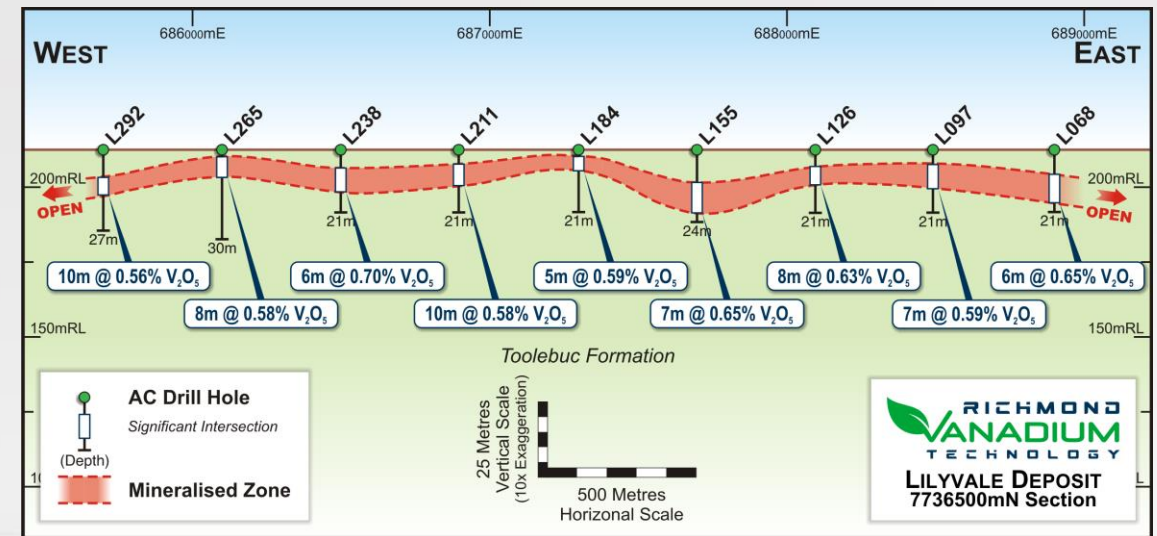
<sup>1</sup> Refer Prospectus dated 14 October 2022, Section 4 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022.





# LILYVALE DEPOSIT

- Located 45km north-west of the Richmond township in close proximity to the Flinders Highway and Great Northern railway
- Mineral Resource of 560Mt @ 0.48%  $V_2O_5$ <sup>1</sup>
- Mineralisation is associated with the Toolebuc geological formation at an average depth of between 2m and 25m below surface
- Starter pit to focus on upper mineralised zone at Lilyvale as it is:
  - highest grade based on drilling to date (0.52%  $V_2O_5$ )<sup>1</sup>
  - can be mined simply by free dig open cut mining with very low strip ratio (0.92)<sup>1</sup>
  - amenable to low cost removal of coarse fraction via scrubbing, trommelling, screening, cycloning and flotation to produce high grade feedstock of 1.82%  $V_2O_5$ <sup>1</sup>
  - waste/tailings is non-toxic



<sup>1</sup> Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022

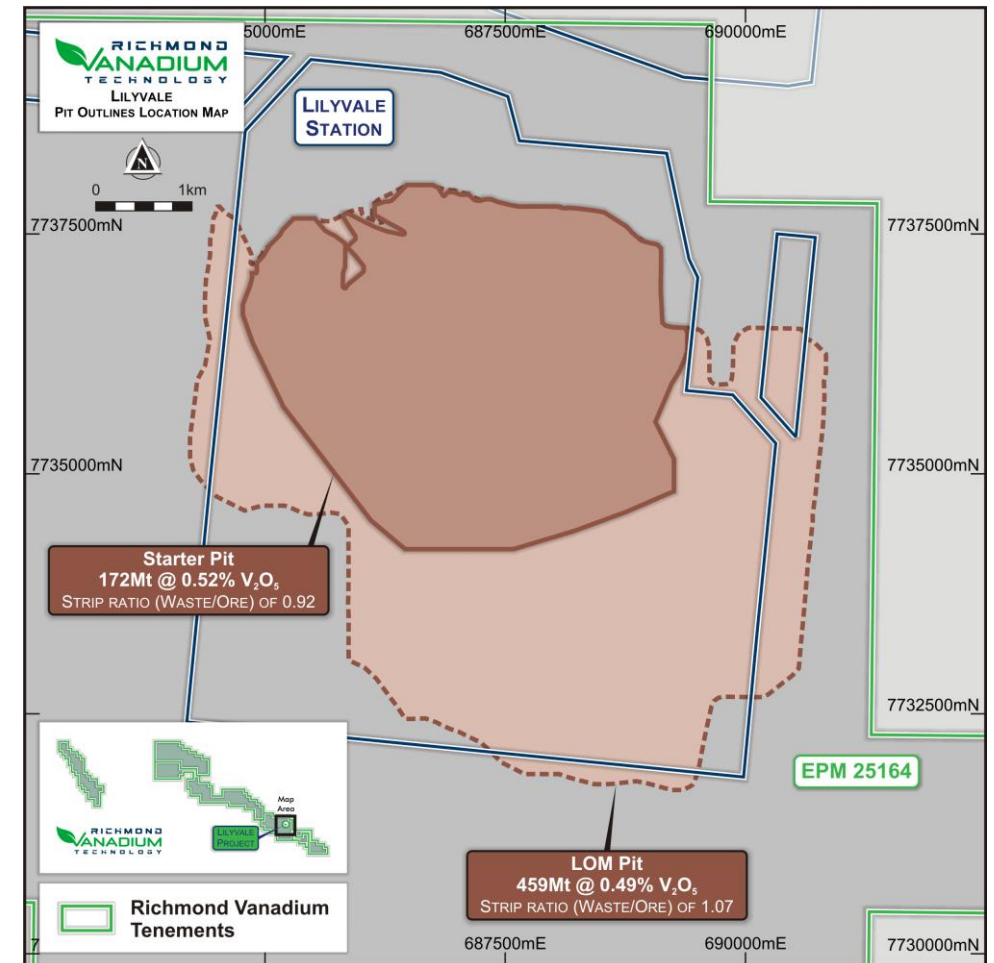
# LILYVALE DEPOSIT ORE RESERVE<sup>1</sup>

- Maiden open pit Ore Reserve at the Lilyvale Deposit of:  
**459.2Mt @ 0.49% for 2.25Mt V<sub>2</sub>O<sub>5</sub>**
- Two pits designed over Lilyvale Deposit Indicated Mineral Resource:
  - LOM (Life of Mine) pit hosting Probable Reserves; and
  - Starter pit focussed on the higher grade part of LOM pit
- Both pits host Probable Reserves designed over Indicated Resources according to the 2012 JORC code
- Preliminary starter pit designed to achieve a lower strip ratio (0.92) and higher ore grade (0.52% V<sub>2</sub>O<sub>5</sub>) in early pit development periods

## Ore Reserve – Lilyvale Deposit at a cut-off grade 0.30%

Pit	Total Rock (MT)	Probable Ore (MT)	Strip Ratio (W/O)	Average V <sub>2</sub> O <sub>5</sub> grade for Probable Ore (%)
LOM	951.7	459.2	1.07	0.49
Starter	331.7	172.5	0.92	0.52

Refer to Appendix 1 “Mineral Resource & Ore Reserve Estimates” attached to this presentation



<sup>1</sup> Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022



# PROVEN METALLURGICAL RESULTS <sup>1</sup>

- Project is a large, low grade, high calcite content resource
- RVT's process flowsheet uses proven conventional technology
- 1.2 tonnes of vanadium samples sent to two research institutes
- Testwork programs jointly developed, with all testwork supervised by RVT
- Two-step process determined:
  - 1) Ore upgraded from a mined grade of 0.49% to a shipping grade of 1.82%  $V_2O_5$  concentrate
  - 2) Extraction via refining to produce 98%  $V_2O_5$  flake for use in the energy storage and steel markets
- Concentrate produced reduced calcium carbonate grade significantly, enabling consideration of several downstream processing options
- Testwork enabled flowsheet design to be completed during PFS
- Provisional patent application lodged with IP Australia relating to the method for the concentration of vanadium



<sup>1</sup> Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022





# PRE-FEASIBILITY STUDY<sup>1</sup>

- Indicates project **presents opportunity to develop** and produce a vanadium concentrate at 1.82%
- Mining and concentration options are known while logistics and available infrastructure provide **a positive economic solution**
- Modest up-front capital costs of **A\$242.2m** (US\$176.8m) for concentrating in Australia and refining overseas, and operating cash costs **of A\$8.66/lb** (US\$6.32/lb<sup>2</sup>) of 98% V<sub>2</sub>O<sub>5</sub> flake<sup>2</sup>
- Independent Technical Assessment Report noted costs more susceptible to changes in flowsheet selection, design and mechanical equipment sizing as engineering design advances, than changes in equipment pricing
- At US\$9.60/lb (study price) project generates **NPV<sub>10%</sub> of A\$613.0M (US\$447.5M) with IRR of 38%** and payback of 3.2 years, concentrating in Australia and refining offshore
- BFS will consider preferred onshore refining option due to a changed government landscape, and look at further optimising the process to reduce capital costs
- Queensland Government to build \$75 million critical mineral demonstration facility in Townsville** helping to accelerate the growth of the critical minerals industry and creating employment opportunities



<sup>1</sup> Refer Prospectus dated 14 October 2022, at section 4 and also ITAR at Schedule 1 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022

<sup>2</sup> AUD-USD FX rate (0.73)

# SUMMARY OF KEY PFS OUTCOMES<sup>1</sup>

Measure	PFS outcome US\$9.60/lb V <sub>2</sub> O <sub>5</sub> (Study Price)
<b>Life of Mine (LOM)</b>	
Total pit volume (Mt)	951.7
Stripping ratio (waste: ore)	1.07
Mined ore (Mt)	459.2
Ore Grade V <sub>2</sub> O <sub>5</sub> (%)	0.49



Measure	PFS outcome US\$9.60/lb V <sub>2</sub> O <sub>5</sub> (Study Price)	Sensitivity Analysis		
		PFS outcome at US\$7.60/lb V <sub>2</sub> O <sub>5</sub>	PFS outcome US\$8.60/lb V <sub>2</sub> O <sub>5</sub>	PFS outcome US\$10.60/lb V <sub>2</sub> O <sub>5</sub>
<b>PFS (Initial 25-year life)</b>	(based on concentrating in Australia, refining offshore)			
Mined ore (Mt)	101.5			
Ore Grade V <sub>2</sub> O <sub>5</sub> (%)	0.49			
Concentrate Produced V <sub>2</sub> O <sub>5</sub> (Mt)	19.75			
Concentrate Grade (%)	1.82			
Refining recovery average (%)	86.1			
V <sub>2</sub> O <sub>5</sub> 98% Flake Produced (kt)	317.5			
Capital costs (\$M)	A\$242.2			
Operating costs (\$/lb)	A\$8.66 (US\$6.32 <sup>2</sup> )			
NPV @ 10% (\$m) (post-tax)	A\$613	A\$139	A\$376	A\$850
Payback (years)	3.2	8.7	4.6	2.5
IRR	38%	17%	28%	48%

All material assumptions in the sensitivity analysis continue to apply and have not materially changed. The sensitivity analysis included in the ITAR (refer Prospectus dated 14 October 2022, ITAR at Schedule 1, Figure 10-1) shows that the project is most sensitive to the product price followed by the exchange rate. A 15% change in the concentrate product price results in a 31% - 41% change in NPV.

<sup>1</sup> Refer Prospectus dated 14 October 2022, at section 4 and also ITAR at Schedule 1 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022

<sup>2</sup> AUD-USD FX rate (0.73)



# COMPARISON OF ESTIMATED PRODUCTION COST BREAKDOWN

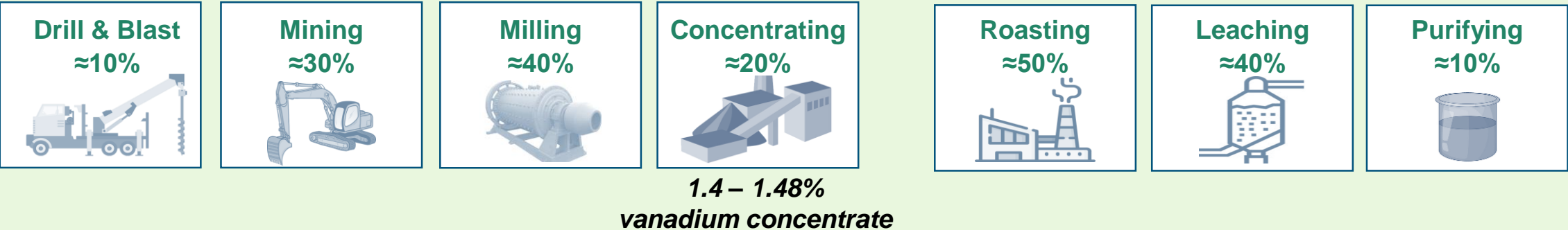
## Soft Oxide vs Titanomagnetite Vanadium Deposits

### Concentrating

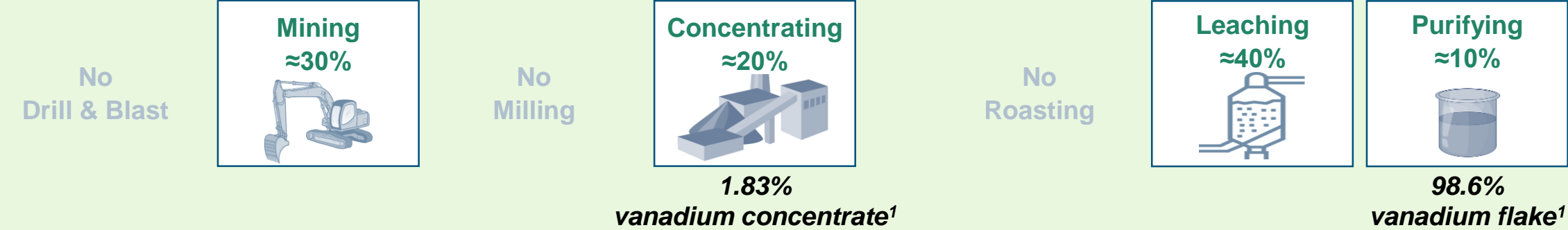
### Refining

*to minimum 98% to meet vanadium flake standard*

#### TITANOMAGNETITE VANADIUM DEPOSIT



#### SOFT OXIDE VANADIUM DEPOSIT

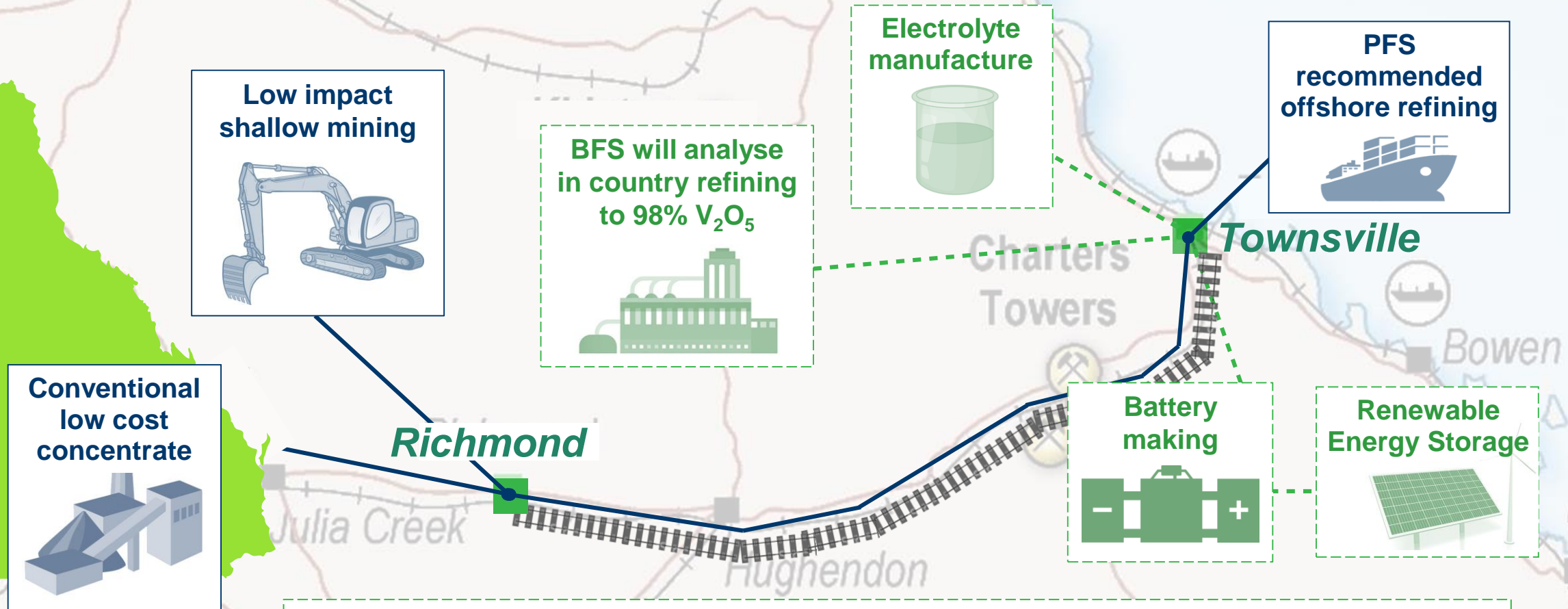


<sup>1</sup> Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022



# MINE TO METAL TO BATTERY

An economic analysis for beneficiation to a concentrate in Australia, and a comparison of refining offshore in China or onshore in Australia was carried out as part of the PFS. The PFS recommended that refining to produce  $V_2O_5$  flake be carried out offshore due to lower capital costs.



The BFS will undertake further analysis of downstream refining to be conducted in Australia (Queensland) as the preferred option due primarily to a changed government landscape. It is noted that an Australian refinery option may require government funding assistance due to the lower financial returns in this scenario. The BFS will consider further optimising the process to reduce capital costs if it was carried out in Australia as noted in the Company's Prospectus, Schedule 1 (ITAR) released to the ASX on 9 December 2022.

The process flow for electrolyte manufacture, battery making and renewable energy storage is not a direct asset of the Company, however is part of the intended market to which the Company's product is to be supplied, including via investment into and arrangements with Ultra Power Systems Pty Ltd (refer Company's Prospectus section 5 released to the ASX on 9 December 2022).

# INVESTMENT IN ULTRA POWER SYSTEMS<sup>1</sup>

## RVT enters Binding Term Sheet to invest \$3M into Ultra Power Systems

- Binding Term Sheet signed 5 August 2022 to invest \$3M into Ultra Power Systems Pty Ltd (Ultra)
- Ultra will purchase vanadium pentoxide flake from RVT – subject to availability and timeliness of delivery, quality and price
- RVT has right to appoint one director as long as it holds minimum 7.5% interest in Ultra
- Formal Agreement to be signed by 28 February 2023

Ultra has developed its own VRFB system, the Ultra V40 battery module, and a standalone power system which integrates solar and wind turbines into a mobile and scalable power generation system highly suitable for off-grid applications.

Ultra's licenced electrolyte is a premium product that has a substantially higher operating temperature range and higher energy density without requiring additives.

Ultra provides RVT with a strategic partnership with an Australian battery manufacturer, as well as substantive off-take agreements in the future.

Ultra's initial markets, both in Australia and overseas, include off-grid applications within the mining sector (such as bore pumps, exploration camps, mining villages and ultimately full mine electrification), remote communities, community batteries, residential microgrids, and the specific charging demands of the electric vehicle sector.





# CONTACT US

## Dr Shuang (Shaun) Ren

**Managing Director**

T: +61 8 6141 9500

E: [info@richmondvanadium.com.au](mailto:info@richmondvanadium.com.au)

## Jon Price

**Non-Executive Director**

T: +61 8 6141 9500

E: [info@richmondvanadium.com.au](mailto:info@richmondvanadium.com.au)

## Victoria Humphries


**Media & Investor Relations**


T: +61 431 151 676

E: [victoria@nwrcommunications.com.au](mailto:victoria@nwrcommunications.com.au)

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 **RICHMOND**  
**VANADIUM**  
TECHNOLOGY



# APPENDIX 1 – MINERAL RESOURCE AND ORE RESERVE ESTIMATES<sup>1</sup>

Richmond – Julia Creek Project Mineral Resource and Contained Metal (at 0.30% V <sub>2</sub> O <sub>5</sub> cut-off)				
Deposit	Category	Tonnage (MT)	V <sub>2</sub> O <sub>5</sub> (%)	V <sub>2</sub> O <sub>5</sub> (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
<b>Totals and Averages</b>		<b>1,838</b>	<b>0.36</b>	<b>6.65</b>

Note:

Reported in accordance with JORC Code (2012) at cut-off grade 0.3% V<sub>2</sub>O<sub>5</sub>

Metal content calculated using grades with 3 decimal places

Metal content varies from Mineral Resources Update by HGS (ASX:IRC “Intermin announces world –class Vanadium Resource”, dated 20 March 2018), due to arithmetic errors. The table above reflects the correct results for Manfred.

Metal content of molybdenum and nickel can be found in Table 5-1 of the ITAR (Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022)

Richmond – Julia Creek Project Ore Reserve (Lilyvale Deposit)			
Category	Tonnage (MT)	V <sub>2</sub> O <sub>5</sub> (%)	V <sub>2</sub> O <sub>5</sub> (MT)
Proved	0.00	0.00	0.00
Probable	459.2	0.49	2.25
<b>Total</b>	<b>459.2</b>	<b>0.49</b>	<b>2.25</b>

Note:

At cut-off grade (COG) of 0.3% V<sub>2</sub>O<sub>5</sub>

The Ore Reserve for the project is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, JORC

The Ore Reserve statement is based on information compiled by Dr Dawei Xu, MAusIMM

## APPENDIX 2 – PEER COMPARISON TABLE

Company	Code	Project	Stage	Resource Category	Resource Tonnes (Mt)	Resource Grade (V <sub>2</sub> O <sub>5</sub> %)	Total Resource (Mt @ V <sub>2</sub> O <sub>5</sub> %)	Concentrate Grade	Information Source and Notes
Richmond Vanadium	ASX:RVT	Richmond – Julia Creek	Development	Indicated	429.4	0.50	1,838Mt @ 0.36% (Cutoff V <sub>2</sub> O <sub>5</sub> = 0.30%)	1.82	Refer Prospectus dated 14 October 2022 and Supplementary Prospectus dated 21 October 2022 released to ASX on 9 December 2022
				Inferred	1,408.6	0.33			
Vanadium Resources	ASX:VR8	Steelpoortdrift	Development	Measured	145.5	0.72	680Mt @ 0.70% (Cutoff V <sub>2</sub> O <sub>5</sub> = 0.45%)	2.10	ASX Announcement dated 17/11/2022 Investor Presentation
				Indicated	327.3	0.70			
				Inferred	207.4	0.68			
Bushveld	LSE:BMN	Mokopane	Development	Indicated	63.2	1.32	297Mt @ 0.68% (Cutoff V <sub>2</sub> O <sub>5</sub> = 0.30%)	1.75	Mokopane Vanadium project Pre-Feasibility Study 30/1/2016 bushveldminerals.com/wp-content/uploads/2017/08/201602040458050.pdf
				Inferred	234.0	0.51			
Australian Vanadium	ASX:AVL	Australian Vanadium	Development	Measured	11.3	1.14	239Mt @ 0.73% (Mixed cutoffs!)	1.40	ASX announcement dated 6/4/2022 Bankable Feasibility Study for the Australian Vanadium Project. 73.6Mt of the Indicated and 88.5Mt of the Inferred tonnes use 0.40% V <sub>2</sub> O <sub>5</sub> cutoff. All other tonnages (95.6Mt) are at 0.70% V <sub>2</sub> O <sub>5</sub> cutoff.
				Indicated	82.4	0.70			
				Inferred	145.3	0.71			
Bushveld	LSE:BMN	Vametco	Production	Indicated	140.1	0.74	183Mt @ 0.78% (Cutoff = 20% magnetite)	1.98	Vametco Inferred & Indicated Mineral Resource and Ore Reserve Update for Annual Reporting purposes, 30/3/2022 bushveldminerals.com/wp-content/uploads/2022/04/J4590-Vametco-Mineral-Resources-and-Ore-Reserves-31-December-2021-Dated-30-Mar-2022.pdf
				Inferred	42.6	0.90			
Technology Metals	ASX:TMT	Murchison Technology Metals	Development	Measured	12.1	1.00	154Mt @ 0.85% (Cutoff V <sub>2</sub> O <sub>5</sub> = 0.40%)	1.40	ASX announcement dated 23/11/2022 RIU Resurgence Conference 23 November 2022
				Indicated	51.2	0.90			
				Inferred	90.5	0.80			
Largo Resources	NASDAQ:LGO TSX:LGO	Maracas	Production	Measured	45.95	0.83	79Mt @ 0.78% (Cutoff V <sub>2</sub> O <sub>5</sub> = 0.30%)	2.45	43-101Technical Report dated 10/10/2021 s29.q4cdn.com/562286712/files/doc_downloads/technical_report/marac%C3%A1s_menc hen_mine/TR_GE21_Largo_43101_16122021_Final-Version-Conformed-for-Filing.pdf
				Indicated	17.73	0.70			
				Inferred	15.52	0.74			
Bushveld	LSE:BMN	Brits	Exploration	Indicated	44.9	0.56	66.8Mt @ 0.56% (Cutoff = 20% magnetite)	1.58	Competent Persons Report on the Brits Vanadium Project North West 30/1/2020 bushveldminerals.com/wp-content/uploads/2020/01/Independent-CPR_Brits-Vanadium_January_2020_Final.pdf
				Inferred	22.0	0.55			
Glencore	LSE:GLEN JSE:GLN	Rhovan	Production	Measured	51.7	0.47	176Mt @ 0.49% (Cutoff = 15% magnetite)		Glencore 2021 Reserves & Resources report at 31/12/2021 glencore.com/.rest/api/v1/documents/fb0cafaa3ec10b90571130be41ba4270/2021-GLEN_Resources-and-Reserves-report.pdf
				Indicated	33.5	0.50			
				Inferred	91.0	0.51			