

VANADIUM FOR A CLEANER FUTURE

RESOURCE CONNECT ASIA
FUTURE FACING COMMODITIES

SINGAPORE - APRIL 2023

ASX:TMT

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Competent Person's Statement

The information in this report that relates to Exploration Results are based on information compiled by Mr John McDougall. Mr McDougall is the Company's Exploration Manager and a member of the Australian Institute of Geoscientists. Mr McDougall has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr McDougall consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Matthew Clark, Mr Clark is a Senior Resource Geologist of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Clark has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Clark consents to the disclosure of the information in this announcement in the form and context in which it appears.

The information that relates to Ore Reserves is based on information compiled by Mr Ross Cheyne of Orelogy who takes overall responsibility for the Report as Competent Person. Mr Cheyne is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Ross Cheyne has reviewed the Ore Reserve statement and given permission for the publication of this information in the form and context within which it appears.

The information in this report that relates to the Processing and Metallurgy for the Murchison Technology Metals project is based on and fairly represents, information and supporting documentation compiled by Mr Brett Morgan, a full-time employee of Technology Metals Australia. Mr Morgan is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Brett Morgan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Pursuant to LR-5-19-1 production target and financial forecast: Refer ASX Release - 21 August 2019 for full details of the DFS: Financial Metrics at long term historical average price of US\$8.78/lb V2O5.

Pursuant to LR-5-19-2 production target and financial forecast: The material assumptions as per the ASX release on 21 August 2019 continue to apply and have not materially changed.

Refer to ASX Releases on 5 August 2022 for full details of global Murchison Technology Metals Project Ore Reserve, and Yarrabubba Vanadium and Ilmenite Ore Reserves.

TMT VANADIUM SUPPORTING MOVE TO NET ZERO



VANADIUM TO HELP SUPERCHARGE SUSTAINABLE INDUSTRIES

- Iron Steel sector one of the largest CO₂ emitters
- Adding vanadium reduces steel weight, increases capacity and reduces volume

= CO₂ Savings

- Vanadium redox flow batteries (VRFB) ideal for time-shifting large amounts of energy for later use (long duration energy storage)
- Increases use of renewables, reducing fossil fuels

= CO₂ Savings

THE WORLD'S NEXT PRIMARY VANADIUM MINE



Outstanding project fundamentals in Tier 1 jurisdiction

- High yielding geology is <u>key</u>
- Integrated conventional processing delivering <u>high</u> recoveries, <u>lowest</u> quartile costs
- High purity **product** attracting <u>premium</u> pricing
- Financial backing by Danish export credit agency EKF to deliver a <u>critical mineral</u> to the world



CORPORATE OVERVIEW



Capital Structure

TMT ASX Code \$12.0m

Cash (as at 31 December 2022) \$69.2m

Market Cap (As at 5 April 2023) 209.8m

Shares on Issue

18.8m

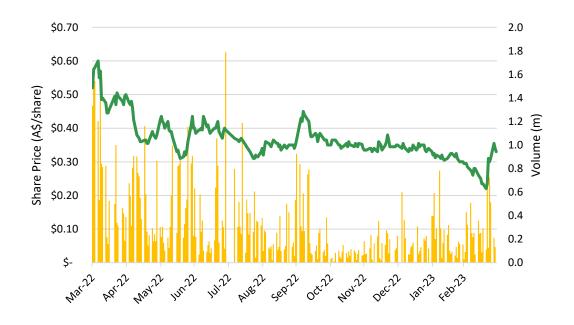
Unlisted Options¹ (Various exercise)

6.2_m

Performance Rights²

Holder Name	Holding (%)
Resource Capital Fund VII L.P.	17.2%
BNP Paribas Nominees	10%
Standard Pastoral Company	6.7%
Retzos Group	5.2%
TOTAL TOP 20	57.7%
Board and Management holdings (fully diluted)	8.17%

^{*}Based on issued capital as at 5 April 2023



¹ Includes 15.4m director and employee options – 3.9m vested, balance vest on project development hurdles

² 53% vest on MTMP FID, 47% vest on first production

EXPERIENCED BOARD & MANAGEMENT





Michael Fry Non-Executive Chairman

Michael holds a Bachelor of Commerce degree from the University of Western Australia, is a Fellow of the Financial Services Institute of Australasia, and is a past member of the Australian Stock Exchange.

Mr. Fry has extensive corporate and commercial experience, financial and capital market knowledge and a background in corporate treasury management.



Ian Prentice Managing Director

Ian holds a Bachelor of Science (Geology) from the University of Western Australia and has over 30 years experience in the global mining industry, spanning exploration, development and open cut and underground minina.

Ian is a Member of the Australasian Institute of Mining and Metallurgy.



Dr. Carmen Letton Non-Executive Director

Carmen is a mining engineer and mineral economist with 35 years of global experience in senior leadership roles in operations, business improvement and operational excellence.

Dr. Letton was most recently the Head of Resource Development and Life of Asset Planning (Asset Strategy Development) at Anglo American.

David English

Chief Operating Officer

David is a mining professional with over 30 years operations and project development experience in the Western Australian resources industry, having delivered Sandfire Resources' DeGrussa Project and IGO Limited's Nova Nickel Project as the Project Manager.

Mr. English was GM Operations at the Windimurra Vanadium Project from February 2008 until February 2010 involved in the process of redeveloping the project.

Sonu Cheema

Company Secretary

Sonu is a Partner at Cicero Group with over 10 years' experience working with public and private companies in Australia and abroad.

Mr. Cheema 's responsibilities include completion and preparation of management and ASX financial reports, investor relations, initial public offers, mergers and acquisitions, management of capital raising activities and auditor liaison.

Elisha Civil

Chief Financial Officer

Elisha is a Chartered Accountant with over 20 years' experience in the resources sector including General Manager Finance at Regis Resources, and Group Manager Finance and Tax at Fortescue Metals Group.

Ms. Civil holds an MBA from the University of Western Australia, and a Bachelor of Commerce from Murdoch University.

John McDougall

Exploration Manager

John holds a Bachelor of Science with Honours (Geology) from the University of Tasmania and has over 20 years experience in mineral exploration, with iron ore, base and precious metals experience.

John has been managing the geological data acquisition at Gabanintha and Yarrabubba since February 2017.

SUSTAINABILITY





Environment

- Addressing environmental approval requirements
- Sustainable water usage, greenhouse gas emission reduction strategies



Native Title/Heritage

- Regular briefing sessions with **Traditional Owners**
- On-country heritage surveys in support of Cultural Heritage Management Plan



Governance

- Diversity of personnel at every level of the Company
- Policies in place to guide ethics and expected behaviours

TIER ONE PARTNERSHIPS



Building for sustained success

TATA STEEL

Biggest steelmaker in India



Dynamic Japanese electrolyte producer



Leading Chinese specialty minerals processors





Danish AAA-rated export credit agency



World experts in rotary roasting kiln



Leader in gas infrastructure

MTMP – A TIER ONE PROJECT



Ahead of the curve with industry-leading metrics



Large high-grade resource – supports +25 year life with high concentrate grades (up to $1.6\% V_2O_5$)



Shallow weathering provides high yielding, high recovery fresh ore early in project life



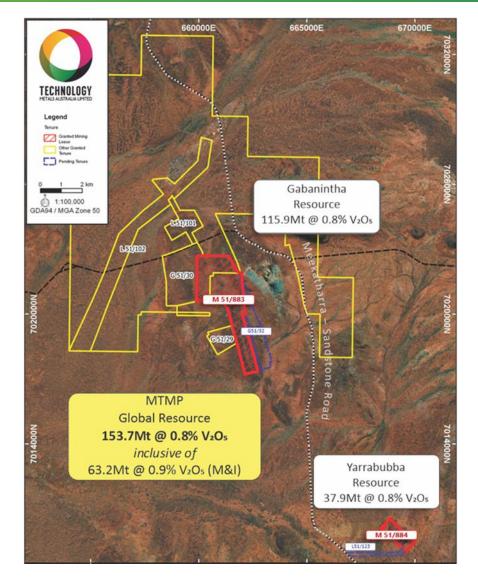
Conventional integrated salt roast water leach processing – **lower end-to-end emissions** than peers



Premium vanadium, plus **ilmenite** by-product for first nine years – revenue from well-established markets



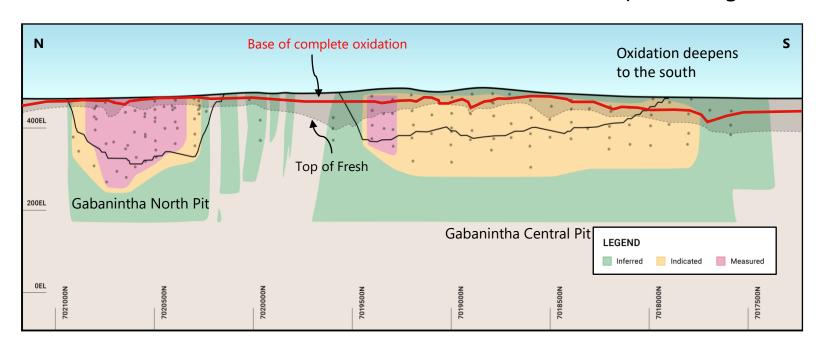
Average annual EBITDA of A\$182m*

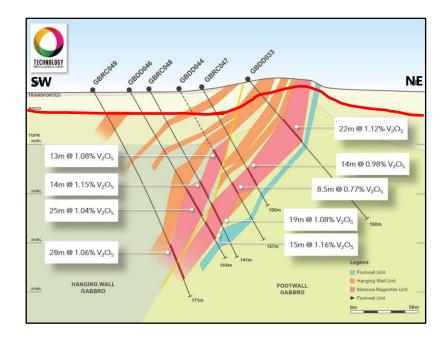


EARLY ACCESS TO HIGH YIELDING ORE



- Outcropping high grade ore traditional open pit ore mining from surface
- Very shallow (<5m) weathering at Yarrabubba and Gabanintha North
- Fresh and transitional ore = high yield from mined ore to magnetic concentrate at coarse grind size
- Enables use of conventional salt roast water leach processing with industry leading recoveries



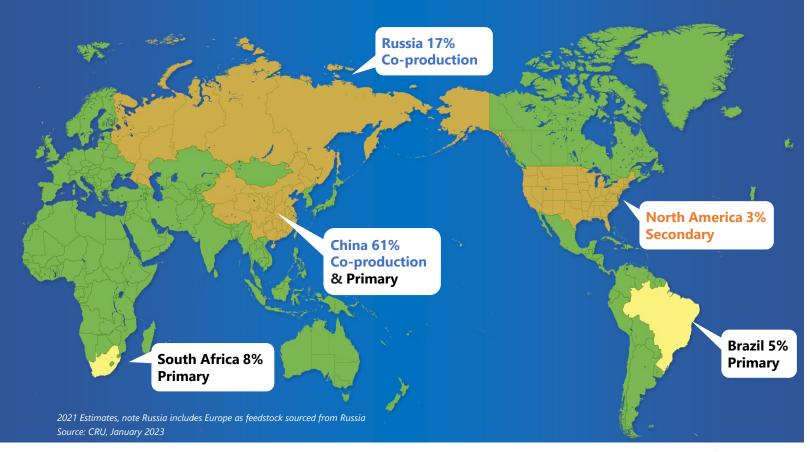


Gabanintha Long Section

Yarrabubba Cross Section

GLOBAL VANADIUM SUPPLY





Customers looking for secure supply

Co-production ~71% supply

Primary production ~17% supply

Secondary production ~12% supply

China and Russia dominate supply

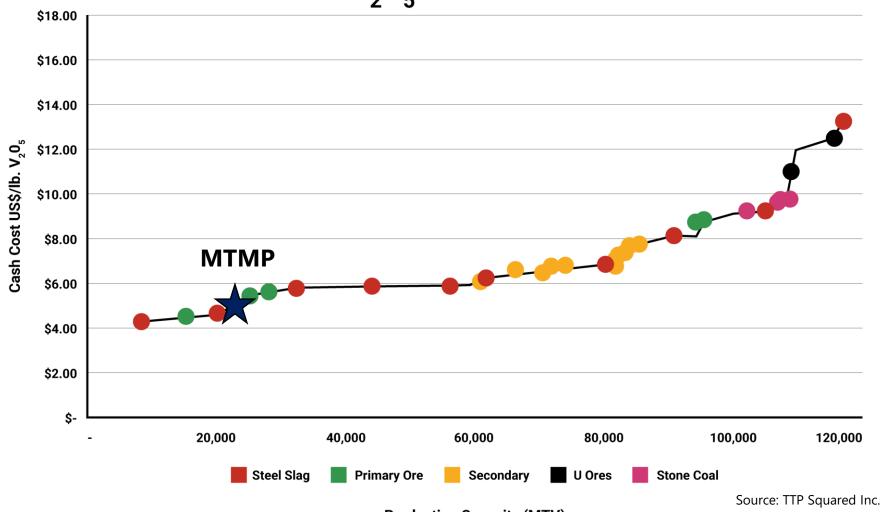
Australia hosts 18% of the world's vanadium resources*

Supply disruptions stemming from China could have a potentially large effect on energy security in the West given the concentration of battery material production in China

COST CURVE







PRIMARY USES OF VANADIUM

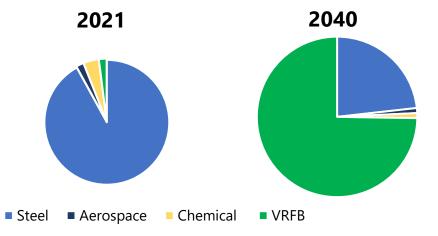


Uses	Description					
Specialty alloys	Particularly with titanium and aluminium ✓ Ti-Al-V alloys used for jet engines and high speed aircraft ✓ V-Ti alloys for best strength-to-weight ratio of any engineered material in the world					
Steel strengthening alloy	Vanadium used to add: ✓ Strength ✓ Toughness ✓ Corrosion resistance ✓ Seismic resistance = Reduction of steel required Vanadium steel is: ✓ Lightweight ✓ Durable ✓ Easily machined					
Ву	2025, an estimated 85% of all cars will use vanadium alloys to reduce					

Batteries...to dominate market growth

Supply shortfall forecast for 2031 of ~45,000t V₂O₅

MTMP to produce ~12,500tpa



weight and increase fuel efficiency to meet stringent fuel economy standards



*CRU, January 2023 ASX:TMT | 13

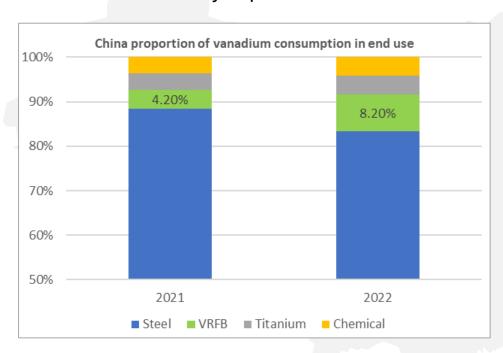
VRFBs IN CHINA

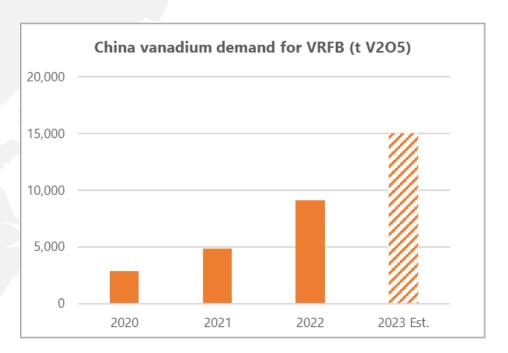


China leading the deployment of VRFBs

VRFBs expected to be main driver of vanadium demand growth in China

- Government banned lithium and Na-S batteries for large energy storage VRFBs promoted as safer option
- World's largest VRFBs developed to date are in China
- Two largest producers have announced substantial VRFB supply agreements and construction of sizeable vanadium electrolyte production facilities





Source: Ferro Alloy Net, Fast Markets Ferro Alloys March 2023

VRFB DEVELOPMENTS NORTH AMERICA

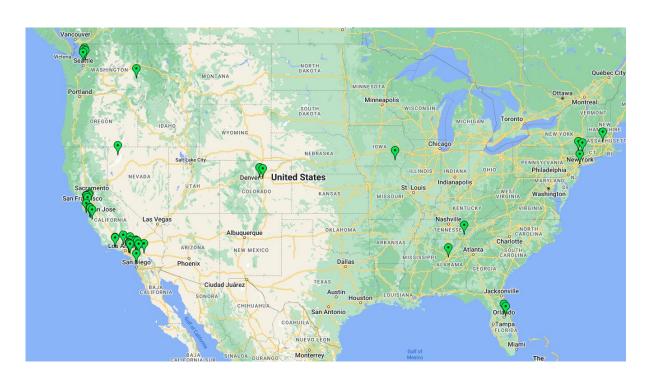


US Inflation Reduction Act supporting demand

- Around 35 VRFBs announced or operational in North America
- Largest, manufactured by Sumitomo Electric, is in San Diego, California
- Three large systems, with 8-hour storage duration, under installation in California



Sumitomo Electric's VRFB in San Diego, California



1MWh of energy storage requires ~10T V₂O₅

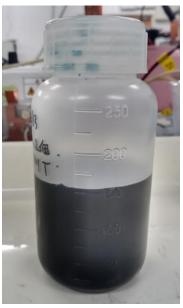
Projects announced and under construction in North America total ~480 MWh Requiring around 4,800t V₂O₅, equivalent to around **35% of TMT annual production**

PROGRESSING DOWNSTREAM CAPABILITIES



Battery grade electrolyte produced from MTMP feedstock







Left: TMT's electrolyte product. Right: Mini-cells tests conducted at LE System's Tsukuba Battery Laboratory Source: LE System

- Collaboration with leading Japanese electrolyte developer, LE System
- LE System manufactured electrolyte from MTMP feedstock in its laboratory in Japan
- Series of mini-cell tests conducted to examine electrolyte performance
- Test results meet specifications of major VRFB manufacturers

PARTNERING WITH MAJOR MARKETS



Supplying high-grade vanadium to support India's energy transition





Delectrik's VRFB for dispatch to USA and Australia. Source: Delectrik

- Delectrik is a fast-growing VRFB manufacturer based in India
- Indian Government committed US\$4.3b towards energy transition
- MoU between vLYTE and Delectrik contemplates supply of MTMP vanadium to Delectrik
- Also supply of vanadium electrolyte by vLYTE for use in Delectrik VRFB in Australia

PROJECT ACTIVITIES



Developing a long-term successful business



Engagement of preferred partners – collaboration on detailed construction planning, schedule definition and site infrastructure









Collaborative engagement with Traditional Owners



Progression of environmental approvals



ESG strategy implementation



Advancing implementation phase





TMT: A COMPELLING INVESTMENT





Industry Leading Tier 1 Project

- Outstanding geology enabling proven processing techniques
- Located in Western Australia. a Tier one mining jurisdiction
- Excellent access to gas and essential infrastructure



Critical Minerals for a Cleaner Future

- Vanadium, a Critical Mineral in the EU, USA and Australia
- Intensifying demand for vanadium redox flow batteries
- Strategic use of vanadium in steel for lower CO₂ emissions



Strong Experienced Team to Deliver

- High-performing professionals who have delivered major projects
- Focused on development strategy to maximise shareholder value
- Seasoned industry players engaged for project implementation



Tier 1 Investors and Partners

- Backing from RCF VII provides long-term project development support
- Building robust relationships with international partners, including LE System and Tata Steel





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MTMP GLOBAL MINERAL RESOURCE ESTIMATE



Classification	Classification Material		V₂O₅ %	Fe %	Al₂O₃ %	SiO₂ %	TiO₂ %	LOI %	Р%	S %
	Massive	4.4	1.1	48.1	5.5	7.3	12.4	-0.4	0.01	0.3
Measured (Yarrabubba)	Disseminated	1.5	0.6	30.0	10.8	23.4	7.7	2.5	0.01	0.2
Measured (Yarrabubba) Measured (Gabanintha) Measured Indicated (Yarrabubba)	Massive	5.1	1.1	46.9	5.7	8.4	12.1	-0.2	0.01	0.3
Measured (Gabanintha)	Disseminated	1.1	0.8	36.4	7.9	19.6	9.0	0.5	0.01	0.2
Measured	Massive + disseminated	12.1	1.0	44.3	6.5	10.9	11.4	0.1	0.01	0.2
	Massive	8.0	1.1	48.1	5.4	7.1	12.5	0.0	0.01	0.3
Measured (Yarrabubba) Measured (Gabanintha) Measured (Gabanintha) Measured Massive + disseminated Massive + disseminated Massive Disseminated Massive Disseminated Massive Disseminated Massive Disseminated Massive + disseminated Measured plus Indicated Massive + disseminated Measured plus Indicated Massive + disseminated Massive + disseminated Massive Disseminated Massive Disseminated Massive Disseminated Massive Disseminated	6.9	0.6	28.4	12.5	25.2	7.2	2.6	0.02	0.3	
	Massive	19.5	1.1	48.9	5.2	6.2	12.8	-0.1	0.01	0.2
Indicated (Gabanintha)	Disseminated	16.7	0.6	27.3	13.3	26.7	7.0	3.0	0.03	0.2
Indicated	Massive + disseminated	51.2	0.9	39.0	8.9	15.6	10.1	1.3	0.02	0.2
Measured plus Indicated	Massive + disseminated	63.2	0.9	40.0	8.4	14.7	10.4	1.1	0.02	0.2
	Massive	5.7	1.1	47.4	5.6	7.8	12.3	0.1	0.01	0.3
Interred (Yarrabubba)	Disseminated	11.4	0.6	27.9	12.6	25.8	7.2	2.0	0.02	0.4
	Massive	36.5	1.1	46.7	6.0	8.3	12.3	0.4	0.01	0.2
Inferred (Gabanintha)	Disseminated	36.9	0.5	26.6	12.9	27.6	6.9	3.4	0.03	0.3
Inferred	Massive + disseminated	90.5	0.8	36.2	9.6	18.3	9.5	1.8	0.02	0.2
TOTAL	Massive + disseminated	153.7	0.8	37.7	9.1	16.8	9.8	1.5	0.02	0.2

Source: TMT Announcement, MTMP Global Mineral Resource Upgrade Delivers 26% Increase to Measured and Indicated Resource, 7 November 2022

- Mineral Resources are reported in accordance with the JORC Code (2012 Edition).
- Mineral Resources were estimated within constraining wireframe solids using a nominal 0.9% V2O5 lower cut-off grade for the massive magnetite zones and using a nominal 0.4% V2O5% lower cut-off grade for the banded and disseminated mineralisation zones.
- Mineral Resources are quoted from all classified blocks within the wireframe solids above a lower cut-off grade of 0.4% V2O5.
- Differences may occur due to rounding. Yarrabubba Measured and Indicated Mineral Resources are reported above an open pit optimised pit shell. Inferred Mineral Resources are reported to a lower RL limit of 250 mRL.

 Gabanintha Measured and Indicated Mineral Resources are reported above a lower RL limit of 240 to 280 mRL that approximates the Ore Reserve pit shells. Inferred Mineral Resources are reported to a lower RL limit of 170 mRL.

MTMP ORE RESERVE ESTIMATE

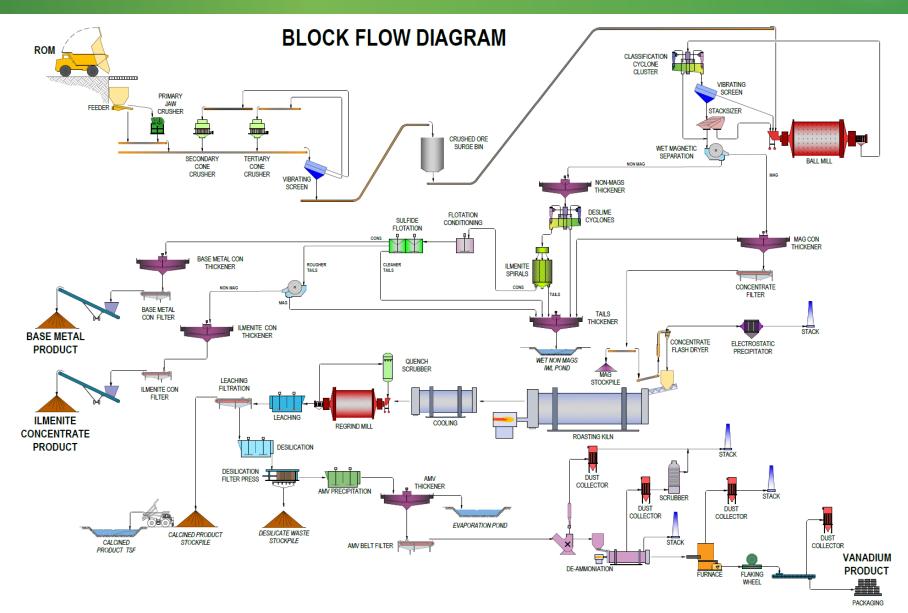


Deposit		Ex-Pit Ore			Magnetic Conc.		Non-Magnetic Conc.		Rec. V₂O₅	Rec. Ilmenite	Waste	Total
	Mt	V₂O₅%	TiO₂%	Mass Yield	Mt	V₂O₅%	Mt	TiO₂%	M lb	kt	Mt	Mt
Yarrabubba Probable	15.88	0.87%	10.0%	44.4%	7.04	1.61%	8.84	12.35%	202.7	1132.6	110.1	126.0
Yarrabubba Total	15.88	0.87%	10.0%	44.4%	7.04	1.61%	8.84	12.35%	202.7	1132.6	110.1	126.0
Gabanintha Proven	1.12	0.95%		69.8%	0.78	1.30%			18.1			
Gabanintha Probable	27.48	0.90%		57.1%	15.69	1.31%			369.4		154.5	183.1
Gabanintha Total	28.60	0.91%	10.7%	57.6%	16.47	1.31%			387.5	0.0		
Global MTMP Total	44.48	0.89%	10.5%	52.9%	23.52	1.40%	8.84	12.35%	590.3	1132.6	264.6	309.1

Source: TMT Announcement: MTMP Mine Life Increased to 25 Years – Maiden Ilmenite Reserve and Production Profile, 5 August 2022

FLOWSHEET





NET ZERO STRATEGY FOR THE MTMP



Committed to reduction of greenhouse gas emissions at the MTMP To produce a mineral that enables a cleaner future

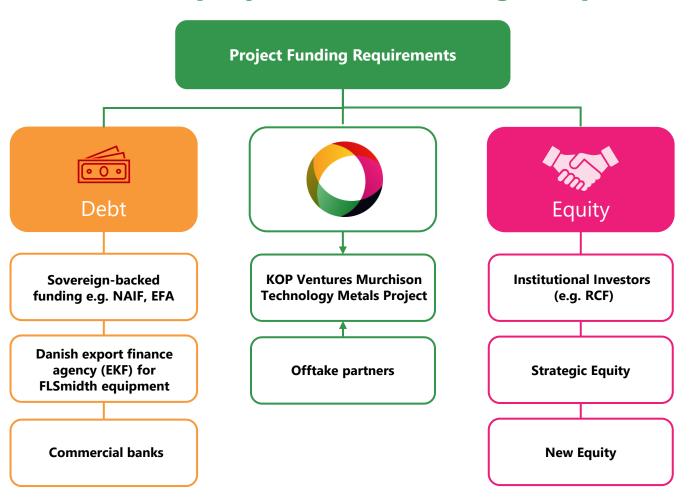
- Solar farm installation coupled with battery storage
- Roof-mounted solar arrays for all accommodation buildings and walkway areas at the village
- Adoption of low carbon energy solutions for mine dewatering and water supply activities
- Transition to electric and/or non-carbon fuel options for mining fleet
- Incorporation of heat loss and capture strategies and energy recovery at the processing plant



FUNDING STRATEGY



Debt and equity mix from a range of partners



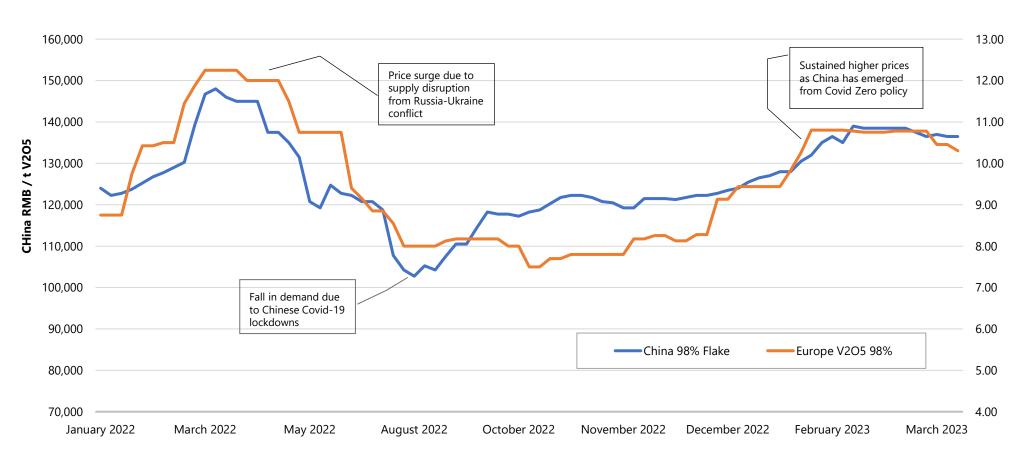
- RCF is the largest shareholder with a holding of 17.2%, with continuing support and positive outlook for the vanadium sector
- EKF issued letter of interest for A\$150m financing support for major equipment
- Discussions ongoing with potential offtake partners and others on strategic investment into the MTMP
- Project economics expected to support up to 65% debt gearing

V₂O₅ PRICE PERFORMANCE



Europe USD / Ib V205

CHINA VS EUROPE RELATIVE PRICE PERFORMANCE



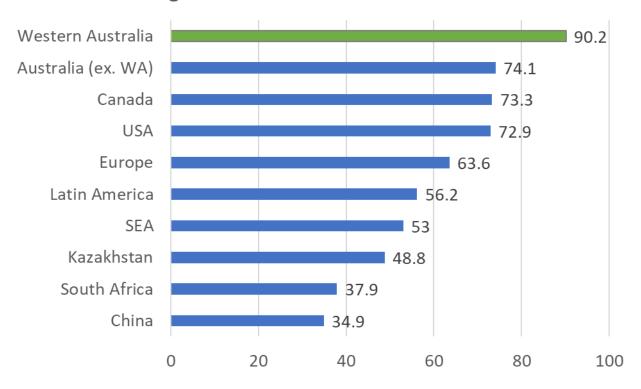
Source: FerroAlloy.Net

AUSTRALIA ATTRACTIVE SOURCE OF SUPPLY



WA is the most attractive source of new vanadium supply globally

Mining Investment Attractiveness Score 2021



 The MTMP is located in Western Australia, the most attractive mining jurisdiction in the world

- Australia hosts 18% of the world's vanadium resources*
- Alternative sources of new supply are in China, Russia or South Africa, all of which are far less attractive locations for investment

Australia has the potential to serve an important role among allies to secure critical energy metals such as vanadium

Source: CRU, January 2023, Fraser Institute

*United States Geological Survey and Geoscience Australia, 2017.

Source: CRU, January 2023

VANADIUM IN STEEL REDUCES CO₂ EMISSIONS



Steel sector one of the largest CO₂ emitters

- 1 tonne steel = 1.85 tonne CO₂ released
- Approximately 8% global CO₂ emissions from steel in 2020
- Inclusion of vanadium enables higher quality, stronger steel, lowering emissions
- Chinese industry reduced 2019 CO₂ emissions by 1.5% by including vanadium in rebar¹



The benefits of upgrading to high-strength vanadium steel

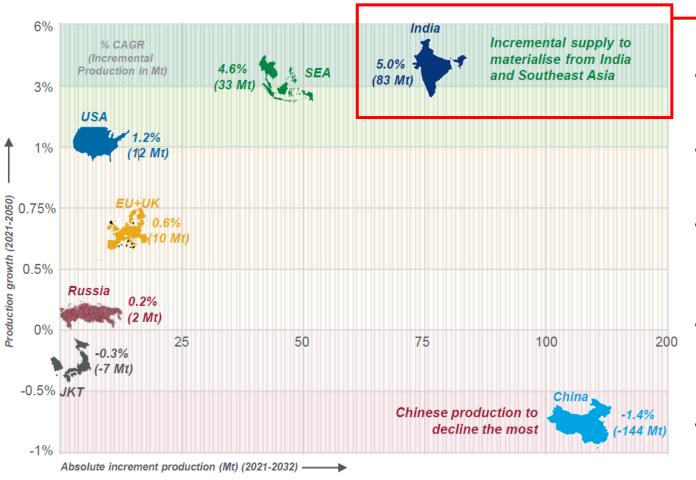




INDIA LEADING GROWTH IN STEEL PRODUCTION



India's steel demand increasing to 9% of global consumption by 2032



- Incremental steel production in India to increase 5% year on year
- Investing US\$110-140 billion in steelmaking over 2021-2032
- Vanadium high strength rebar needed for construction of buildings, infrastructure and high-speed rail
- Vanadium intensity of use is ~39g/t of steel in India versus ~85g/t in Europe and ~104g/t in North America
- TMT MOU in place with TATA STEEL

WHY VANADIUM BATTERIES?



Safe, stable, reliable, low cost, long life performance



SAFETY

Water based and totally nonflammable, non-combustible, and non-toxic



LOW ENERGY COST

Over its 20+ year lifespan, vanadium batteries offer the lowest cost per kWh stored (LCOE)



EASY TO EXPAND CAPACITY

Battery capacity easily expandable by adding more storage tanks



NO DEGRADATION

Performance remains constant with excellent long term charge retention



SUSTAINABILITY

The vanadium is fully reusable and recyclable at end of battery life



LONG LIFE

Can easily last more than 20 years with very high cycle life (up to 20,000 cycles)



RELIABLE PERFORMANCE

Work in harsh environmental conditions without loss of performance



SINGLE CHEMICAL ELEMENT

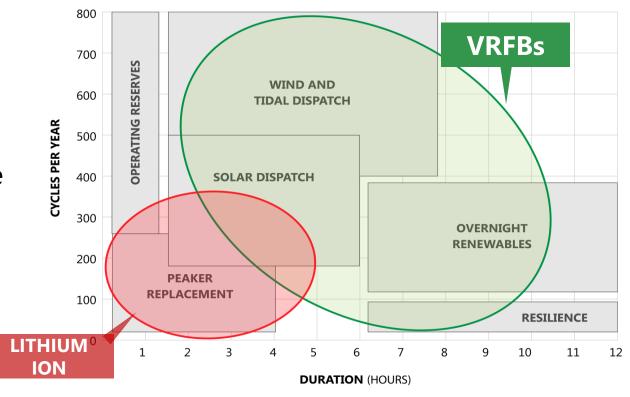
Use multiple forms of vanadium to store and release charge – eliminating need for any other elements

VRFB FILLS THE ENERGY STORAGE GAP



Cost efficiently time-shift large amounts of energy for later use

- While solar and wind generate very cheap electricity, long duration energy storage is needed to maximise efficiency
- Lithium-ion being superseded by VRFBs for long duration storage with low maintenance costs and long operational lifetimes
- Most suited to large-scale grid stabilisation and industrial energy storage application
- By 2050, Australia will require 50GW/1,000GWh of energy storage*



VRFBs ideal for use in medium-long duration applications. Source: Invinity

^{*}Andrew Blakers, Director of Australian National University Centre for Sustainable Energy Systems

VRFB DEVELOPMENTS GLOBALLY



Deployment of large scale VRFBs globally

Sumitomo	Rongke Power	Invinity	Shanghai Electric	Yadlamalka Energy		
			n/a			
Hokkaido, Japan	Dalian City, China	Alberta, Canada	Jiangsu province, China	South Australia		
Commenced operations in 2015	Operational	Construction/Installation	Public plans	Construction /Installation		
SUMITOMO ELECTRIC	融科储能 RONGKE POWER	INVINITY ENERGY SYSTEMS	上海电气 SHANGHAI ELECTRIC	YADLAMALKA ENERGY		
60MWh (15MW for 4h)	800MWh (200MW)	8.4MWh	400MWh (100MW)	8MWh (2MW)		
	Hokkaido, Japan Commenced operations in 2015 SUMITOMO ELECTRIC	Hokkaido, Japan Dalian City, China Commenced operations in 2015 Operational SUMITOMO ELECTRIC	Hokkaido, Japan Dalian City, China Alberta, Canada Commenced operations in 2015 Operational Construction/Installation SUMITOMO ELECTRIC RONGKE POWER Dalian City, China Alberta, Canada Construction/Installation	Hokkaido, Japan Dalian City, China Alberta, Canada Jiangsu province, China Commenced operations in 2015 Operational Construction/Installation Public plans SUMITOMO ELECTRIC DIRECTION SHANGHAI ELECTRIC		

^{* 1}kWhr requires ~10kg of V₂O₅

Source: Company announcements

GROWTH FORECAST FROM BATTERY MARKETS



Vanadium for VRFBs expected to grow to 33% of global market in 2030*

Increase in demand (index 2022) 25 20 15 10 5 2027 2032 2037 2047 2042 Vanadium (batt) Vanadium (steel) Manganese (steel) Manganese (batt) — Nickel (steel) Nickel (batt)

Source: Wood Mackenzie, Batteries and Steel: friends or enemies?, March 2023

- Current market in balance at around ~220,000t V₂O₅ in 2022
- Consumption is expected to grow to ~380,000t V₂O₅ by 2031
- Current production, state supported projects in China and vanadium from recycling is not expected to meet future consumption
- Supply shortfall forecast for 2031 of \sim 45,000t V_2O_5 MTMP to produce \sim 12,500ktpa

Source: CRU, January 2023