



TECHNOLOGY
METALS AUSTRALIA LIMITED

VANADIUM

SAFER. LONGER. GREENER. STRONGER

NOOSA MINING INVESTOR CONFERENCE
JULY 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 Oreology 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.

A COMPELLING INVESTMENT

Delivering Australia's critical minerals strategy to enable the clean energy transition



Strategically Important Tier 1 Project

Vanadium is a critical mineral in the EU, USA, India, Japan and Australia
Outstanding geology enabling proven integrated processing in Australia



Strong Experienced Team

High-performing professionals and contractors who have delivered major projects
Training and development of skilled workforce in battery technology



Building International Partnerships

Backing from RCF VII provides long-term project development support
Collaboration with top industry players: Tata Steel, LE System, Delectrik



Meaningful ESG Performance

Commitment to decarbonisation through abatement and energy efficiency strategies
Careful management of the environment and water stewardship



Enabling Infrastructure

Development of the Gabanintha Gas Pipeline that will support the region
Contribution to road upgrade to ensure operational efficiency



Collaboration with Traditional Owners

Working constructively with the Yugunga-Nya People
Ensure shared benefits and socioeconomic opportunities

Capital Structure

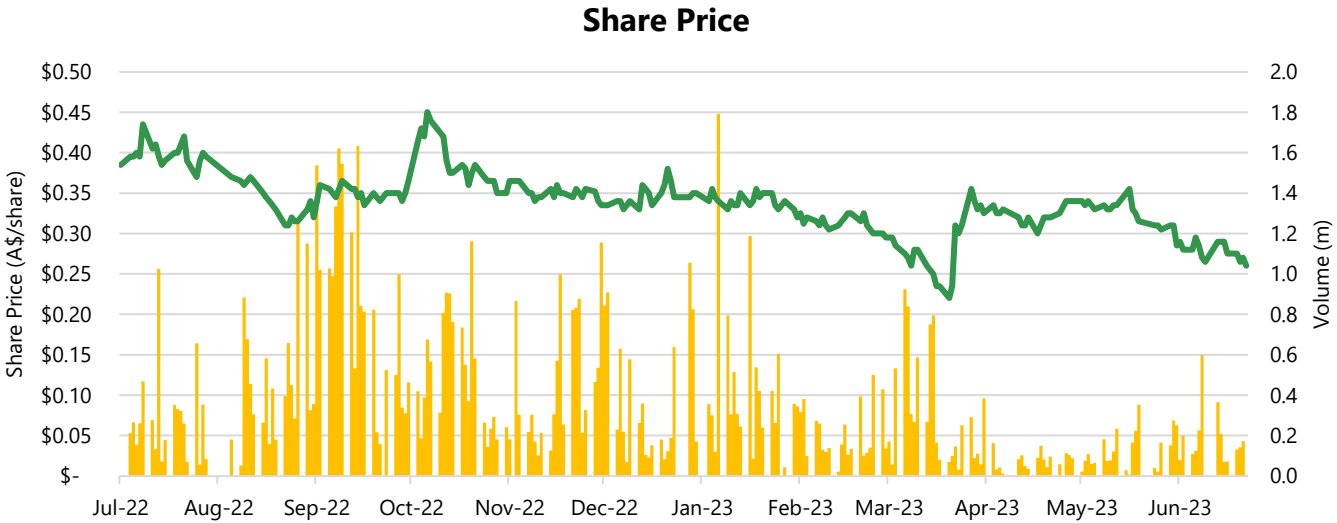
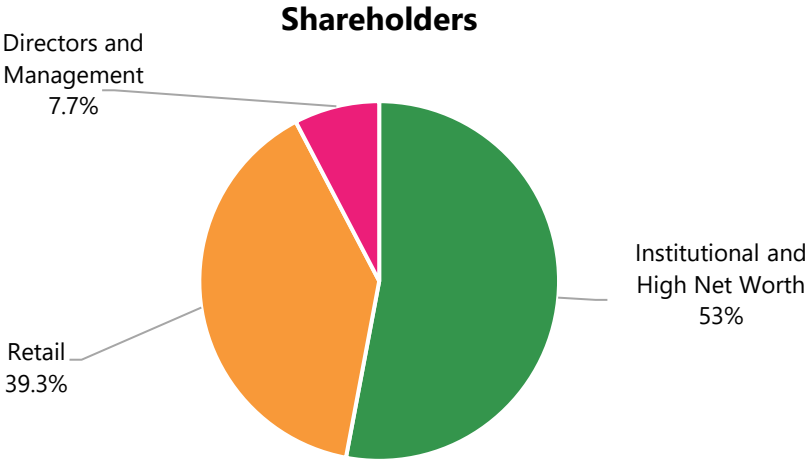
Key Metrics	
ASX Code	TMT
Cash	\$16.5m (at 30 June 2023)
Market Cap	\$72.5m (at 20 July 2023)
Shares on Issue	254.3m
Unlisted Options ¹ (Various exercise)	10.8m
Performance Rights ²	6.2m

¹ Includes 10.8m director and employee options that vest on project development hurdles

² 51% vest on MTMP FID, 49% vest on first production

Holder Name	Holding (%)
Resource Capital Fund VII L.P.	18.2%
BNP Paribas Nominees	8.7%
Standard Pastoral Company	5.5%
TOTAL TOP 20	59.6%
Board and Management holdings (fully diluted)	7.6%

*Based on issued capital at 18 July 2023



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.

Michael 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 mining.

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.

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



Jo Gaines
Non-Executive Director

Jo is an experienced leader and strategic policy director, having previously worked at high level of government as the Deputy Chief of Staff to the Premier of Western Australia. She brings extensive experience in stakeholder engagement, including across all levels of government and within the private sector.

Jo holds a Bachelor of Arts from the University of Western Australia, a Post Graduate Diploma in Occupational Health and Safety from Curtin University and is a graduate of the Australian Institute of Company Directors.



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.

David was GM Operations at the Windimurra Vanadium Project from February 2008 until February 2010 involved in the redevelopment of the project.



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.

Elisha 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.



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.

Sonu's role includes 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.

VANADIUM TO HELP *SUPERCHARGE* SUSTAINABLE INDUSTRIES

Vanadium batteries the safer option for long duration energy storage

Vital efficiency drivers for renewable energy sources

= CO₂ Savings

Iron - Steel sector one of the largest CO₂ emitters

Adding vanadium reduces steel weight, increases capacity and reduces volume

= CO₂ Savings



THE WORLD'S NEXT PRIMARY VANADIUM MINE



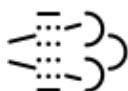
Outstanding project fundamentals in World-leading jurisdiction



Large high-grade resource – 153.7Mt at 0.8% V_2O_5 with high vanadium in concentrate grades (up to 1.6% V_2O_5)



Shallow weathering provides high yielding fresh ore early in project life delivering lowest quartile costs



Conventional integrated salt roast water leach processing to deliver downstream processing with high recoveries using natural gas – **a cleaner fuel source** compared to those used by peers



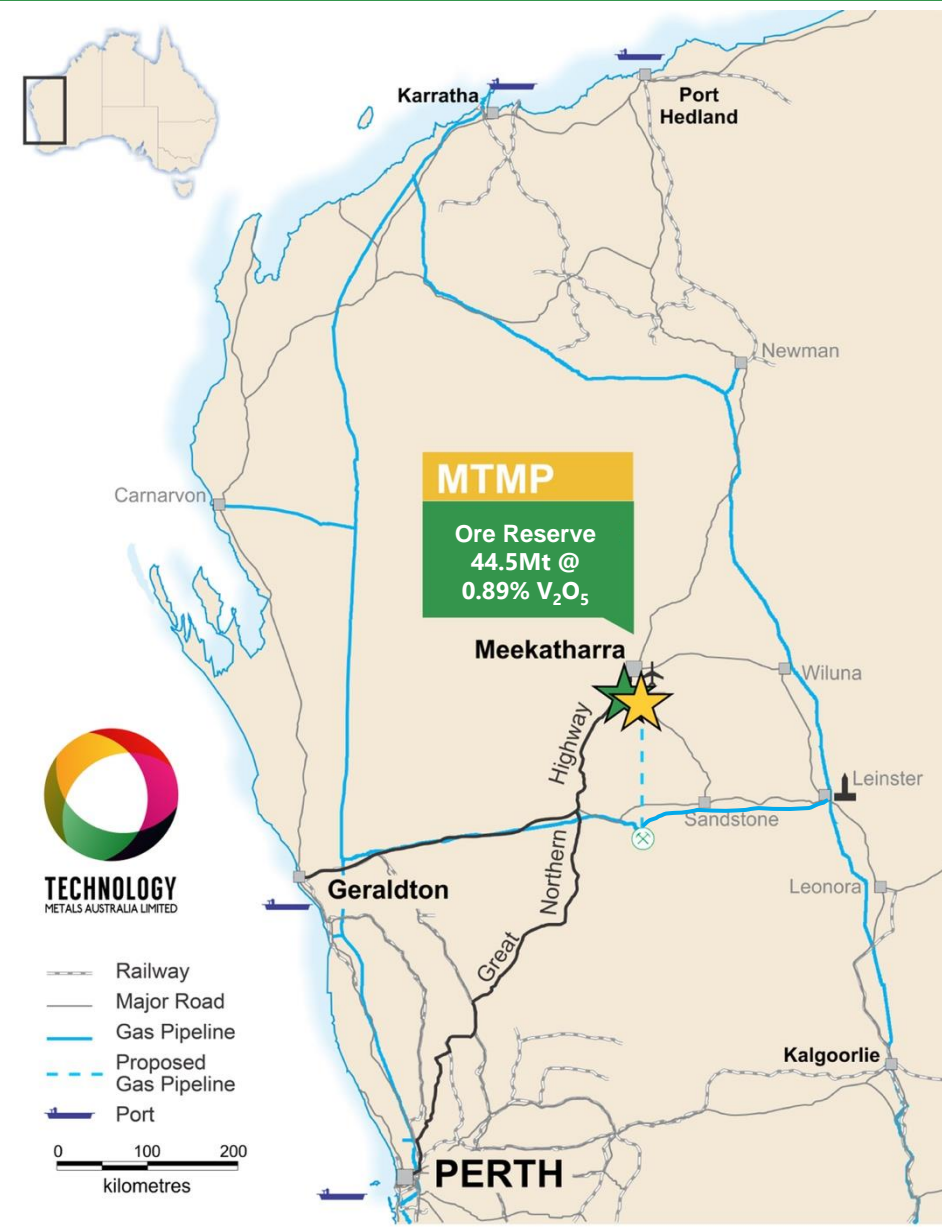
High purity vanadium product attracts a premium price + **ilmenite** by-product for the first nine years provides dual revenue from a **well-established market**



Financial support from Danish export credit agency EIFO (previously EKF) to deliver a **critical mineral** to the world



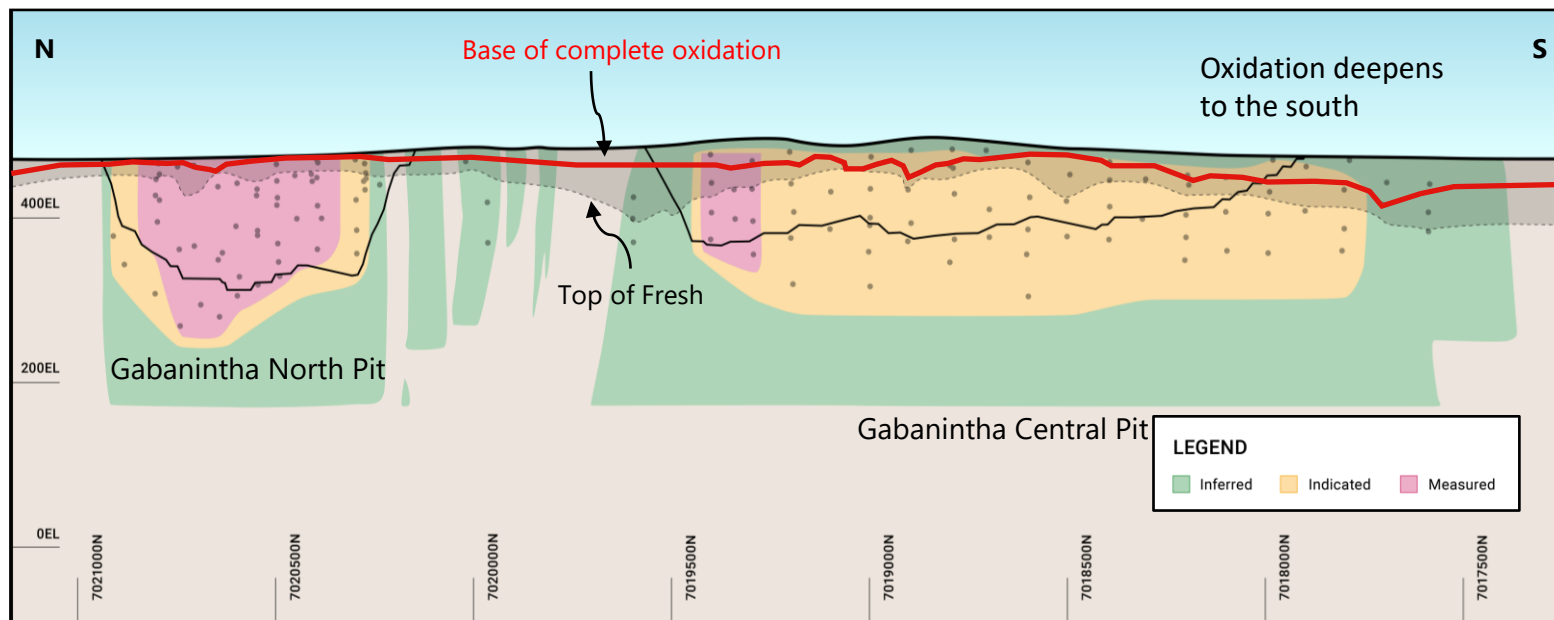
Average **annual EBITDA of A\$182m***



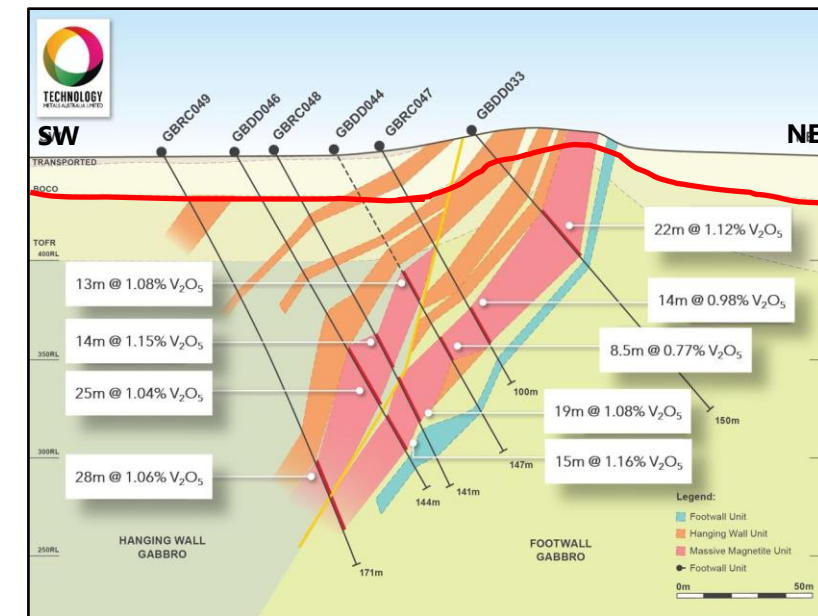
*Source: TMT Announcement: MTMP Mine Life Increased to 25 Years – Maiden Ilmenite Reserve and Production Profile, 5 August 2022

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
- Use of conventional salt roast water leach downstream processing on site with industry leading recoveries



Gabanintha Long Section



Yarrabubba Cross Section

***Driving the MTMP forward with corporate and project-level activities
unlocking long-term value and delivering sustained success***



Implementation activities include:

- ✓ Delivery of the Bankable Financial Model
- ✓ Construction readiness planning and scheduling - FEED
- ✓ Collaborative engagement with Traditional Owners
- ✓ Permitting and approvals
- ✓ Independent Technical Expert (ITE) Review
- ✓ Progression of funding strategy
- ✓ Product marketing and customer offtake agreements

PROJECT DELIVERY ACTIVITIES

CIVIL WORKS



CONSTRUCTION



EQUIPMENT



FINANCING



GAS PIPELINE



LOGISTICS



- **Iron Mine Contracting** and **GR Engineering** working with the MTMP team as Integrated Project Team to progress detailed construction planning, identifying cost and schedule reduction opportunities
- **FLSmidth** to deliver pyro-processing technology and major equipment for the concentrator and leach circuit, supported by Danish export credit agency **EIFO**'s potential financial backing of around A\$150 million

- **APA Operations** progressing permitting and approvals, front-end engineering and design for the Gabanintha Gas Pipeline spur from the Northern Goldfields Interconnect (NGI) pipeline
- Progressing Port Access Agreement with **Mid West Ports Authority** that enables the import of reagents and export of ilmenite product via the Port of Geraldton

ENVIRONMENT AND HERITAGE

*Our mission to develop and operate a **world-class critical minerals project** that makes a **positive difference** to the local community, minimises impacts to the environment and contributes to global decarbonisation*



TMT team with EPA Services at the MTMP site



Yugunga-Nya representatives with TMT team on the MTMP site

Our key focus areas are environmental and water stewardship, emissions reduction, cultural and heritage protection. We are:

- Collaborating with our Traditional Owners towards a Cultural Heritage Management Plan and Project Access Agreement
- Liaising with the Environmental Protection Authority (EPA) on advancing permitting and approvals

PROPOSED GREEN VILLAGE AT THE MTMP

Planned installation of roof-mounted solar arrays on all accommodation buildings at the MTMP Village, connected to vanadium battery energy storage, to help reach our decarbonisation goals



Concept graphic only

QUALITY COMMERCIAL PARTNERSHIPS

Collaborating with important players in the vanadium end markets

STEEL



BATTERIES



Leading Chinese specialty minerals processor producing ferrovandium and vanadium nitrogen alloys for the steel industry



Biggest steelmaker in India with an annual crude steel production capacity of 34Mtpa, with products including automotive and structural steels



LE SYSTEM CO., Ltd.

Leading Japanese supplier of vanadium electrolytes to battery manufacturers, running a state-of-the-art plant with a production capacity of 5,000m³pa of electrolyte

DELECTRIK

Fast-growing Indian vanadium battery manufacturer producing highly scalable and flexible battery systems for industrial deployment around the world

VERTICAL INTEGRATION: ORE TO ELECTROLYTE

TMT's ambition is to deliver a vertically integrated supply chain from mine to electrolyte



RAW MATERIALS EXTRACTION

Large high-grade resource at the MTMP enabling 25 years of production of vanadium-bearing ore



MATERIALS PROCESSING

Integrated processing on site enabling downstream processing of ore into high-purity battery pre-cursor vanadium pentoxide



ELECTROLYTE PRODUCTION

Electrolyte production facility based in WA to supply vanadium electrolyte to battery specifications



INTEGRATION INTO BATTERIES

Working with manufacturers to deliver and commission our electrolyte into their batteries

Increasing downstream value

DOWNSTREAM ELECTROLYTE PRODUCTION



Mini-cell tests conducted at LE System's Tsukuba Battery Laboratory
Source: LE System

- Vanadium electrolyte produced from MTMP pre-cursor material at LE System's facility in Tokyo
- Testing of MTMP electrolyte confirmed high purity and performance meeting major battery manufacturer specifications

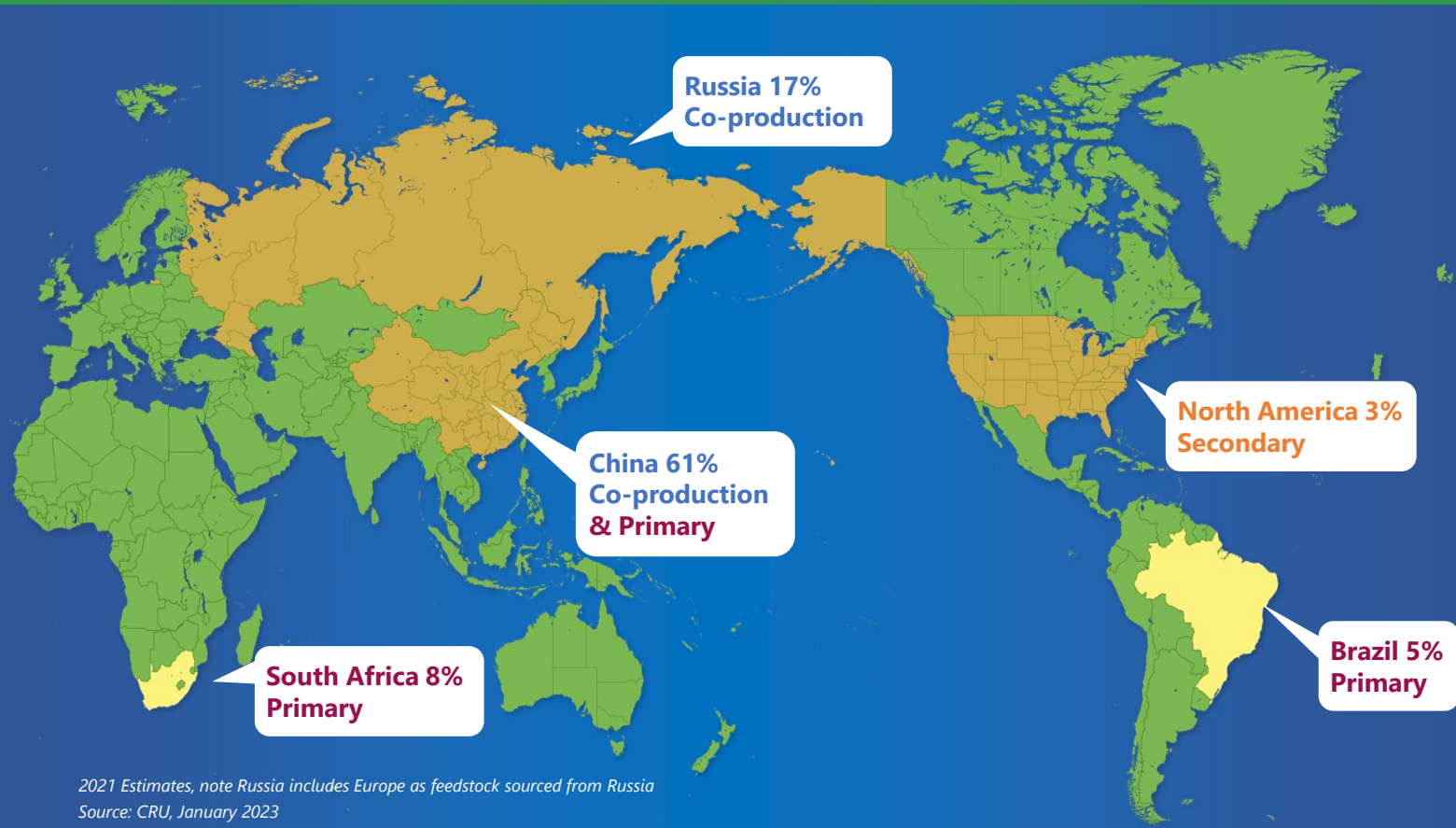


TMT's visit to LE System's electrolyte production facility in Namie, Fukushima Source: Technology Metals Australia



- Electrolyte production technology licensing agreement with LE System to enable TMT's electrolyte production facility in WA
- Proposed electrolyte production facility to have capacity of 166MWh
- Feasibility study ongoing on location of facility, with consideration for proximity to potential end users in Australia

GLOBAL VANADIUM SUPPLY



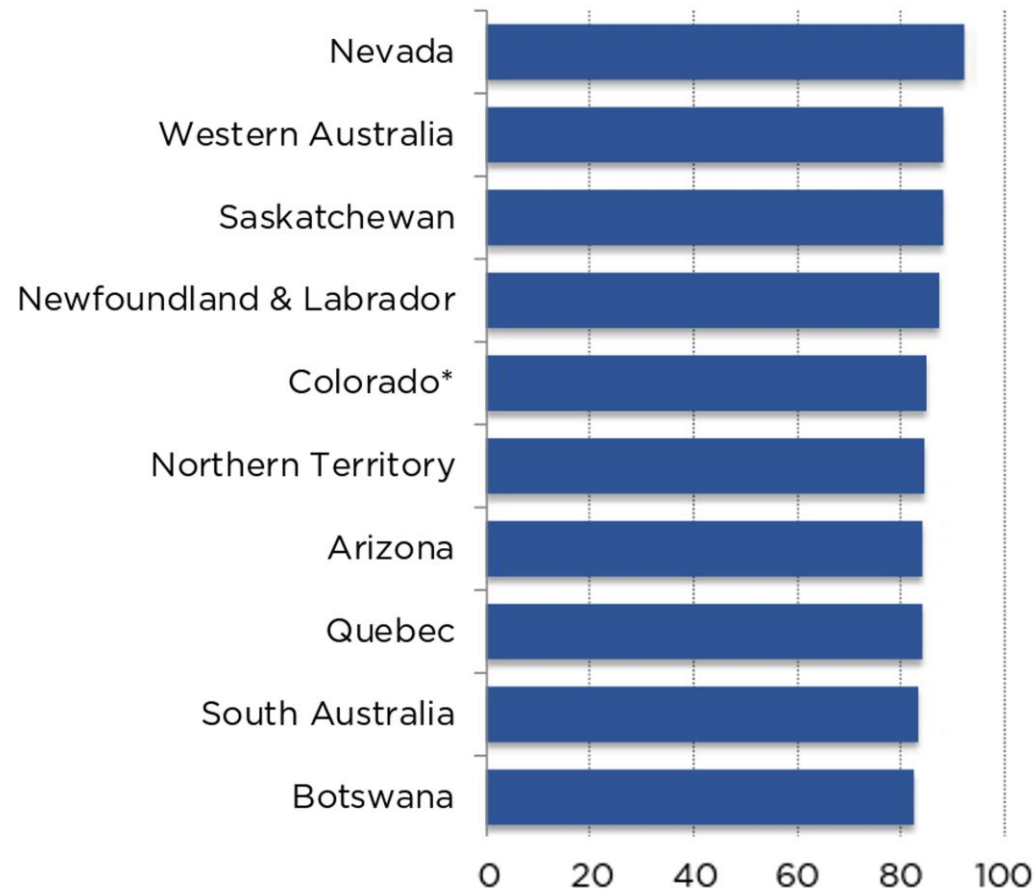
Customers looking for secure supply

1. **Co-production** from vanadium bearing slag smelted from steel production - ~71% supply
2. **Primary production** from majority vanadium bearing ores - ~17% of supply
3. **Secondary production** from hydrocarbon residues and catalysts - ~12% of supply

China and Russia dominate supply

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

Top 10 Jurisdictions for Mining Investment



Source: Fraser Institute, Annual Survey of Mining Companies, 2022.

*United States Geological Survey and Geoscience Australia, 2017.

- Western Australia, **the second 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

VANADIUM – PART OF THE CRITICAL MINERALS STRATEGY

- Federal Government Critical Minerals Strategy 2023-2030 – \$500 million earmarked for investment through NAIF for strategically-aligned projects
- TMT's corporate strategy demonstrates alignment with the Critical Minerals Strategy - to be a significant supplier of vanadium and champion downstream production of vanadium electrolyte
- TMT is progressing engagement with Federal Government funding agencies
- Our social licence to operate is paramount to success – engagement with Traditional Owners the Yugunga-Nya People is ongoing and positive, with regular discussions on employment and training opportunities, alongside heritage protection and development of Cultural Heritage Management Plan
- Environmental stewardship – WA Environmental Protection Authority (EPA) completed site visit to the MTMP

MTMP to deliver the ore to electrolyte pathway to enable vanadium battery implementation



Vanadium titano-magnetite (VTM)



Vanadium pentoxide flake



Vanadium electrolyte



Vanadium battery

WHY VANADIUM BATTERIES?



SAFETY



RELIABLE PERFORMANCE



LONG LIFE



NO DEGRADATION



LOW ENERGY COST



EASY TO EXPAND CAPACITY



SINGLE CHEMICAL ELEMENT



SUSTAINABILITY



Allows the vanadium to be extracted from the electrolyte and redeployed in new vanadium battery installations infinitely.

Prime example of the '**circular economy**', where the value of the material is retained and maximised through reuse.

VANADIUM BATTERIES FILL THE ENERGY STORAGE GAP

While solar and wind generate very cheap electricity, long duration energy storage is needed to maximise efficiency

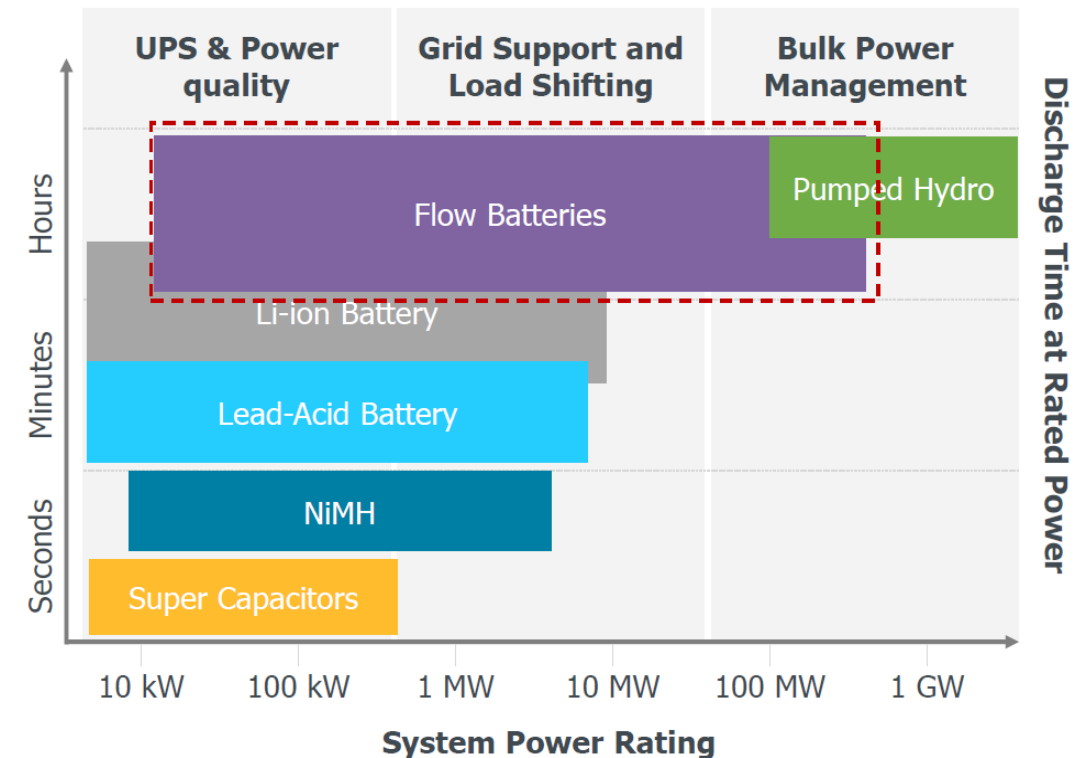
Energy sector is taking note:

“Long duration storage could supplement the high demand peak period covered by the 460MW Eraring battery currently under development and add to the overnight generation availability provided by the Shoalhaven Hydro Scheme”

- Greg Jarvis, Origin Head of Energy Supply and Operations*

“In order for us to really integrate renewables and provide 24/7 green energy, we’ve got to solve those long duration time periods. Lithium-ion can be unstable in the extreme heat of regional WA...we need to look for something that for us probably won’t be lithium-ion, so probably vanadium flow.”

- Stephanie Unwin, Horizon Energy Chief Executive Officer^

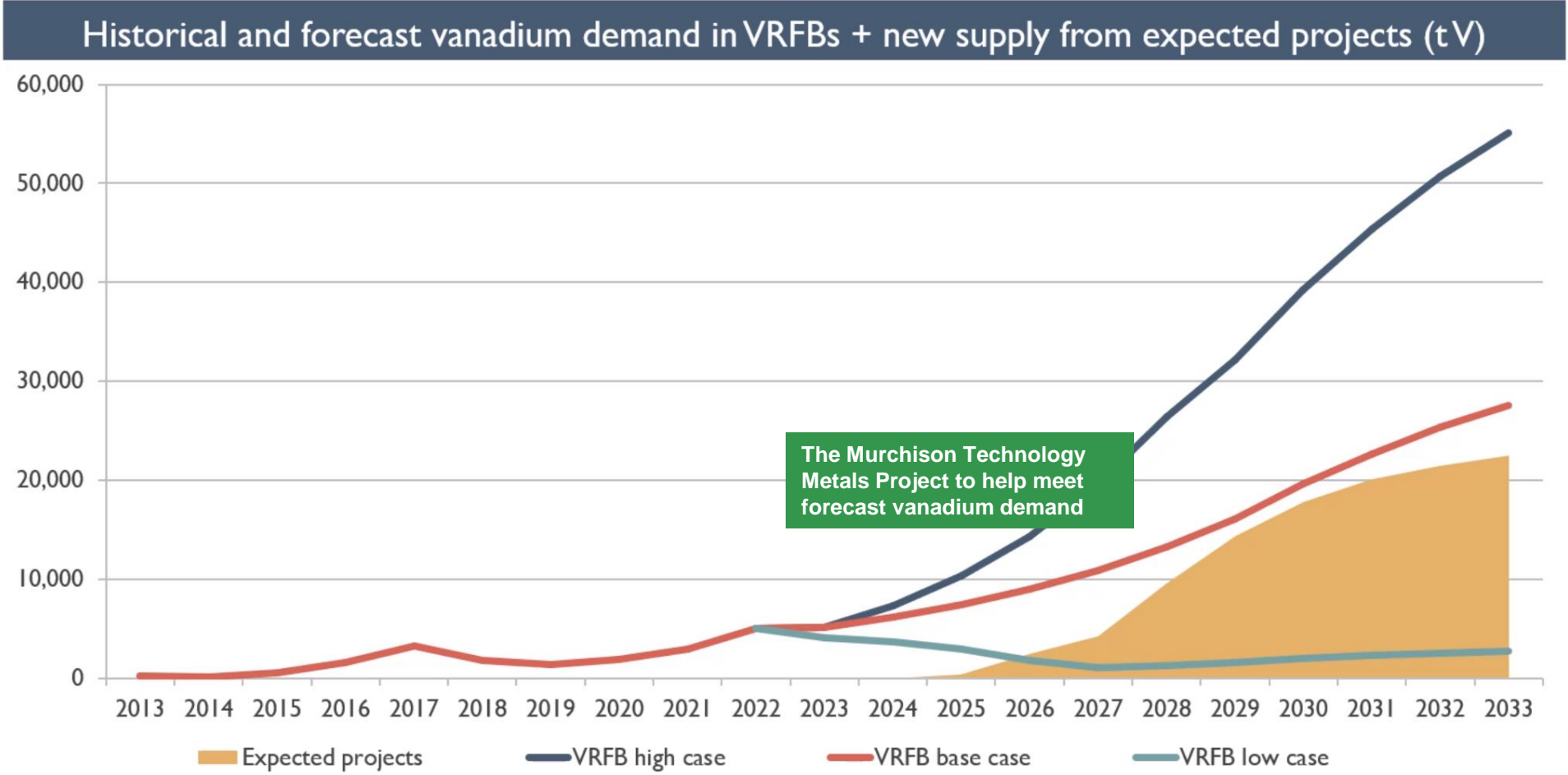


Source: via VTechFlow from International Renewable Energy Agency

* Source: Origin Energy "Origin acquires interest in Newcastle's Allegro Energy and agrees to long duration storage trial at Eraring", 28 June 2023

^Source: Australian Financial Review "Delay Eraring closure as 'insurance', says Transgrid's Redman", 20 June 2023

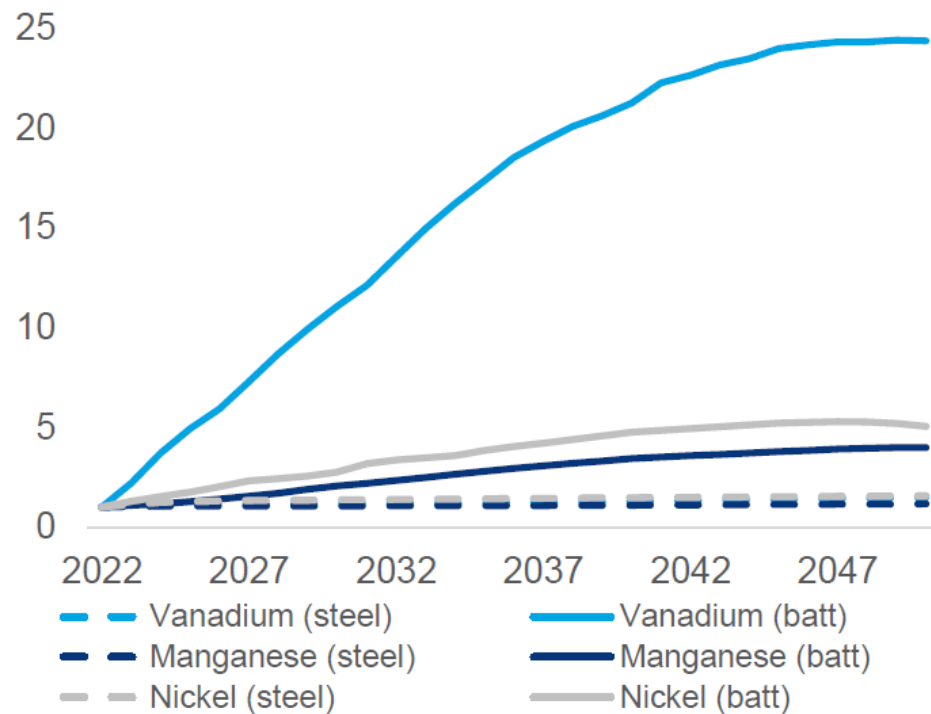
FORECAST DEMAND FROM VANADIUM BATTERIES



Source: Project Blue, June 2023

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

Increase in demand (index 2022)



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

- Current market in balance at around ~220,000t V_2O_5 in 2022
- **Consumption** is expected to grow to ~380,000t V_2O_5 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 ~45,000t V_2O_5 – MTMP to produce ~12,500ktpa

*CRU, January 2023

Source: CRU, January 2023

VANADIUM BATTERY DEVELOPMENTS GLOBALLY

Details	Sumitomo	Rongke Power	Invinity	Shanghai Electric	Yadlamalka Energy
Image				n/a	
Project Location	Hokkaido, Japan	Dalian City, China	Alberta, Canada	Jiangsu province, China	South Australia
Stage	Commenced operations in 2015	Operational	Construction/Installation	Public plans	Commissioning
Developer					
Scale*	60MWh (15MW for 4h)	800MWh (200MW)	8.4MWh	400MWh (100MW)	8MWh (2MW)

* 1kWhr requires ~10kg of V₂O₅

Source: Company announcements

Emerging demand for vanadium battery installations around Australia



Source: Yadlamalka Energy

South Australia - Yadlamalka Energy

Largest of its kind in the southern hemisphere - holds 2MW/8MWh, or 10GWh of dispatchable solar power annually

"It feels like we're on the verge of a vanadium revolution...it's got some important advantages – one of which is it doesn't deteriorate over time unlike lithium-ion." *

– Andrew Doman, Yadlamalka founder and chairman



Source: Vecco Group

Energy Queensland – vanadium battery deployment

Vecco Group and Sumitomo Electric to supply vanadium electrolyte and battery hardware respectively for a 250kW/750kWh vanadium battery for Energy Queensland

"Vanadium flow batteries will play a significant role in the Queensland SuperGrid and we expect to see deployments of this proven technology accelerate as the local supply chain expands." ^

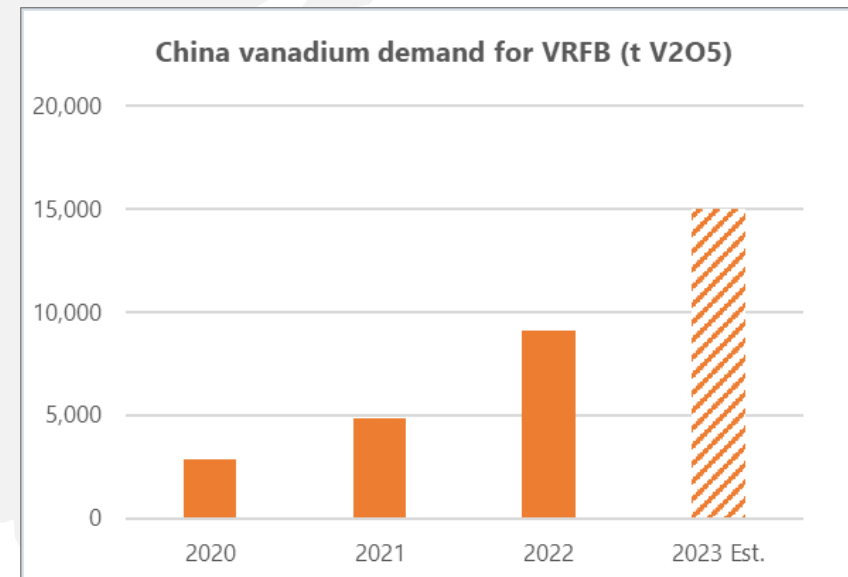
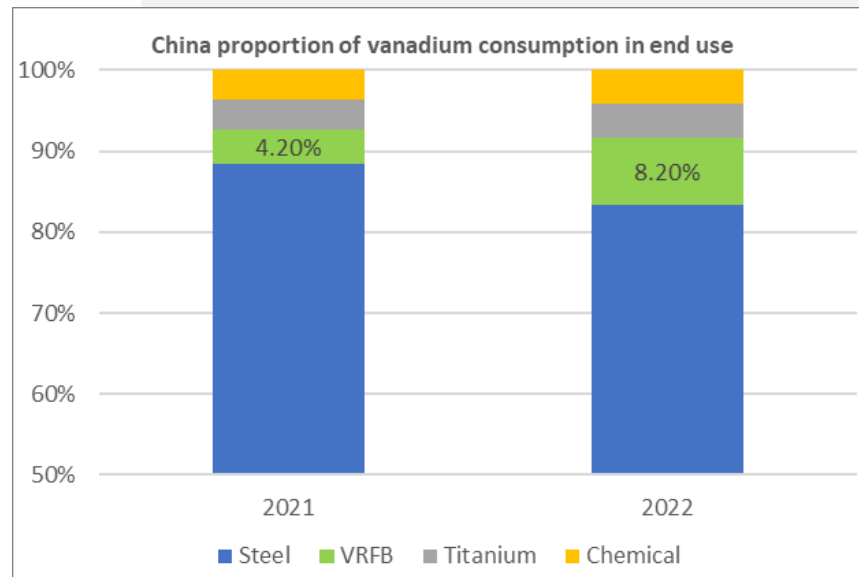
– Tom Northcott, Vecco Managing Director

* In Daily, "Yadlamalka Energy turns on battery storage and solar project at Port Pirie", 21 June 2023

^ PV Magazine, "State puts vanadium tech to test as 'Australian first' manufacturing plant opened", 23 June 2023

China leading the deployment of **vanadium batteries** – driver of demand growth

- World's largest vanadium batteries developed to date are in China
- Government banned the use of lithium and sodium-sulphur batteries for large scale energy storage due to safety issues – vanadium batteries promoted as safer option
- Vanadium industry's two largest producers have announced substantial vanadium battery supply agreements and construction of sizeable vanadium electrolyte production facilities



China investing heavily in vanadium batteries as part of Net Zero strategy

- The country's biggest vanadium producer Pangang alongside Dalian Rongke building a vanadium electrolyte production line with an annual capacity of 60,000m³ – equivalent to ~1GWh vanadium battery capacity
- Installed capacity of vanadium batteries in China set to reach between 8.6-12.9GWh in 2025
- **1MWh = ~8 tonnes of V₂O₅** so China will require 68,800 to 103,200 tonnes of V₂O₅ to fulfill battery requirements in 2025
- By 2030, vanadium batteries are expected to form 30% of electrochemical energy storage market with total of 30GW installations. With an average storage time of 6 hours, i.e., **180GWh – 1.44 million tonnes of V₂O₅ will be required***



Rongke Power vanadium electrolyte production facility. Source: Rongke Power

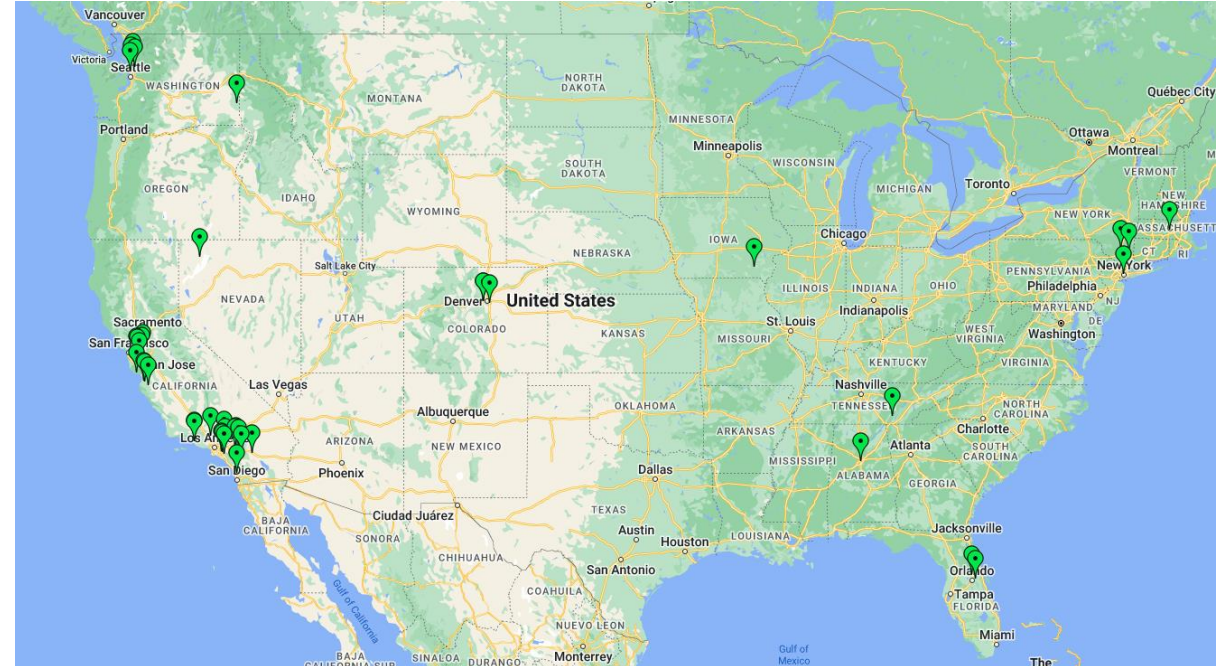
* Chief Scientist of Rongke Power, Huamin Zhang

US Inflation Reduction Act / Canada Investment Tax Credit supporting demand

- Around 35 vanadium batteries announced or operational in North America
- Largest, manufactured by Sumitomo Electric, is in San Diego, California
- Three large systems, with eight-hour storage duration, from 6MW to 16MW under installation in California



Sumitomo Electric's VRFB in San Diego, California



1MWh of energy storage requires ~10T V_2O_5

Projects announced and under construction in North America total ~480 MWh

Requiring around 4,800t V_2O_5 , equivalent to around **35% of TMT annual production**

India is expected to add more than 350GW of renewable energy capacity this decade*

- 75% of renewable energy expansion to come from variable solar and wind power*
- **Renewable Purchase Obligations (RPO) policy** in India mandates that by 2030, the country's distribution utilities purchase ~43% of their total electricity consumption from renewable sources
- Central Electricity Authority in India estimated about **52GW/260GWh of battery energy storage systems required by 2032^**
- Prime Minister Anthony Albanese on his visit to New Delhi in March 2023 witnessed **VRFB technologies being developed at the Indian Institute of Technology Delhi (IIT-D)**
- IIT-D team currently designing kW scale vanadium battery setup on campus to provide charging facility for EVs
- **TMT MOU with Indian vanadium battery manufacturer Delectrik Systems to cover supply of V_2O_5 to India**



*Source: Indian Institute of Technology Delhi,
https://home.iitd.ac.in/show.php?id=164&in_sections=Press#:~:text=The%20Vanadium%20Redox%20Flow%20Battery,discharged%20during%20the%20night%20time.

* Source: The Economic Times, 23 February 2023

^Source: WBCSD – Business guide to energy storage adoption in India

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



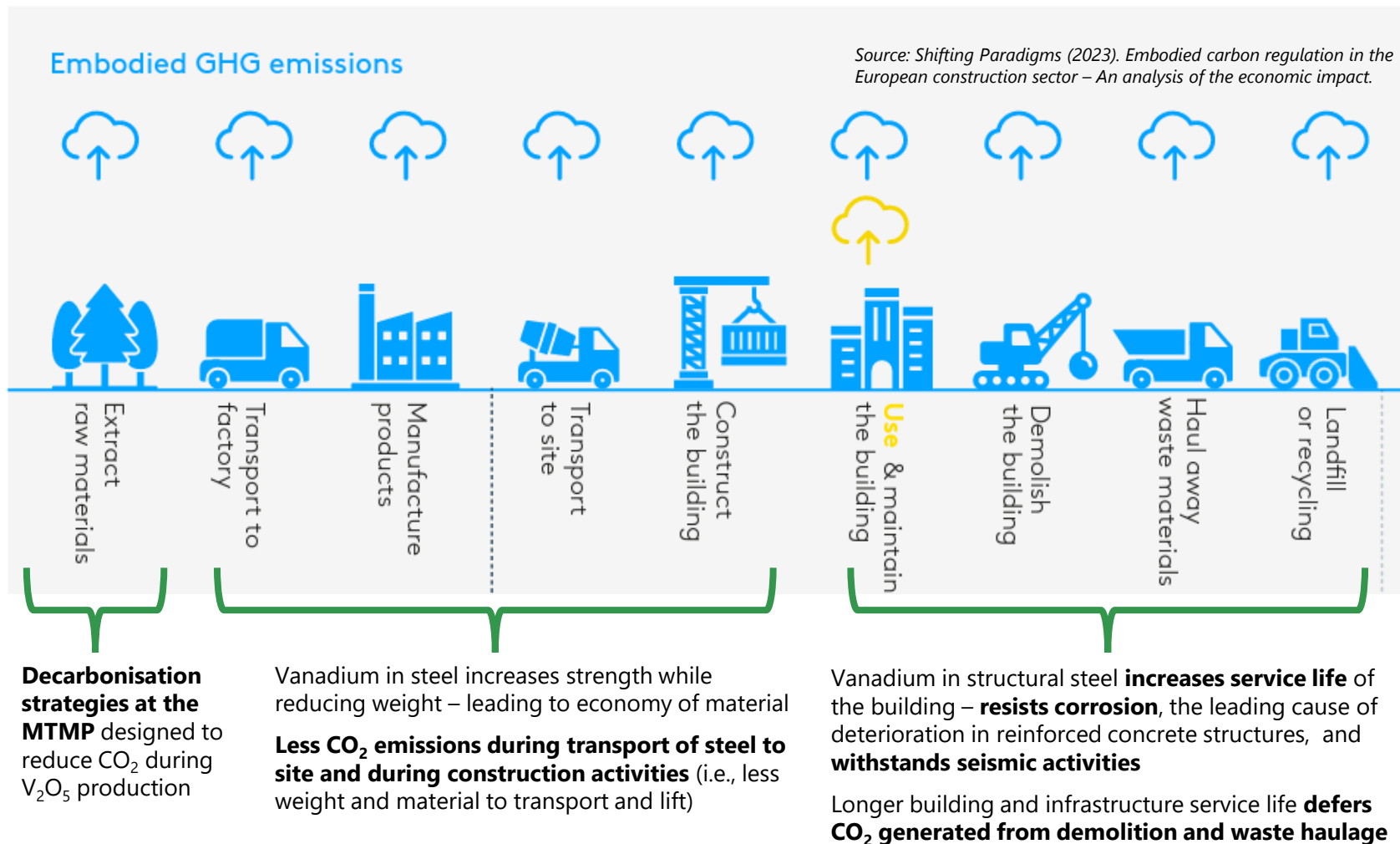
The benefits of upgrading to high-strength vanadium steel



¹ - Santos et al, Texas A&M University

REDUCTION IN EMBODIED CARBON

Vanadium in steel can help reduce building/infrastructure embodied carbon



Embodied carbon refers to CO₂ emissions associated with materials and construction processes through the whole lifecycle of a building or infrastructure

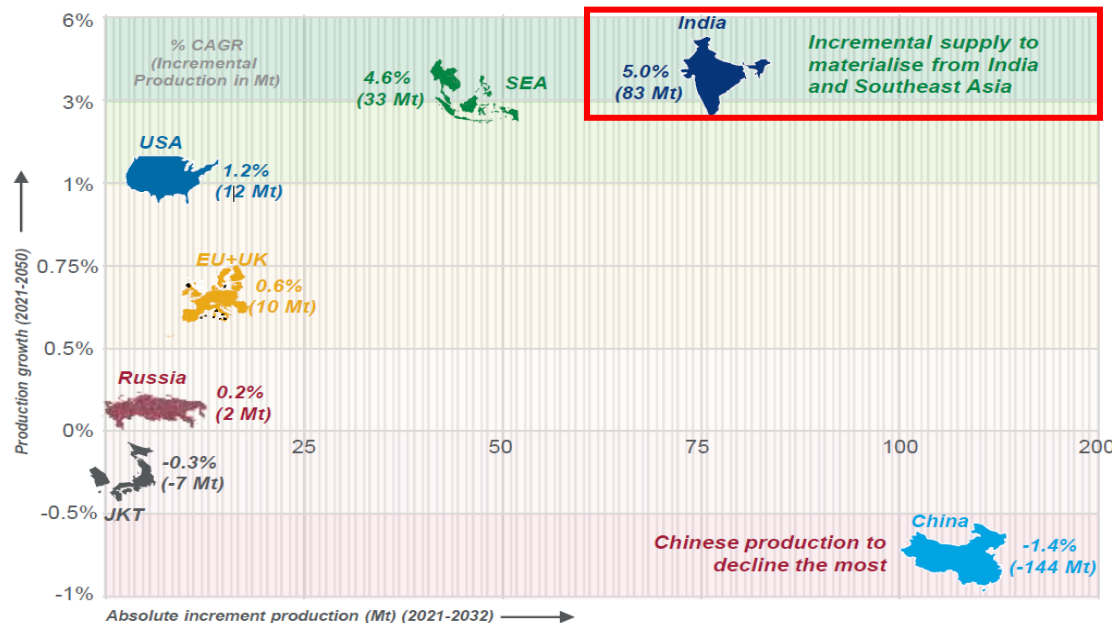
World Green Building Council calling for **Net Zero embodied carbon in all new buildings and infrastructure by 2050**

Vanadium in HSLA steels contributed to an overall CO₂ savings of 1.18 mMT in 2018*

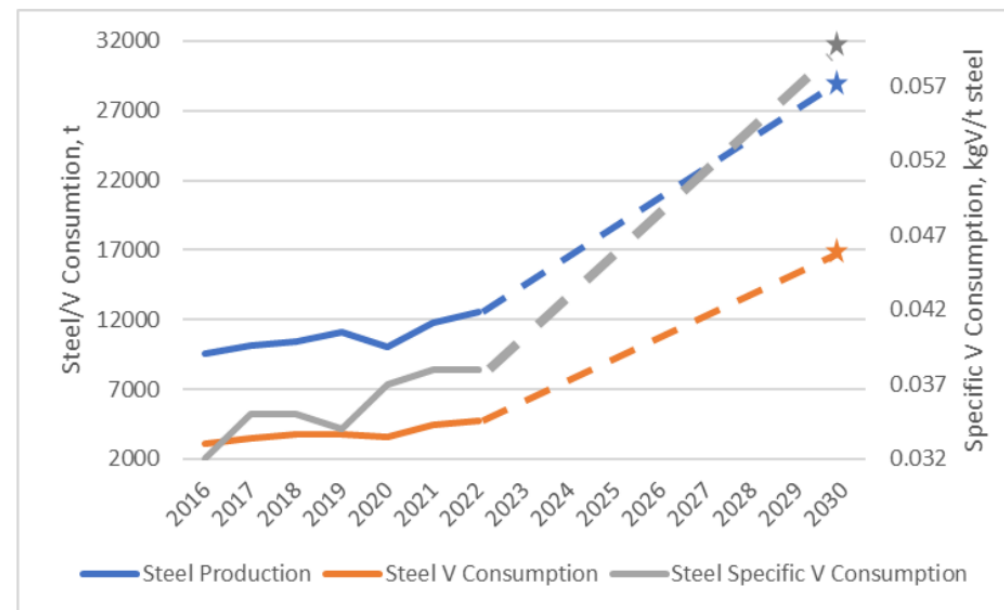
*Source: Santos et al., iScience 24, November 19, 2021.

INDIA LEADING GROWTH IN STEEL PRODUCTION

India's steel production target is **300Mt by 2030**, from **134Mt in FY22**



Source: Wood Mackenzie, Global Steel Market and Investment Outlook, March 2023



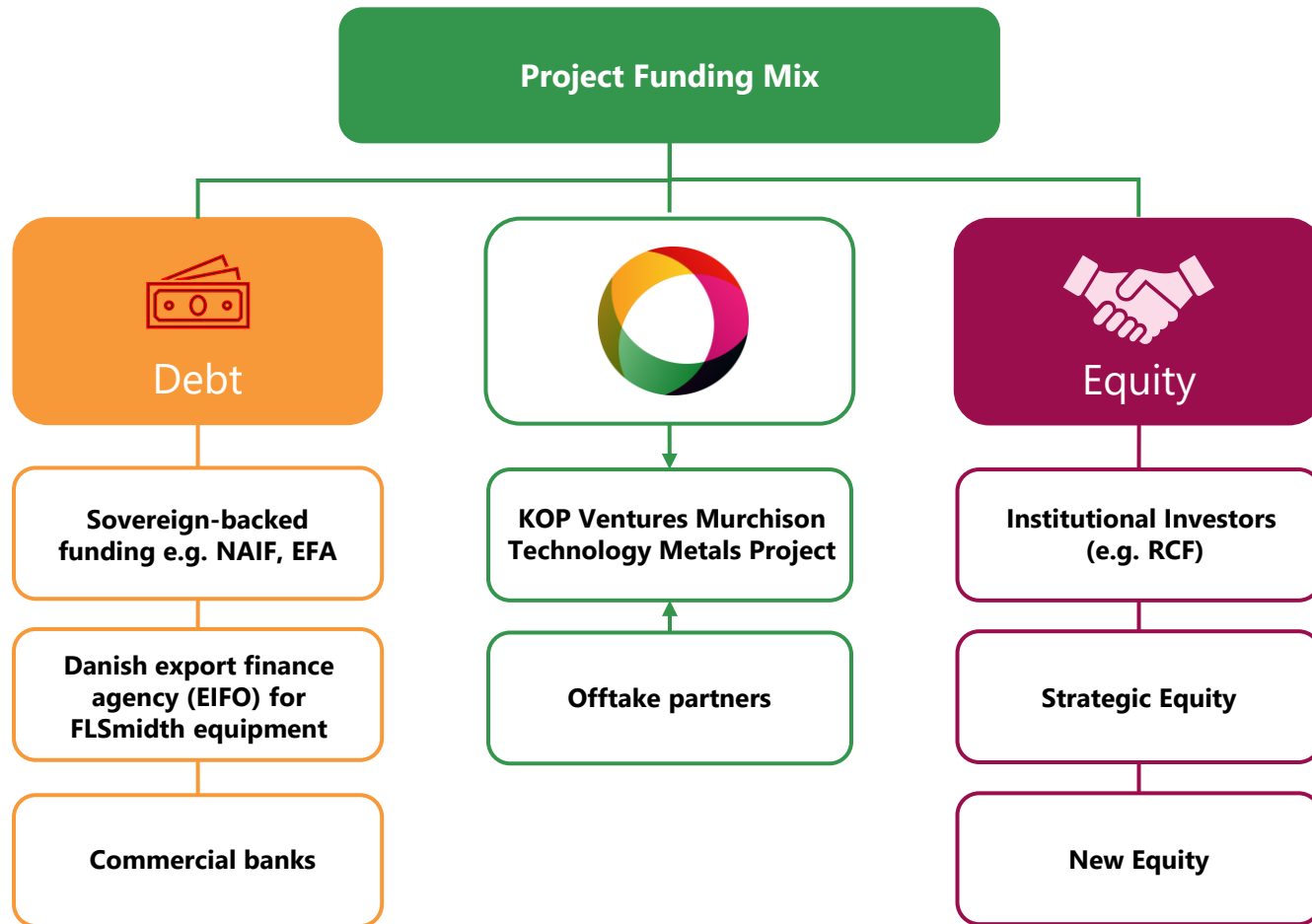
Source: Vanitec, April 2023

- India's **National Infrastructure Pipeline (NIP)** of projects to require **US\$1.4 trillion** over next five years*
- **Roads, Urban and Housing, Railways, Power (Conventional and Unconventional) and Irrigation** to make up ~80% of funds
- Indian Railway Ministry **investing US\$680 billion** to upgrade railways by 2030^
- High-strength vanadium alloy needed for infrastructure and high-speed rail – with **vanadium as alloying element for high-speed rail tracks**.^ Forecast that steel-specific vanadium intensity of use will **increase to 58g/t** in India by 2030 – increasing vanadium consumption to **17,000tpa by 2030**
- **TMT MOU in place with TATA STEEL**

*Source: <https://www.makeinindia.com/national-infrastructure-pipeline-building-india>

^Source: Vanitec, April 2023

Debt and equity mix from a range of partners



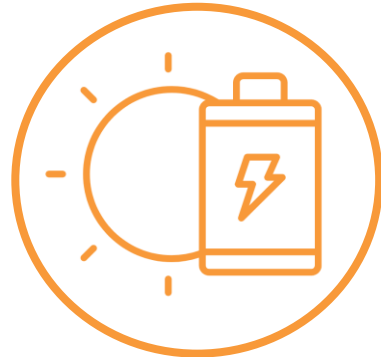
- RCF VII holds an of 18.2% shareholding with continuing support and positive outlook for the vanadium sector
- EIFO issued letter of interest for A\$150m financing support for major equipment
- Discussions ongoing with potential offtake partners and strategic investors into the MTMP
- Independent Technical Expert (ITE) Review progressing in support of debt financiers' due diligence process

A COMPELLING INVESTMENT



Industry Leading Tier 1 Project

- Outstanding geology enabling proven processing techniques
- Located in Western Australia, a globally attractive mining jurisdiction
- Excellent access to gas and essential infrastructure



Critical Minerals for a Cleaner Future

- Vanadium, a Critical Mineral in the EU, USA, India and Australia
- Intensifying demand for vanadium 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



Quality 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	Material	Mt	V ₂ O ₅ %	Fe %	Al ₂ O ₃ %	SiO ₂ %	TiO ₂ %	LOI %	P %	S %
Measured (Yarrabubba)	Massive	4.4	1.1	48.1	5.5	7.3	12.4	-0.4	0.01	0.3
	Disseminated	1.5	0.6	30.0	10.8	23.4	7.7	2.5	0.01	0.2
Measured (Gabanintha)	Massive	5.1	1.1	46.9	5.7	8.4	12.1	-0.2	0.01	0.3
	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
Indicated (Yarrabubba)	Massive	8.0	1.1	48.1	5.4	7.1	12.5	0.0	0.01	0.3
	Disseminated	6.9	0.6	28.4	12.5	25.2	7.2	2.6	0.02	0.3
Indicated (Gabanintha)	Massive	19.5	1.1	48.9	5.2	6.2	12.8	-0.1	0.01	0.2
	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
Inferred (Yarrabubba)	Massive	5.7	1.1	47.4	5.6	7.8	12.3	0.1	0.01	0.3
	Disseminated	11.4	0.6	27.9	12.6	25.8	7.2	2.0	0.02	0.4
Inferred (Gabanintha)	Massive	36.5	1.1	46.7	6.0	8.3	12.3	0.4	0.01	0.2
	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

*Notes:

- 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



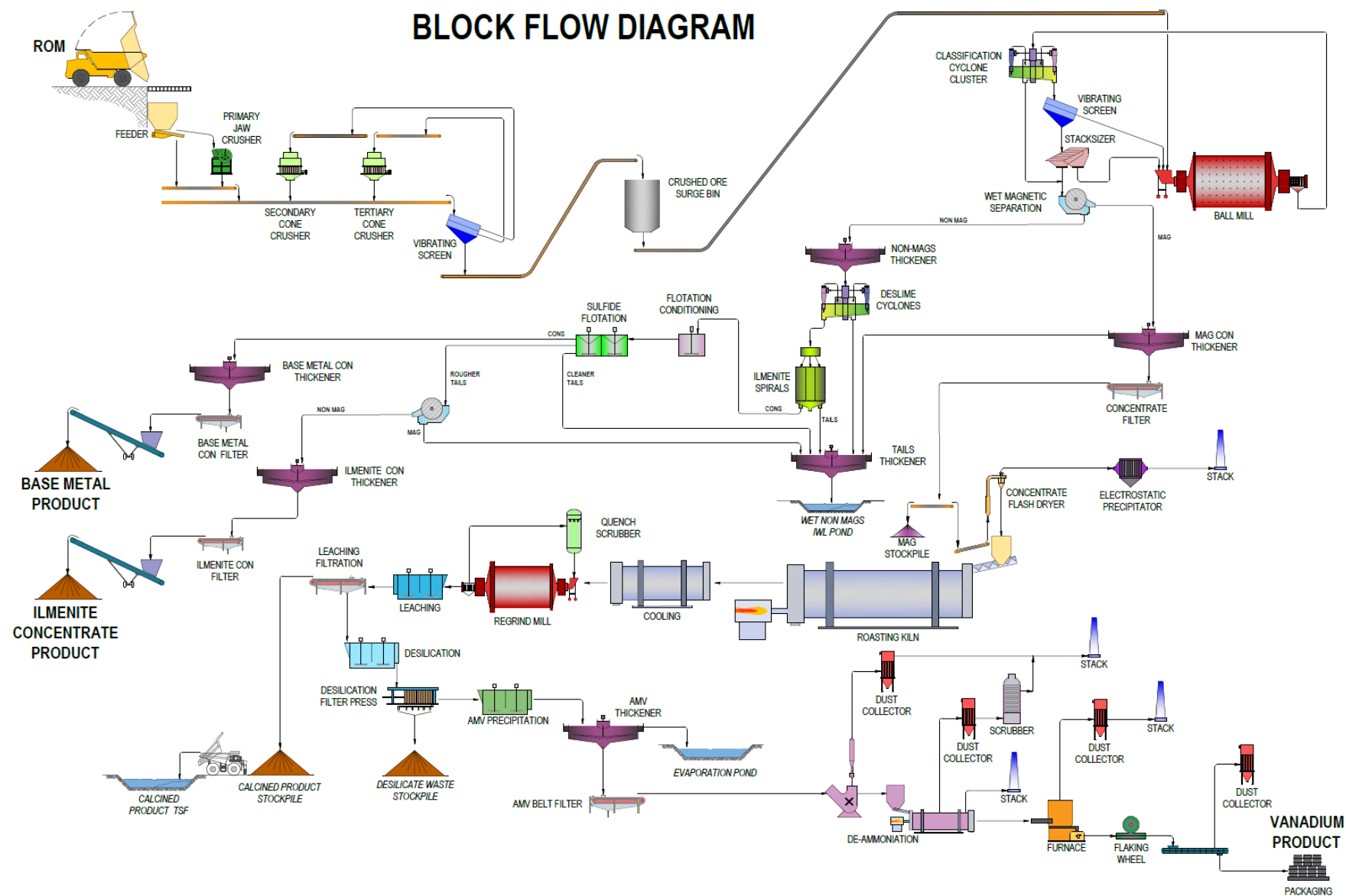
Deposit	Ex-Pit Ore				Magnetic Conc.		Non-Magnetic Conc.		Rec. V ₂ O ₅	Rec. Ilmenite	Waste	Total
	Mt	V ₂ O ₅ %	TiO ₂ %	Mass Yield	Mt	V ₂ O ₅ %	Mt	TiO ₂ %	M lb	kt	Mt	Mt
Yarrabubba Probable	15.88	0.87%	10.0%	44.4%	7.04	1.61%	8.84	12.35%	202.7	1132.6	110.1	126.0
Yarrabubba Total	15.88	0.87%	10.0%	44.4%	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		154.5	183.1
Gabanintha Probable	27.48	0.90%		57.1%	15.69	1.31%			369.4			
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



TECHNOLOGY
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V₂O₅ PRICE PERFORMANCE

Strong underlying fundamentals for vanadium and upside via battery demand.
The more recent short-term weakness in the price is linked to the perceived slowdown in China (also reflected in negative moves in iron ore) but is bottoming out.

CHINA VS EUROPE RELATIVE PRICE PERFORMANCE

