



TECHNOLOGY
METALS AUSTRALIA LIMITED

ASX Announcement

12 November 2021

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Directors

Michael Fry:
Chairman

Ian Prentice:
Managing Director

Jacqueline Murray:
Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

186,535,071 ("TMT") Fully Paid
Ordinary Shares

6,313,167 Unquoted Options
exercisable at \$0.25 on or before 15
June 2022

12,350,000 Unquoted Director and
Employee Options at various
exercise prices and expiry dates

2,650,000 Performance Rights

ASX Code: TMT

FRA Code: TN6



TMT PRESENTATION AT NOOSA MINING CONFERENCE

- TMT invites investors to attend a virtual presentation at the Noosa Mining Unearthed Investor Conference on Friday 12 November 2021 – 12:15 pm (Brisbane Time), 10:15 am (Western Standard Time).
- Noosa Conference details and registrations can be obtained at www.noosaminingconference.com.au

Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to announce its participation at the Noosa Mining Unearthed Investor Conference from 10-12 November 2021.

Managing Director Ian Prentice will provide an update on the status of the development of the Company's Critical Minerals Projects on **Friday 12 November 2021 from 12:15 pm (Brisbane Time), 10:15 am (Western Standard Time)**.

To access further details of the event and to register at no cost, please refer to the following link:

[Meeting Registration - Zoom](#)

A copy of the investor presentation to be delivered during the webinar is attached.

This announcement has been authorised by the Board of Technology Metals Australia Limited.

For, and on behalf of, the Board of the Company,

Ian Prentice

Managing Director

Technology Metals Australia Limited



TECHNOLOGY
METALS AUSTRALIA LIMITED

TECHNOLOGY METALS FOR A CLEANER FUTURE

**NOOSA MINING UNEARTHED
INVESTOR CONFERENCE**

10 - 12 NOVEMBER 2021



DISCLAIMER



Disclaimer

This presentation has been prepared by Technology Metals Australia Limited (“Company”). It does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the Company. You should not treat the contents of this presentation, or any information provided in connection with it, as financial advice, financial product advice or advice relating to legal, taxation or investment matters.

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Neither the Company, nor its related bodies corporate, officers, their advisers, agents and employees accept any responsibility or liability to you or to any other person or entity arising out of this presentation including pursuant to the general law (whether for negligence, under statute or otherwise), or under the Australian Securities and Investments Commission Act 2001, Corporations Act 2001, Competition and Consumer Act 2010 or any corresponding provision of any Australian state or territory legislation (or the law of any similar legislation in any other jurisdiction), or similar provision under any applicable law. Any such responsibility or liability is, to the maximum extent permitted by law, expressly disclaimed and excluded.

Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in the Company.

Future matters

This presentation contains reference to certain intentions, expectations, future plans, strategy and prospects of the Company.

Those intentions, expectations, future plans, strategy and prospects may or may not be achieved. They are based on certain assumptions, which may not be met or on which views may differ and may be affected by known and unknown risks. The performance and operations of the Company may be influenced by a number of factors, many of which are outside the control of the Company. No representation or warranty, express or implied, is made by the Company, or any of its directors, officers, employees, advisers or agents that any intentions, expectations or plans will be achieved either totally or partially or that any particular rate of return will be achieved.

Given the risks and uncertainties that may cause the Company’s actual future results, performance or achievements to be materially different from those expected, planned or intended, recipients should not place undue reliance on these intentions, expectations, future plans, strategy and prospects. The Company does not warrant or represent that the actual results, performance or achievements will be as expected, planned or intended.

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 Aaron Meakin. Mr Aaron Meakin is a Principal Consultant of CSA Global Pty Ltd and is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin 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 Aaron Meakin consent 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 Daniel Grosso an employee of CSA Global Pty Ltd. Mr Grosso takes overall responsibility for the Report as Competent Person. Mr Grosso 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, Daniel Grosso 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 Yarrabubba and Gabanintha projects 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 which he is undertaking, to qualify as a 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.

WHY INVEST?

World class critical minerals resources in a Tier 1 jurisdiction

Gabanintha Vanadium Project

- Large, long-life high purity vanadium project
- Lowest cost quartile
- DFS completed
- Offtake for 75% of average annual output

Yarrabubba Vanadium Project

- Upgraded Mineral Resource estimate
- Study underway to assess optimal sequencing with Gabanintha as part of integrated development

Part of the future energy solution

- Potential for high purity product to be used in Australia based Vanadium Electrolyte production for VRFBs

Nationally significant project



CORPORATE OVERVIEW

CAPITAL STRUCTURE

TMT

ASX Code

\$22.7M*

Cash *(as at 30 Sept 2021)*

\$71.2M*

Market Cap *(as at 11 November 2021)*

203.5m*

Shares on Issue

18.7M

Unlisted Options¹ *(Various exercise)*

2.65m

Performance Rights²

¹ Includes 12.35m director and employee options – 3.9m vested, 4.1m to vest on GVP FID, 4.35m vest on YIVP hurdles

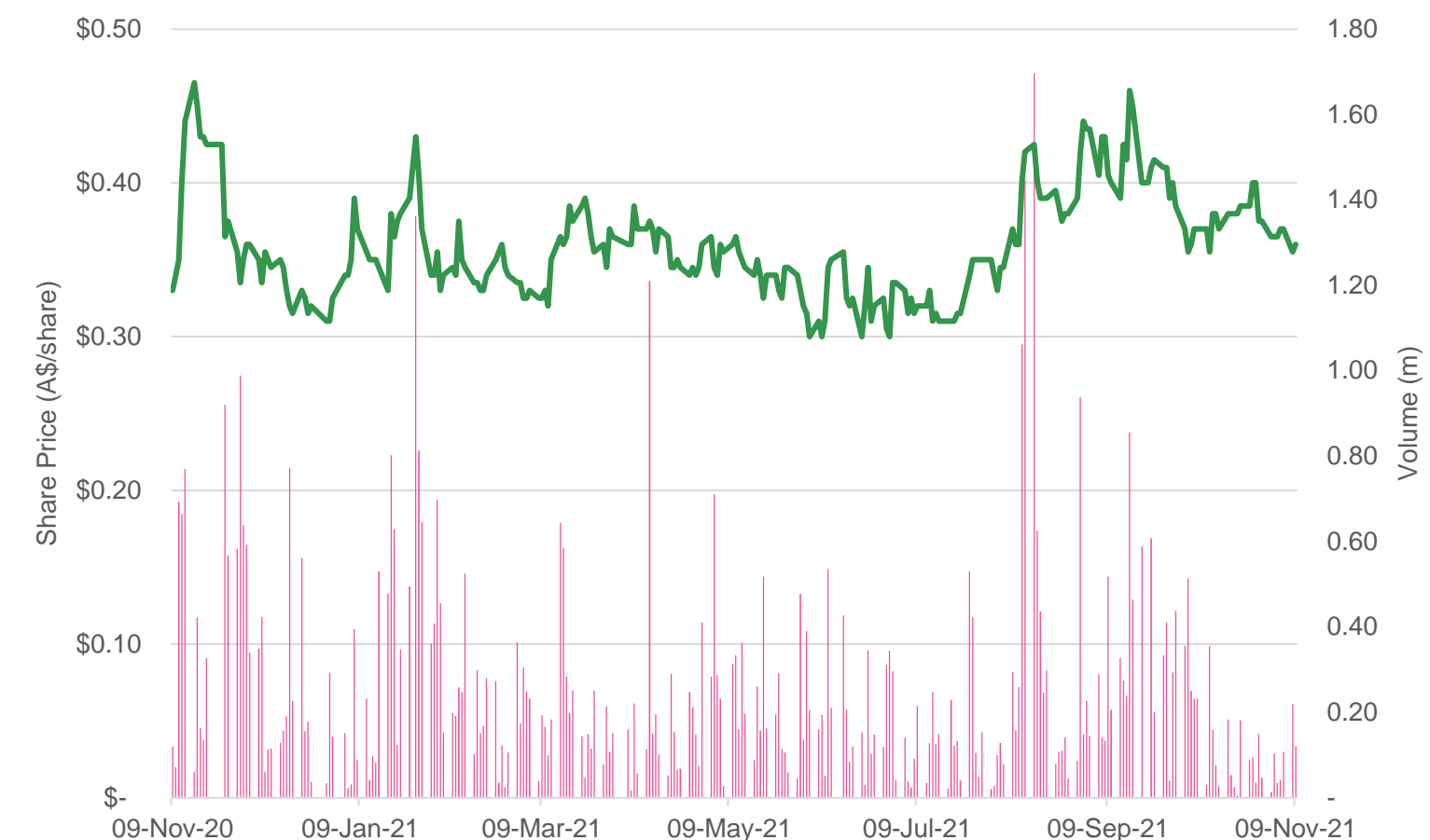
² 50% vest on Yarrabubba FID, 50% vest on first production from Yarrabubba

* Pro forma post completion of \$20 million Placement announced on 23 September 2021



Holder Name	Holding (%)
Resource Capital Fund VII L.P.	13.2%
BNP Paribas Nominees	8.9%
Great Southern Flour Mills	7.5%
Retzos Group	5.1%
TOTAL TOP 20	53.5%
Board and Management holdings (fully diluted)	6.5%

*Based on issued capital as at 11 November 2021



EXPERIENCED BOARD AND MANAGEMENT



Michael Fry
Non-Exec 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.

Mr Fry is currently Non-Executive Chairman of ASX listed Brookside Energy Limited with a focus on oil and gas exploration and production onshore mid-continent region of USA.

Mr Fry was a board member of Precious Metals Australia Limited which owned and operated the Windamurra Vanadium operation in Western Australia.



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.

Ian has served as a Director for a number of ASX-listed resource companies, with activities ranging from exploration and project acquisition in Asia and Africa through to gold production in Australia.

Ian is the founding Executive Director of Technology Metals Australia Limited.



Sonu Cheema
Non-Exec Dir/Co Sec

Sonu is a Partner at Cicero Group with over 10 years' experience working with public and private companies in Australia and abroad. Roles and responsibilities held by Mr Cheema 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.

Currently Mr Cheema is Company Secretary for several other ASX listed Companies.

Mr Cheema has completed a Bachelor of Commerce majoring in Accounting at Curtin University and is a CPA member.



Jacqueline Murray
Non-Exec Director

Jacqueline is a Partner at Resource Capital Funds (RCF) and has worked within the mining industry for over 20 years.

Mrs Murray joined RCF in 2012 after working in business analysis and improvement roles with BHP Billiton. Prior to this she worked in various geotechnical engineering roles in underground and open pit operations within BHP Billiton and WMC Resources.

Mrs. Murray holds an MBA from Melbourne Business School and a Bachelor of Geological Engineering from RMIT University.

She is a graduate of the Australian Institute of Company Directors and currently serves on the Board of Directors of Alliance Mining Commodities and Khoemacau Copper Mining.



Michael Bourke
Project Director

Michael holds a Master of Business Administration, Bachelor Economics and Bachelor Engineering (Chemical) degrees and worked in the minerals and metals industry for over 30 years.

His commodity experience covers mineral sands, nickel, cobalt, vanadium, tin, LNG and oil sands. His work includes contracting and project experience, fabrication for LNG projects and operational responsibility for facilities in WA and Singapore.

He was Business Planning Manager for WMC Nickel, Executive General Manager for Iluka Resources, President Emeco Canada and Operations Manager AGC-Ausgroup.



John McDougall
Exploration Director

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 is a Member of the Australian Institute of Geoscientists. John has previously served as Exploration Manager for an ASX-listed iron ore resource company and has relevant consulting experience in Western Australia and Tasmania.

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

MURCHISON TECHNOLOGY METALS PROJECT

Integration study underway into open pit mining, beneficiation and high purity vanadium processing facility in the mid-west of Western Australia.

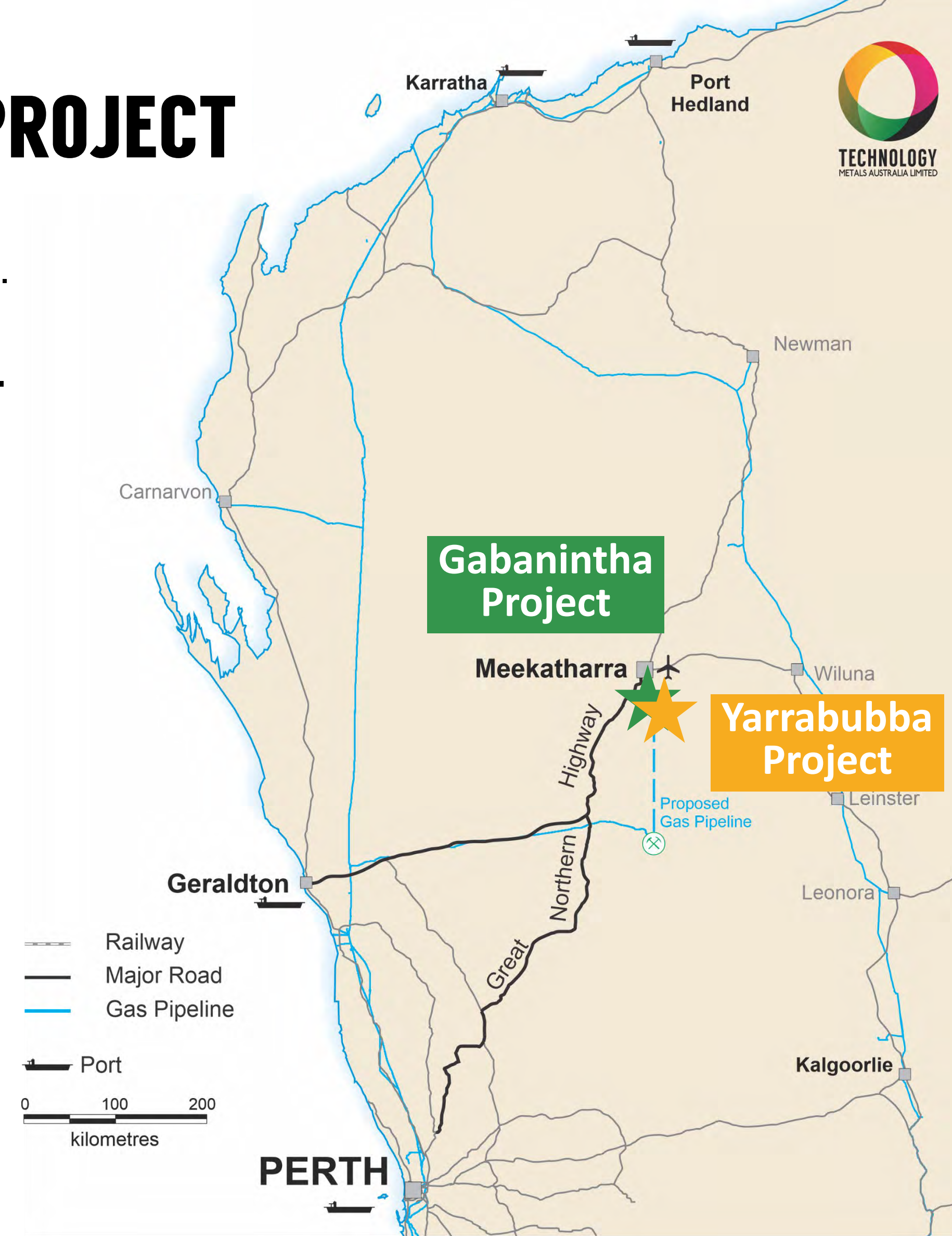
**High-quality, high-grade resource of 79.8Mt at 1.1% V_2O_5
50.2Mt at 0.9% V_2O_5 M&I component to target a +25 year operation.**

GABANINTHA VANADIUM PROJECT

- DFS completed
- Large, long-life high purity VTM hosted vanadium project
- Lowest cost quartile
- Offtake for 75% of average annual output

YARRABUBBA VANADIUM DEPOSIT

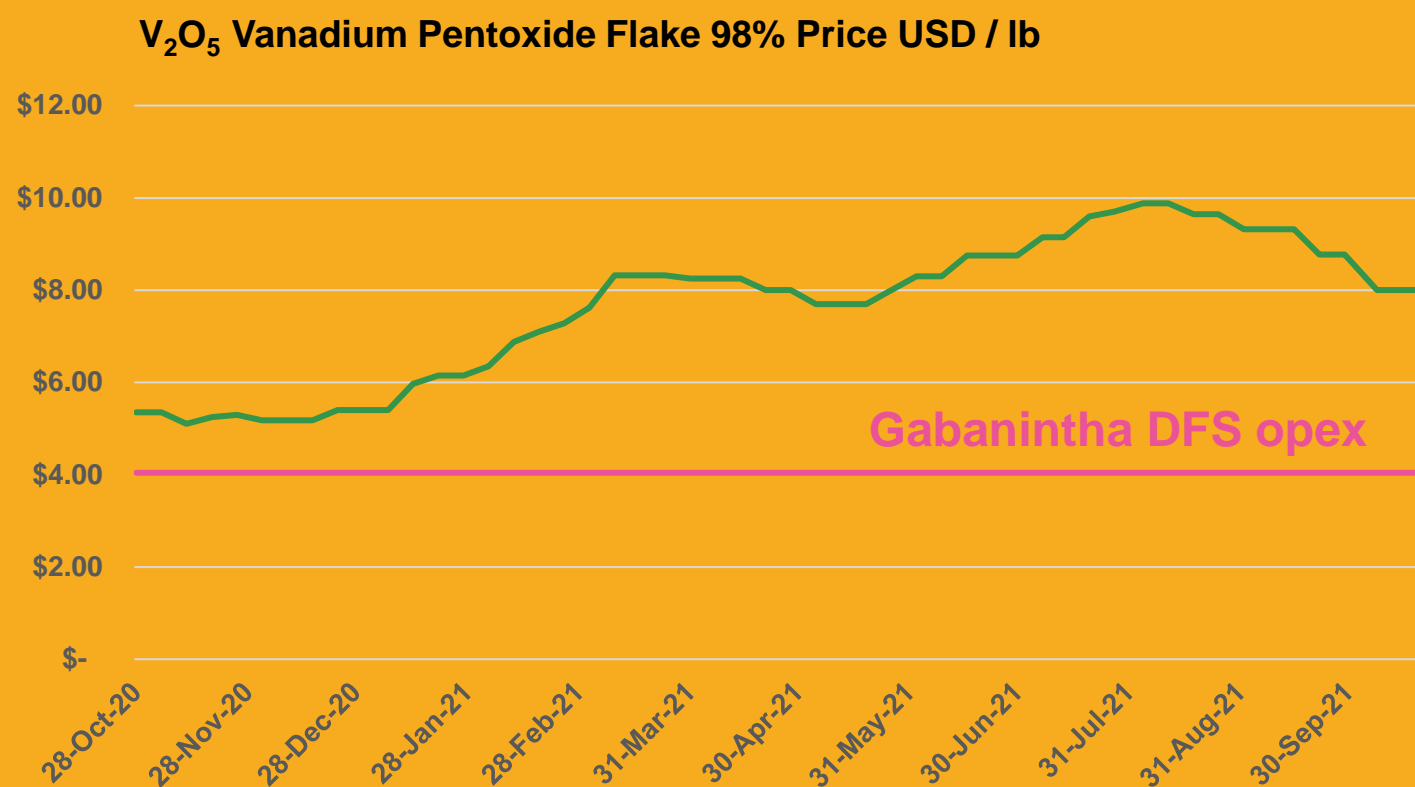
- High grade $>1.6\%$ V_2O_5 in magnetite concentrate
- Same geological setting as Gabanintha
- Metallurgical testwork progressing
- Ability to produce high quality titanium by-product



VANADIUM

A CRITICAL MINERAL SUPPORTING NET ZERO

- Vanadium has an important role to play strengthening steel, enabling higher quality steel, lowering emissions.
- Application in large-scale batteries (VRFB) that don't degrade over time, ideal for support of renewable energy.
- Tightening market with consumption in steel in China and improving demand in Europe and North America.
- COVID-19 impacts – stimulus spending on infrastructure and focus on renewable energy / storage.



“We see significant growth in demand for vanadium - which we foresee due to its growing use in high grade steel and flow batteries.”

Sir Mick Davis, former Xstrata plc CEO

VANADIUM REDOX FLOW BATTERIES

ENABLING THE FUTURE OF GREEN ENERGY



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No Degradation

Performance remains constant with excellent long term charge retention



Low Energy Cost

Over its 20+ year lifespan, VRFB technology offers the lowest cost per kWh stored (LCOE)



Safety

The vanadium electrolyte is water based and is totally non-flammable



Sustainability

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



Long Life

VRFB's can easily last more than 20 years with very high cycle life (up to 20,000 cycles)

Argus: China's vanadium demand from the VRFB industry expected to rise from 3,640tpa in 2021 to 9,100tpa in 2022

VRFB DEPLOYMENTS

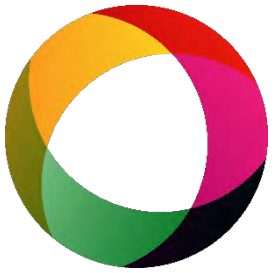
Superior technical and economic fundamentals are leading to massive deployment of VRFBs, especially in Asia - large scale VRFB projects being delivered in Japan and China.

Details	Sumitomo	Rongke Power	VRB Energy	Shanghai Electric	Yadlamalka Energy
Image			n/a	n/a	
Project Location	Hokkaido, Japan	Dalian City, China	Hubei province, China	Jiangsu province, China	South Australia
Stage	Commenced operations in 2015	Operational	Construction	Public plans	Construction
Developer					
Scale	60MWh (15MW for 4h)	800MWh (200MW)	500MWh (100MW)	400MWh (100MW)	8MWh (2MW)
Application	Stabilise the flow of wind and solar power on the northern island of Hokkaido	Project will provide peak-shaving as well as form another load center for the Dalian peninsula, enhancing grid stabilisation	Energy storage solution paired with wind power and solar PV generation	n/a	The project will supply a combination of solar power and battery storage services to the grid

Source: Company announcements.

ENVIRONMENT, SOCIAL & GOVERNANCE

BUILDING A GLOBALLY RELEVANT RESOURCES COMPANY



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Environment

Constructive consultation with WA EPA supporting progress on the GVP ERD.

Early engagement with Traditional Owners and Pastoralists to minimise impacts.

Promote energy efficiency and minimise water usage.

Policy of mitigation, minimisation and rehabilitation.



Social / Community

Policy in place to support local procurement and employment wherever practical.

Support community events and activities – developing a social licence to operate.

Generate training, business and work opportunities for Traditional Owners.

Pursue downstream processing options to ensure value add and skills development.



Governance

Instilling a culture of high ethical standards throughout the group and its activities.

Aim to always operate in a safe and respectful manner.

Focus on active risk management throughout the business.

Develop, nurture and maintain our people.

GABANINTHA VANADIUM PROJECT

WORLD-CLASS DEVELOPMENT READY PROJECT

MINING RESERVE

29.6Mt
@ 0.88% V₂O₅

MINE LIFE

+16years

PROCESSING PLANT

27.9Mlb
V₂O₅ pa

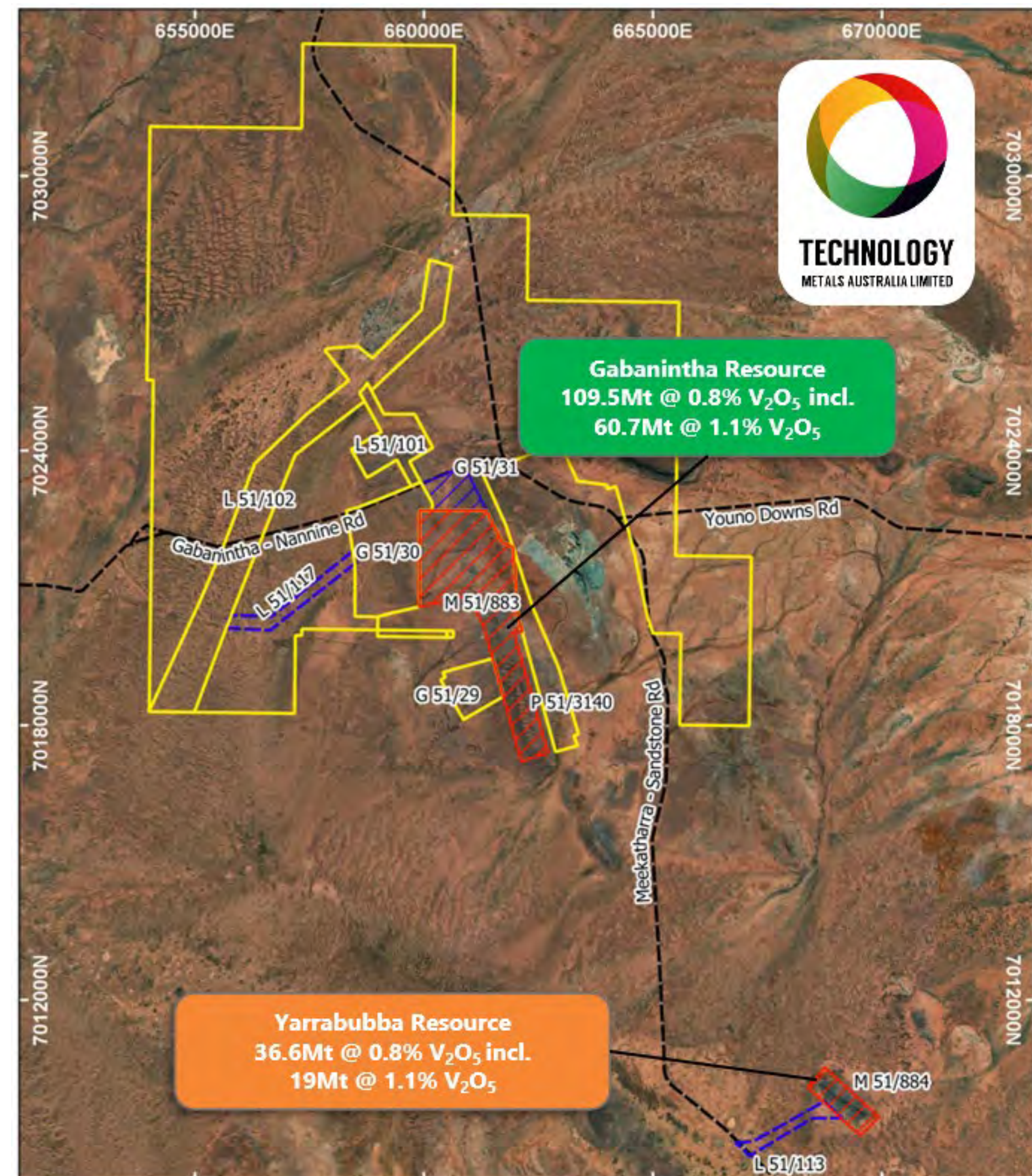
HIGH PURITY PRODUCT

>99% V₂O₅

OPEX

US\$4.04
/ lb V₂O₅

- Resource of 109.5Mt at 0.8% V₂O₅ including high grade component of 60.7Mt at 1.1% V₂O₅.
- Ore body characterised by **shallow oxidation** profile.
- Life of mine¹ **revenue of A\$5.7Bn** at US\$8.78/lb V₂O₅ with average annual EBITDA of A\$175 million.
- Lowest quartile **operating costs at US\$4.04/lb V₂O₅**.
- Pre-tax **NPV₈ A\$663** at US\$8.78/lb V₂O₅.
- Premium purity product (>99%) supporting the movement to Net Zero 2050.
- Site of integrated processing facility for consolidated Murchison Technology Metals Project (MTMP).
- Mining licences granted, environmental approvals nearing completion.
- Gas supply MoU in place.

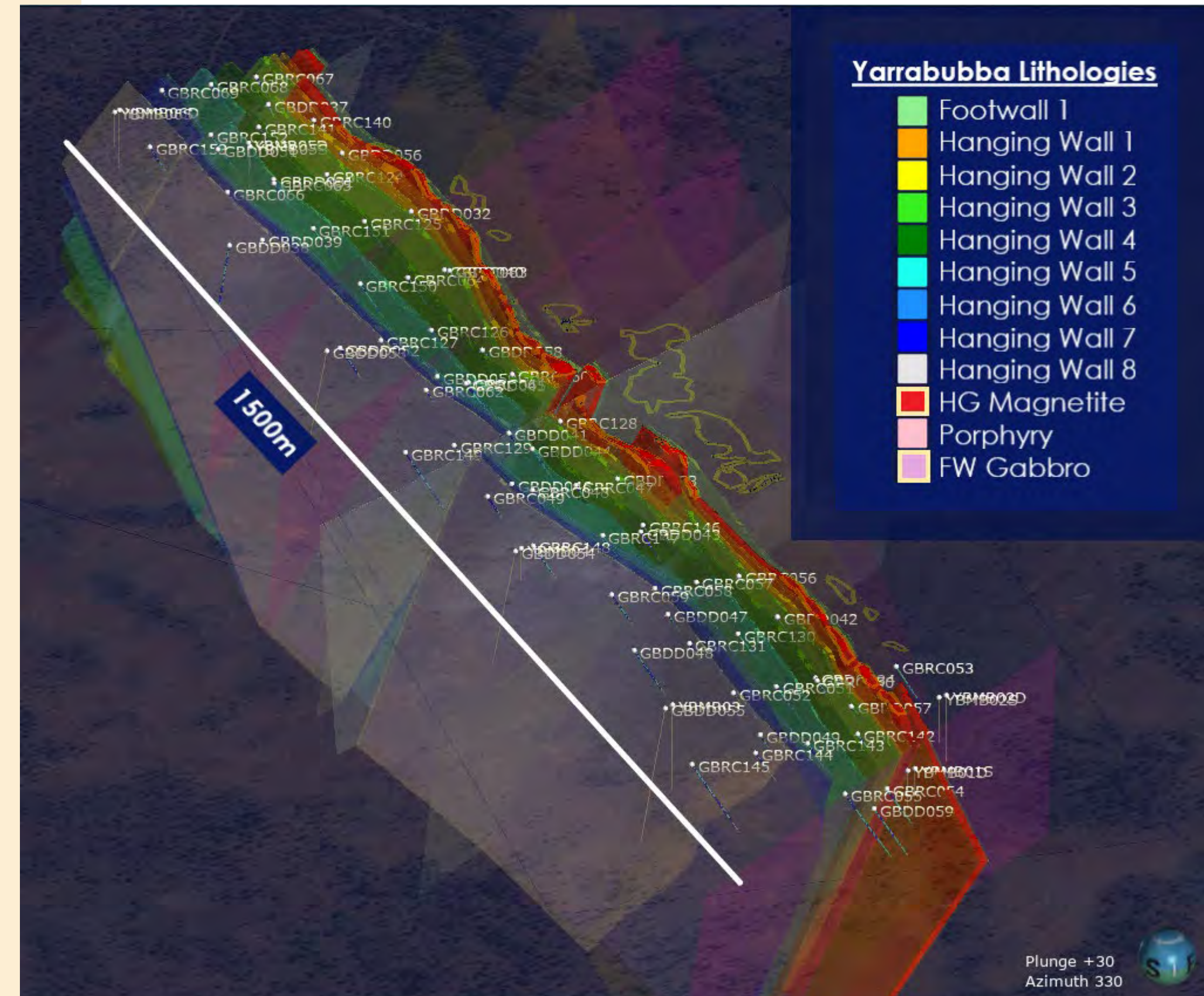


1 - TMT ASX announcement 21 August 2019 for full details of the DFS: Financial Metrics at long term historical average price of US\$8.78/lb V₂O₅

YARRABUBBA PROJECT

OVERVIEW

- Yarrabubba resources and reserves were not included in the Gabanintha Definitive Feasibility Study.
- Mineral Resource upgraded to 36.6Mt at 0.8% V_2O_5** including a high-grade component of 19Mt at 1.1% V_2O_5 ¹
- Indicated Resource increased by 110% to 20.2Mt at 0.9% V_2O_5** within the MTMP Global Measured and Indicated Resource of **50.2Mt at 0.9% V_2O_5 ¹**.
- Deposit drilled out to better than 100m by 50m spacing with high proportion of diamond drill holes.
- Mineralisation hosted in same geological horizon as Gabanintha but produces higher V_2O_5 concentrate.
- Yarrabubba has the potential to lower life of mine operating costs, reduce the payback period and lower the overall development risk of an integrated MTMP.
- An Integration Study is underway to assess the optimal mining and sequencing of Gabanintha and Yarrabubba.

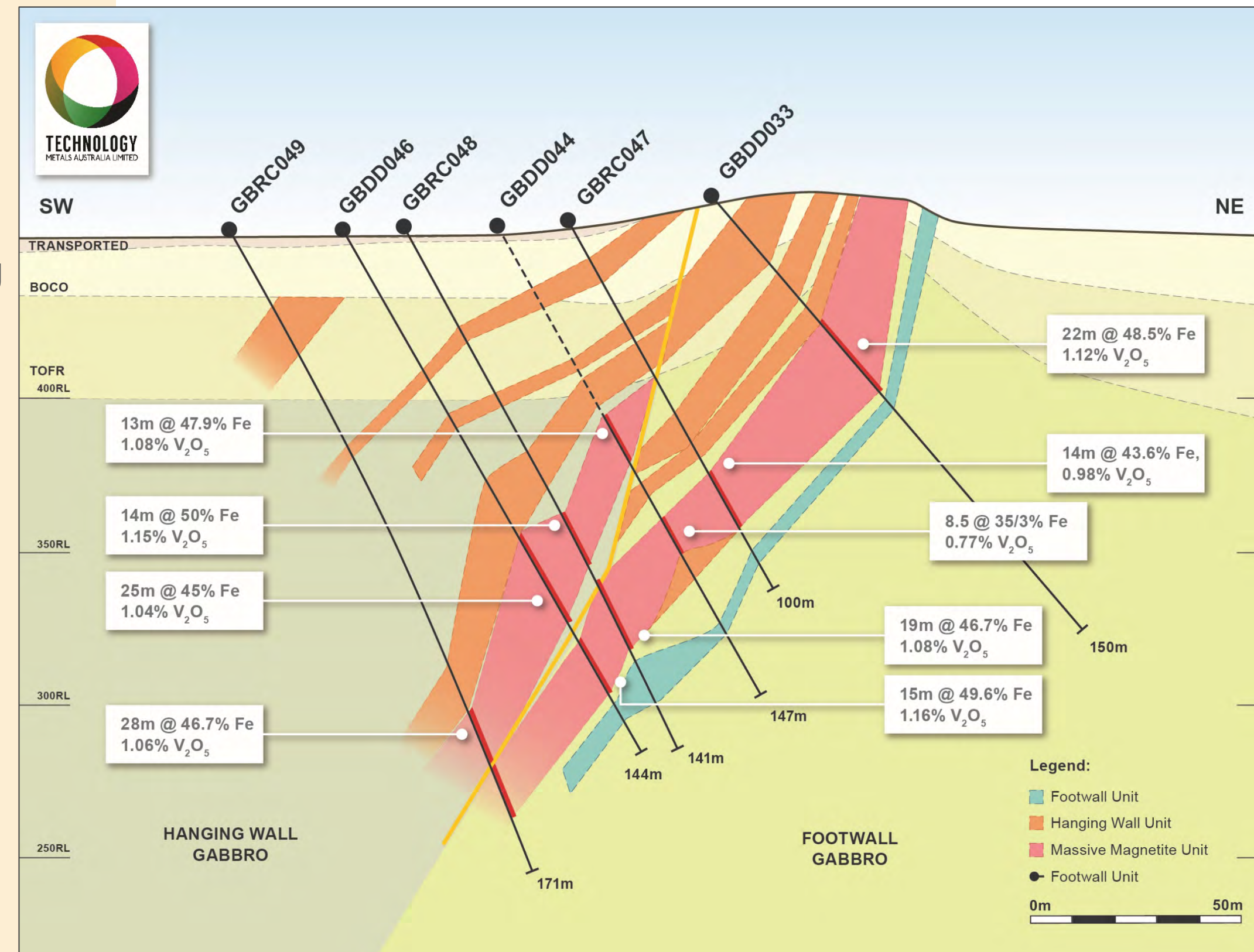


YARRABUBBA PROJECT

REDUCING THE DEVELOPMENT RISK



- Beneficiation testwork delivers **1.6 to 1.7% V_2O_5 in concentrate**; ~25% higher than at Gabanintha.
- Concentrate grade an economic driver for high purity salt roast / water leach vanadium projects like MTMP.
- Resource drilling defined significant structural thickening of high-grade zones.
- Sighter roast – leach testwork confirmed concentrate amenable to high recovery extraction¹.
- Key differentiators for Yarrabubba
 - Very shallow oxidation with high magnetic recovery.
 - Titanium** by-product (+48% TiO_2) from non magnetics.
 - Simple open pit mining.
 - Thickened high-grade magnetite zones near surface.
- Reserve upgrade underway - expect significant reserve growth following definition of structural thickening.
- Additional roast – leach testwork underway in support of reserve estimation.



MURCHISON TECHNOLOGY METALS PROJECT

KEY PROJECT PARTNERS



WA Government

Lead Agency Support
Future Battery Industry
Supporting downstream processing.

NAIF

Engagement with Federal Government agency

Part of strategic funding approach.

WA EPA

Environmental approvals

Constructive consultation underway

APA

Gas transportation agreement

Lower gas transportation costs; access to emerging Perth Basin gas fields.

FLSmidth

Equipment vendor engagement

Kiln supply agreement executed.

Ongoing market engagement for product offtake / funding options

Sinosteel, CNMNC, Shaanxi Fengyuan, Big Power, LE System.

STRATEGIC PLAN

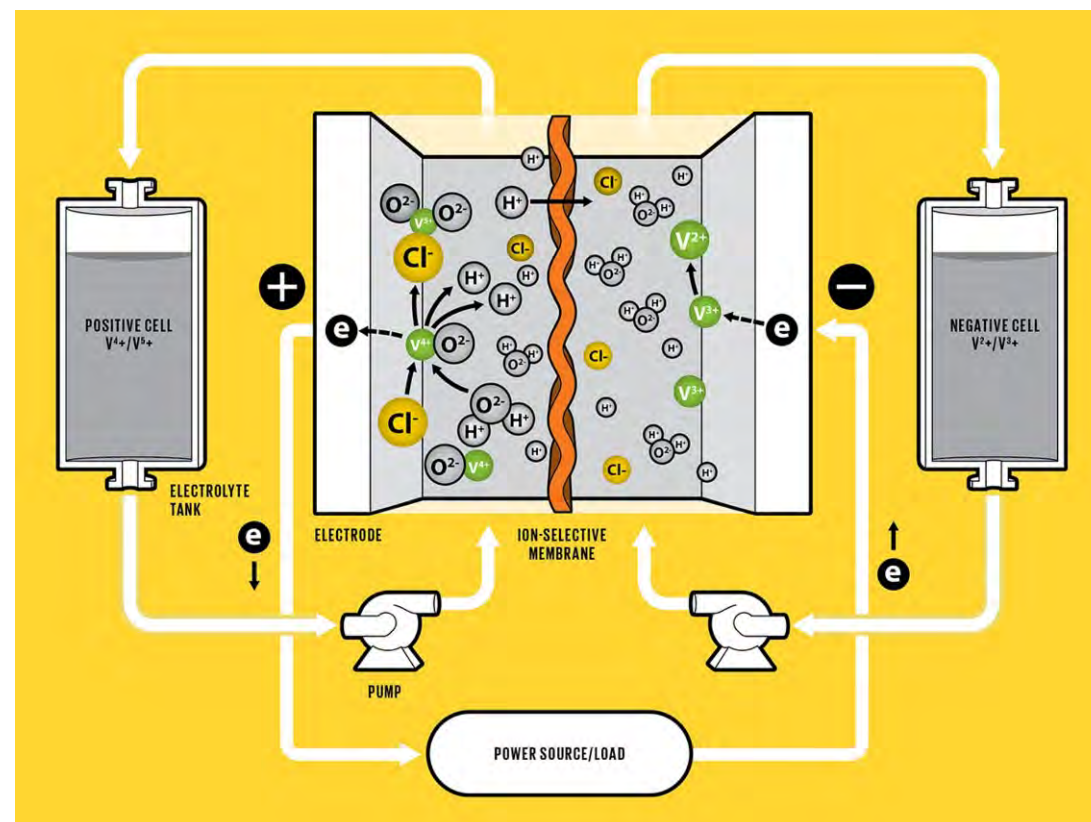
To produce strategic technology metals that reduce emissions and produce emissions free power



VRFB AND ELECTROLYTE STRATEGY

PART OF THE ENERGY SOLUTION

- MoU signed with Japanese electrolyte producer, LE System, to investigate the potential local production of vanadium electrolytes using Technology Metals' products.
- Concurrently, the Company has initiated discussions with VRFB manufacturers with regards to the establishment of an Australian VRFB production facility.
- The evolution of the MTMP from a V_2O_5 flake producer into downstream applications forms part of the sustainability strategy.

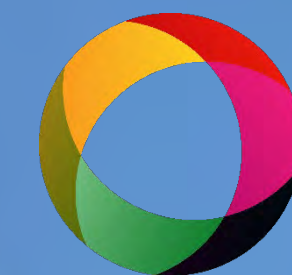


LE SYSTEM CO., Ltd.

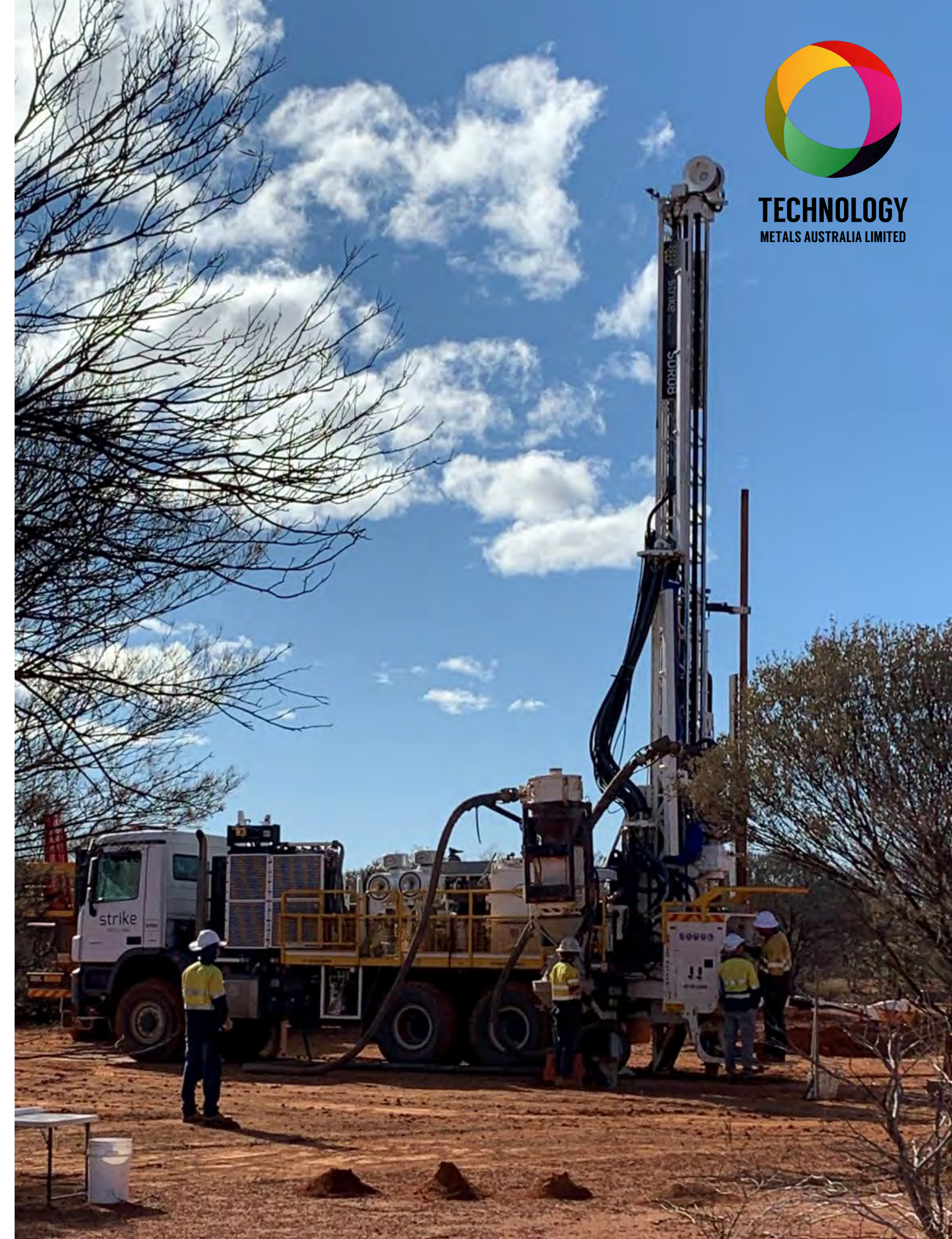
LE SYSTEM Co., Ltd.

TIMETABLE AND NEWS

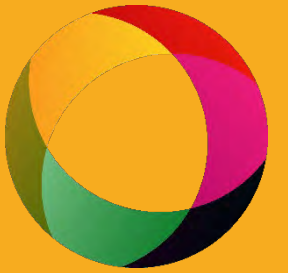
Mining leases - granted	✓	
Bulk sample generation	✓	
Infill resource drilling	✓	
Mineral resource update	✓	
Ore Reserve estimation		Q4 2021 / Q1 2022
ERD – Update lodged for approval		Q4 2021 / Q1 2022
Roast – leach testwork		Q4 2021 / Q1 2022
Process plant design optimisation		H1 2022
Integration study completion		Q2/Q3 2022
Yarrabubba mining approvals		Progressing



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A COMPELLING INVESTMENT



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Globally Significant

project with robust economics located in a Tier 1 jurisdiction.

Strategic Investor

RCF VII with long-term focus on supporting project development

Critical Minerals

deliver critical minerals that support emissions reduction goals.

Delivering

on project development underpinned by high quality technical work.

Team in Place

focused on a development strategy to maximise shareholder value.

Stable

operating environment with excellent infrastructure and access.

CONTACT US

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