

VANADIUM FOR A CLEANER FUTURE

MID WEST AND GASCOYNE MAJOR PROJECTS
OCTOBER 2022

**ASX:TMT** 

TMT acknowledges the Traditional Custodians on the lands on which we meet and work. We pay our respects to the Elders past, present and emerging. We celebrate the stories, traditions and the living cultures of Aboriginal and Torres Strait Islander people who also work and live on this land.

## STRONG CORPORATE TEAM





**Ian Prentice**Managing Director



**David English**Chief Operating Officer



Michael Fry Non-Exec Chairman



**Elisha Civil**Chief Financial Officer



Jacqueline Murray Non-Exec Director



John McDougall Exploration Manager



**Dr. Carmen Letton**Non-Exec Director



**Sonu Cheema** Company Secretary

## **Our Corporate Vision**

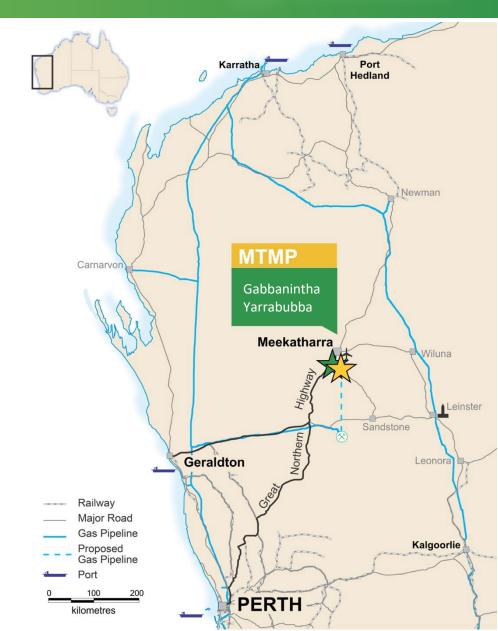
To develop a world-class critical minerals industry that makes a positive difference to the local community, minimises impacts to the environment and contributes to global decarbonisation

## SIGNIFICANT MID WEST PROJECT



# Vanadium and ilmenite production to bring benefits to the Mid West

- TMT's vanadium project, the Murchison Technology Metals Project (MTMP), is located 50km south of Meekatharra
- The MTMP comprises two deposits Gabanintha and Yarrabubba, which will produce high quality vanadium pentoxide and ilmenite
- The bulk ilmenite product will be shipped out of the Port of Geraldton
- 150km gas pipeline infrastructure towards Meekatharra bringing further development into the Mid West



## **MURCHISON TECHNOLOGY METALS PROJECT**



## One of the largest single vanadium projects globally right here in the Mid West

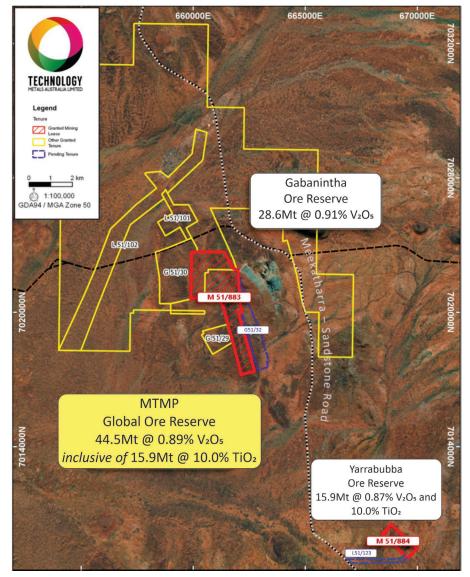
Global Ore Reserve 44.5Mt @ 0.89% V<sub>2</sub>O<sub>5</sub>

15.9Mt @ 10.0% TiO<sub>2</sub>

- Traditional open pit mining
- Conventional integrated processing plant
- Production capacity 12,500tpa V<sub>2</sub>O<sub>5</sub> and ~100,000tpa ilmenite\*
- Mine life +25 years for continued benefits to the region



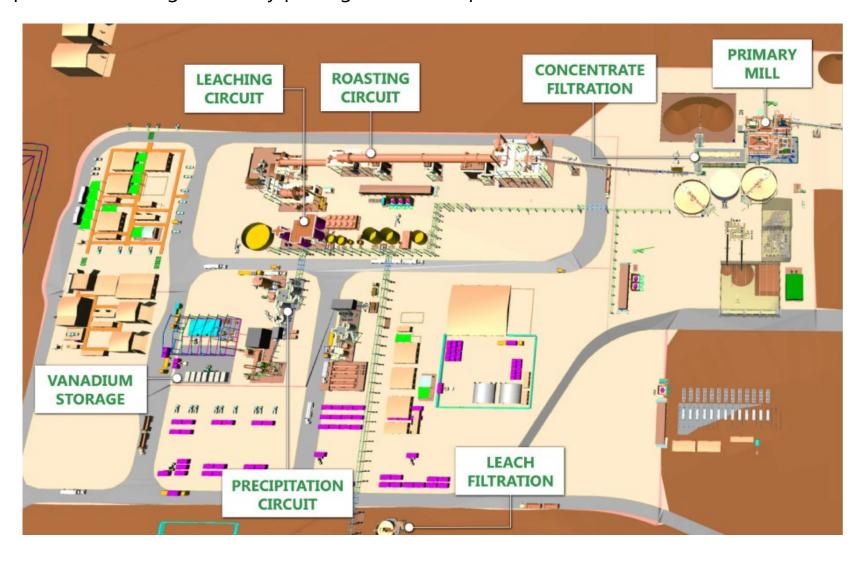




## PLANT DESIGN COMPLETE



Commercial competitive tendering underway putting us in the Implementation Phase



## STRONG SOCIAL AND COMMUNITY VALUES



## Strong, authentic and reliable corporate citizen



Engagement with Shire of Meekatharra to support community projects, with a focus on Youth Education and Engagement



Regular consultation with the Yugunga-Nya Traditional Owners to build long-term relationships



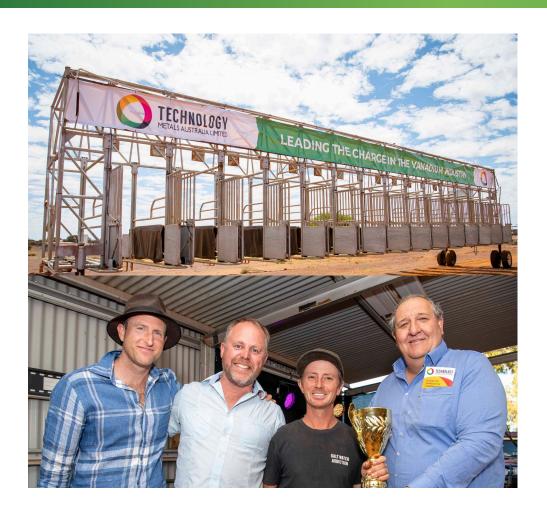
Employment, training and business opportunities for the regional community

### **Our Key Values:**

- People and Community
- Collaboration
- Honesty and Trust
- Protecting the Future
- Minimal Environmental **Impacts**
- Leaving a positive legacy

## **WORKING WITH THE COMMUNITY**







- Contributing to the local culture and community events sponsorship of the Meekatharra Races
- Undertaking site visits with the Yugunga-Nya People to ensure consultation on environmental and heritage matters
- Supporting the Youth Services run by the Shire of Meekatharra

## **ECONOMIC CONTRIBUTIONS THROUGH OPPORTUNITIES**

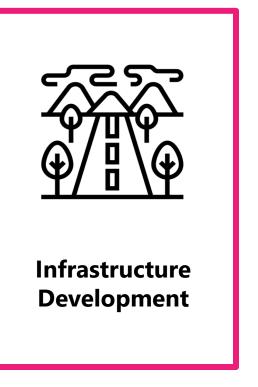


Technology Metals' investment in the region will provide long-term benefits to the community for years to come









## TMT VANADIUM SUPPORTING MOVE TO NET ZERO



# VANADIUM REDUCES EMISSIONS VIA STEEL ALLOYS AND BATTERIES

- Iron Steel sector one of the largest CO<sub>2</sub> emitters
- Adding vanadium reduces steel weight, increases capacity and reduces steel requirement

= CO<sub>2</sub> 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

= CO<sub>2</sub> Savings

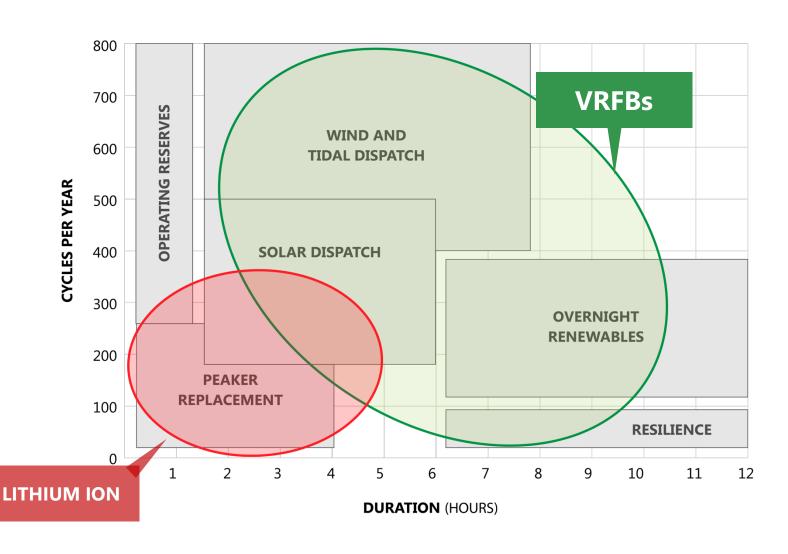
## **VANADIUM REDOX FLOW BATTERIES PART OF THE SOLUTION**



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

"Vanadium RFBs are 'state-of-the-art' due to comparatively high energy density, low maintenance costs and long operational lifetimes."

The Future of Energy Storage, An Interdisciplinary MIT Study, 2022



## 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

## TMT: LARGE, LOW COST, RELIABLE VANADIUM SUPPLY



## Leveraged to rapid trajectory towards Net Zero

- Vanadium reduces emissions via steel alloys and VRFB batteries
- Recent global events highlight need for longer duration energy storage VRFBs are ideal
- Demand for vanadium expected to more than double by 2050
- TMT's MTMP will supply low-cost reliable vanadium to these growing markets

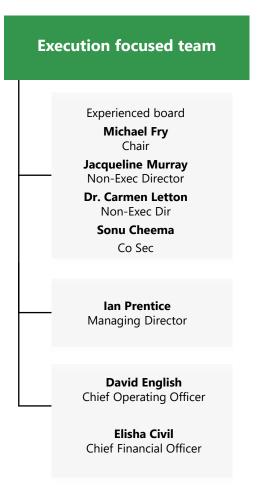


## STRONG TEAM AND PARTNERSHIPS



## Significant cash at bank A\$15.1m<sup>1</sup> **Fully funded to FID** Able to place long lead orders A\$92m Market cap As at 10 October 2022

## **Supportive shareholders Top 20 hold 56% Resource Capital Funds 17.2%** Early believers in battery metals<sup>2</sup> **Board and** management 7.9%<sup>3</sup>



## **Quality Partners**



















1. At as 30 September 2022

- 4. Includes 14.35m director and employee options - 3.9m vested, balance vest on project development hurdles
- 50% vest on MTMP FID, 50% vest on first production

2. Examples include investments in tantalum

(Global Advanced Metals), lithium (Talison

Lithium), rare earths (Molycorp), nickel (Talon





## **David English**Chief Operating Officer



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