

7 April 2022

MANAGING DIRECTOR TO PRESENT AT PAYDIRT'S 2022 BATTERY MINERALS CONFERENCE

Australian resource and mineral processing technology company TNG Limited (ASX: TNG) ("TNG" or the "Company") is pleased to advise that its Managing Director & CEO, Paul Burton, will be presenting at "Paydirt's 2022 Battery Minerals Conference".

Event: Paydirt's 2022 Battery Minerals Conference – Pan Pacific Hotel, Perth WA

Presenter: Mr Paul Burton, Managing Director & CEO of TNG Limited

Time: 7 April 2022 at 2.30pm (AWST)

A copy of the presentation is attached.

Authorised by:

Paul E Burton
Managing Director & CEO

7 April 2022

Inquiries:

Paul E Burton
Managing Director & CEO + 61 (0) 8 9327 0900

Paula Raffo
Company Secretary & IR + 61 (0) 8 9327 0900

Nicholas Read
Read Corporate + 61 (0) 8 9388 1474

Follow TNG on  

About TNG

TNG is a Perth based resource and mineral processing technology company focussing on building a world-scale strategic metals business based on its flagship 100%-owned Mount Peake Vanadium-Titanium-Iron Project in the Northern Territory. Located 235km north of Alice Springs, Mount Peake will be a long-life project producing a suite of high-quality, high-purity strategic products for global markets including vanadium pentoxide, titanium dioxide pigment and iron ore fines. The project, which is expected to be a top-10 global producer, has received Major Project Status from the Northern Territory and Federal Governments.

TNG is also advancing a green energy strategy with the dual objective of offsetting carbon emissions from its planned future operations and generating new business opportunities in the alternative energy market to create additional shareholder value, with a focus on green hydrogen and vanadium redox flow batteries.

TNG



DEVELOPING MOUNT PEAKE A BATTERY AND CRITICAL MINERALS PROJECT IN NORTHERN AUSTRALIA

Paydirt's 2022 Battery Minerals Conference

PAUL BURTON – MANAGING DIRECTOR & CEO

7 April 2022

FORWARD LOOKING STATEMENTS

This presentation has been prepared by TNG Ltd. This document contains background information about TNG Ltd current at the date of this presentation. The presentation is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this presentation.

This presentation is for information purposes only. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of TNG Ltd shares in any jurisdiction. This presentation may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply in their own jurisdiction. A failure to do so may result in a violation of securities laws in such jurisdiction.

This presentation does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments. To the fullest extent permitted by law, TNG Ltd, its officers, employees, agents and advisers do not make any representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this presentation. No responsibility for any errors or omissions from this presentation arising out of negligence or otherwise is accepted. This presentation may include forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of TNG Ltd. Actual values, results or events may be materially different to those expressed or implied in this presentation.

COMPETENT PERSON'S STATEMENTS

The information in this presentation that relates to the Mount Peake Mineral Resource estimates is extracted from an ASX Announcement dated 26 March 2013, (see ASX Announcement - 26 March 2013, "Additional Information on the Mount Peake Resource", www.tngltd.com.au and www.asx.com.au), and was completed in accordance with the guidelines of the JORC Code (2012). Initial mining and financial assessment work, based on the Mineral Resource, followed (see ASX Announcement - 15 July 2013, "TNG Considers Two-Stage Development Option for Mount Peake Project, NT ", www.tngltd.com.au and www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

The information in this presentation that relates to the Mount Peake Ore Reserve estimates is extracted from an ASX Announcement dated 31 July 2015, (see ASX Announcement - 31 July 2015, "Mount Peake Feasibility Results", www.tngltd.com.au and www.asc.com.au) and was completed in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Ore Reserve estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

PRODUCTION TARGETS AND FINANCIAL INFORMATION

Information in relation to the Mount Peake Definitive Feasibility, including production targets and financial information, included in this report is extracted from an ASX Announcement dated 11 September 2019 called "Optimised Delivery Strategy for Mount Peake" available on the Company's website on www.tngltd.com.au. The Company confirms that all material assumptions underpinning the production target and financial information set out in the announcement released on 11 September 2019 continue to apply and have not materially changed.

TNG acknowledges Whadjuk Noongar People as the traditional custodians of the land where we stand, and pays respects to their elders' past, present and emerging.

TNG also acknowledges and pays respects to the Native Title Holders represented by the Eynewantheyne Aboriginal Corporation, the traditional owners of the land on which our world-class Mount Peake Vanadium-Titanium-Iron Project is located in the Northern Territory.

Executive Summary



Building a global strategic metals company through the development of the world-class **Mount Peake Vanadium-Titanium-Iron Project** in the Northern Territory of Australia



Vertically integrated operation producing three high-purity products – **Vanadium products (Vanadium Pentoxide (V_2O_5) and Vanadium Electrolyte)**, Titanium Dioxide (TiO_2) and Iron Oxide (Fe_2O_3) from the Mount Peake deposit



TIVAN[®] processing technology 100% owned by TNG

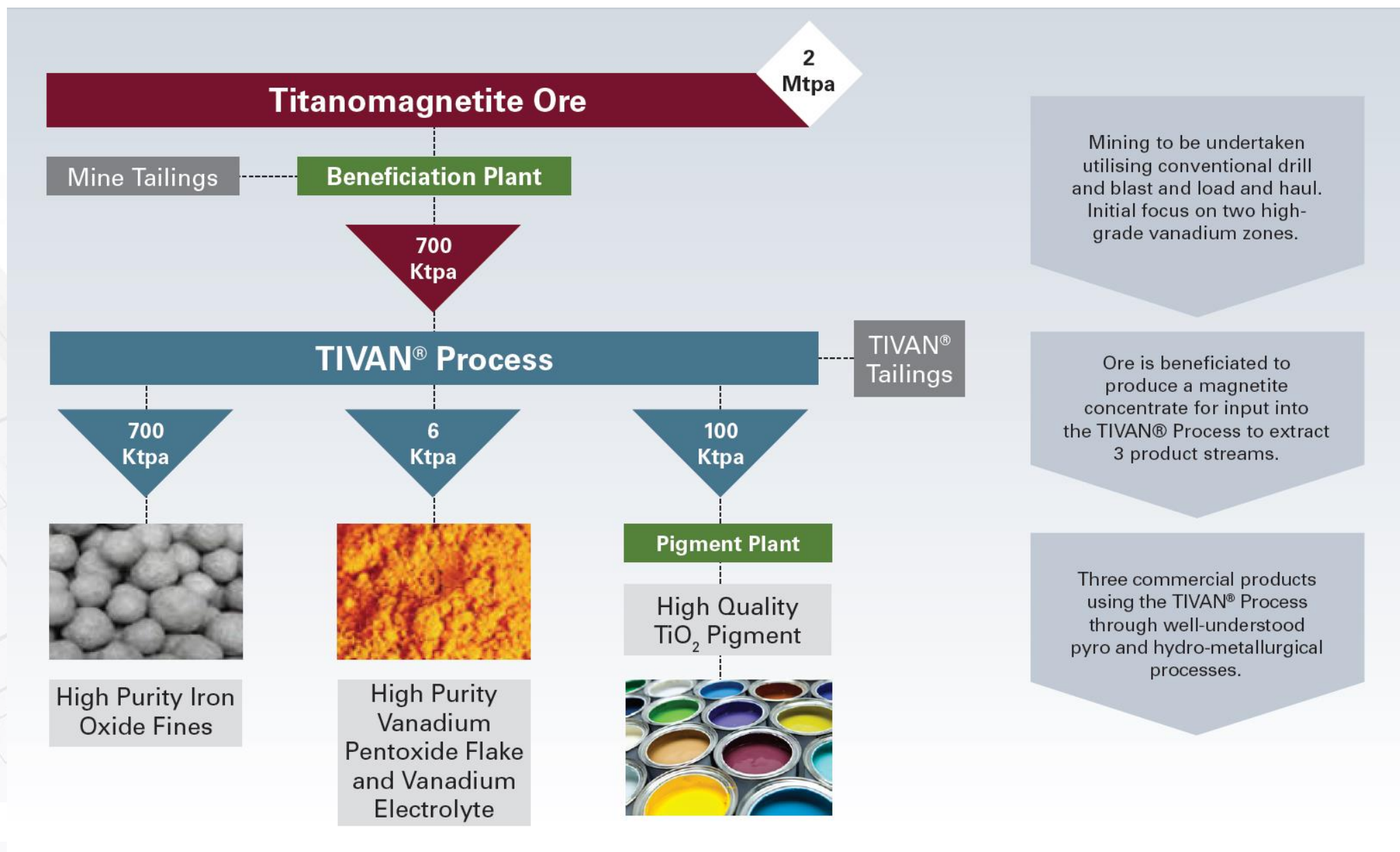


Partnerships with Tier-1 development companies and off-take agreements for 100% of all products with global groups in place



Green energy focused on environmentally sustainable resources with the potential launch of a Vanadium Redox Battery (VRFB) business and green hydrogen product

Vertically Integrated Business Plan



Three High Value – High Purity Products



VANADIUM and TITANIUM have been identified by the Australian Government as critical minerals required to make advanced technologies that will support the global push for decarbonisation

TITANIUM DIOXIDE PIGMENT TiO_2

Forecast Production of
100,000 tonnes per annum of
Titanium Dioxide



- White pigment used globally, non-toxic and environmentally friendly
- Market worth US\$20 billion in 2020
- 60% used in paints, coatings, inks and enamels
- Global demand is estimated at 6.5 Mtpa
- Forecast growth at 4.1% CAGR
- Estimated 8 Mtpa by 2025

VANADIUM PENTOXIDE V_2O_5

Forecast Production of
6,000 tonnes per annum of
Vanadium Pentoxide



- Mined in China, Russia, South Africa and Brazil
- Over 90% is used in the steel industry
- Strengthening agent, high tensile steel
- Global demand is estimated to be 190,000tpa V_2O_5
- Vanadium used in energy storage sector
- Vanadium redox flow batteries

IRON OXIDE Fe_2O_3

Forecast Production of
500,000 tonnes per annum of
Ferric Oxide

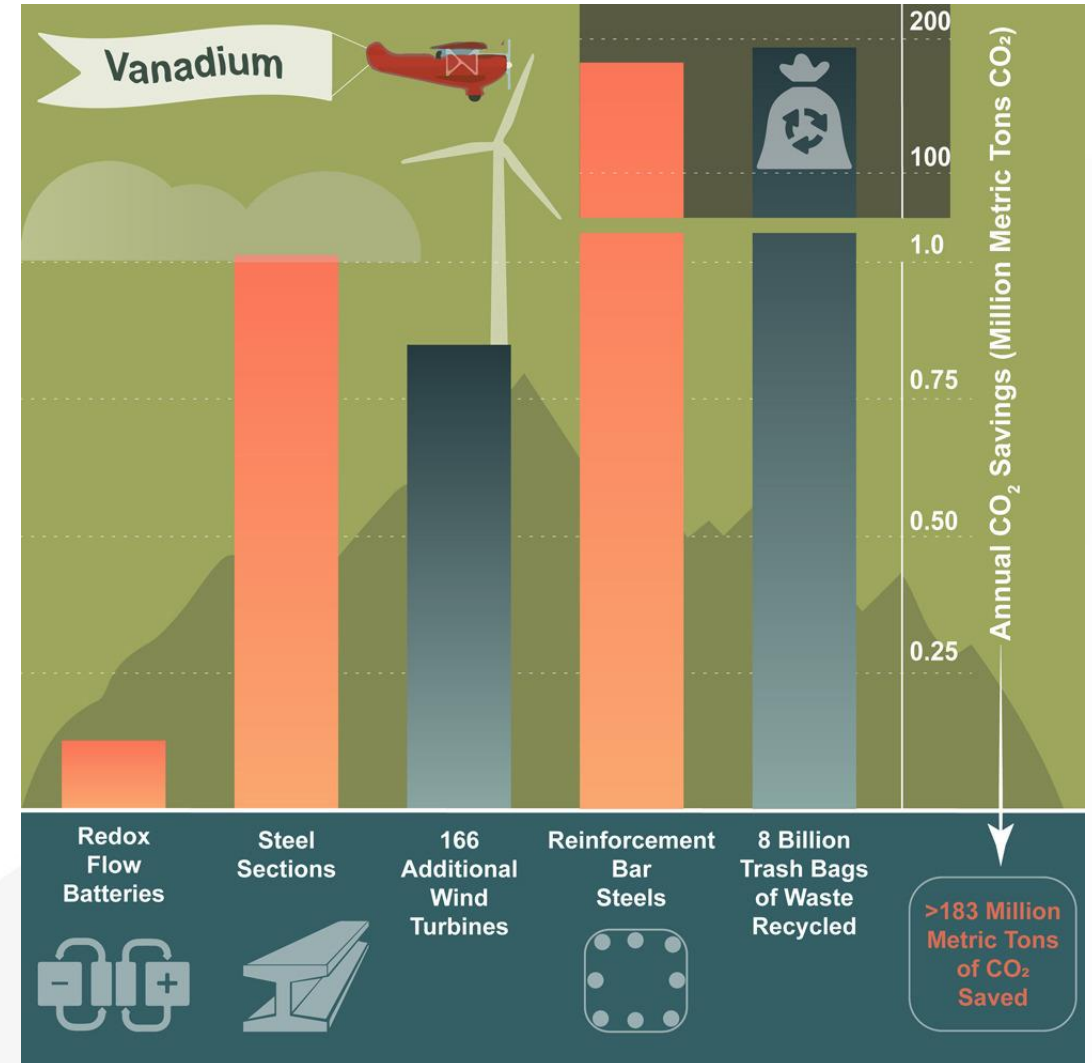


- High purity hematite is used for steel production – an essential part of modern living from buildings to cars, machineries to appliances
- Significant and fast growing demand in neighbouring Asian region
- Fe content over 64.4%, strong premium over the benchmark 62% grade

Vanadium

A SUSTAINABLE SOLUTION AS A MAJOR CO₂ REDUCER

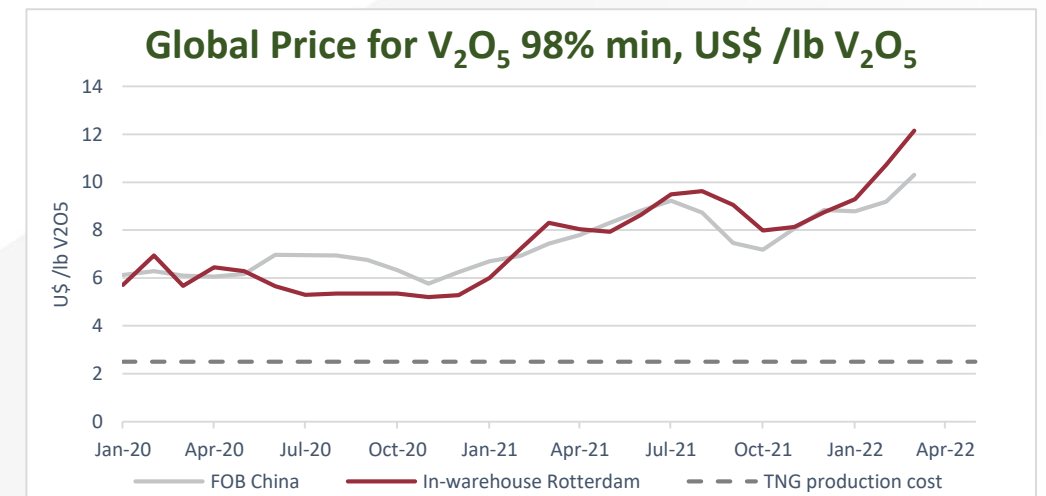
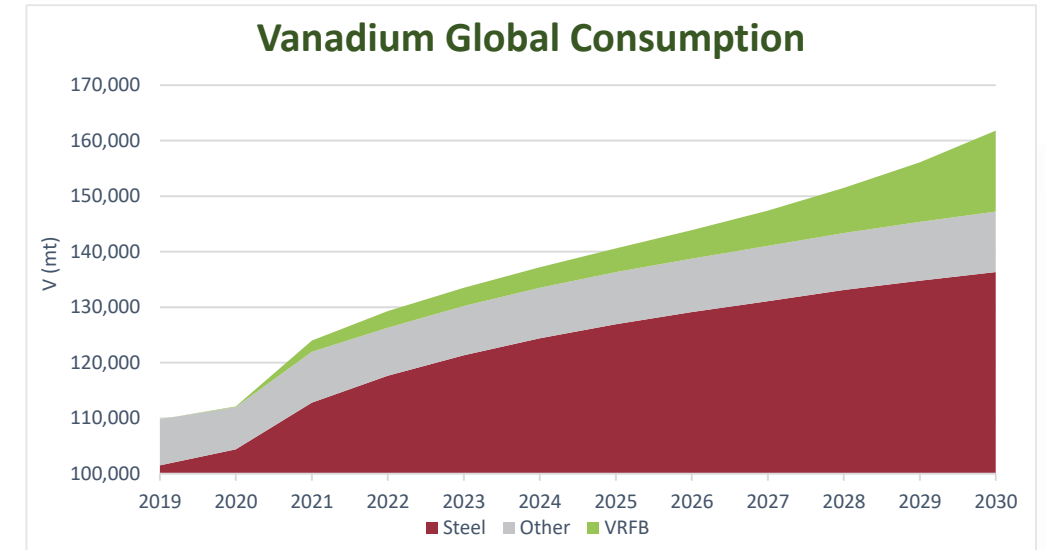
- Vanadium has enabled an avoided environmental burden totaling 185 million metric tons of CO₂ on an annual basis
- Enabling the energy transition and deep decarbonization hinges on strategic minerals
- The versatility of vanadium chemistries enables technologies that lower CO₂ emissions
- In structural applications, vanadium enables a greater economy of materials use
- Vanadium redox flow batteries balance the intermittency of wind and solar power



Vanadium Market and Pricing



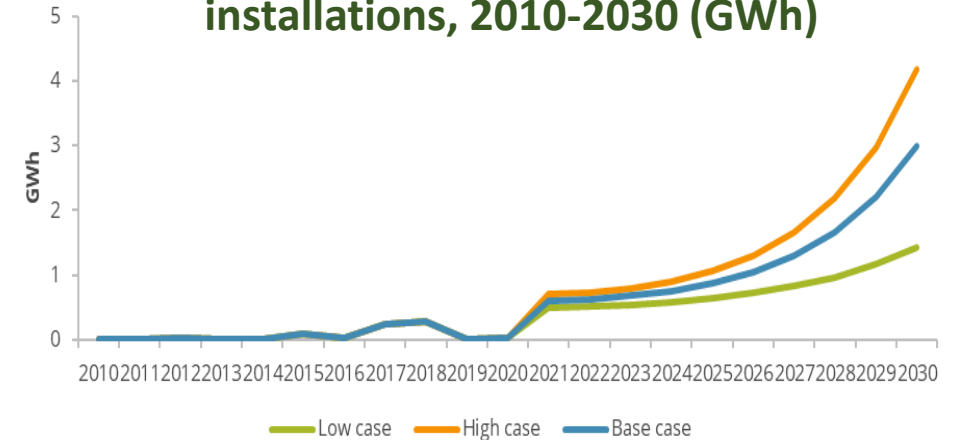
- Vanadium is globally listed as Critical Minerals
- TNG to produce a high-purity V_2O_5 , over 99.6%, using the Primary Mine Output route with its TIVAN® process
- Expected US\$2.0/lb V_2O_5 premium on market price for TNG product at 99.6% V_2O_5 *
- V_2O_5 is a strengthening agent for high tensile steel
- Global demand is estimated at 190ktpa of which 90% for steel (e.g. rebars)
- TNG will produce 6,000tpa of high-purity V_2O_5 for use in high added value applications such as batteries (VRFB) and ferrovanadium
- TNG will be a low cost V_2O_5 producer estimated at US\$2.5/lb V_2O_5 compared to the average production cost of US\$4.5/lb V_2O_5



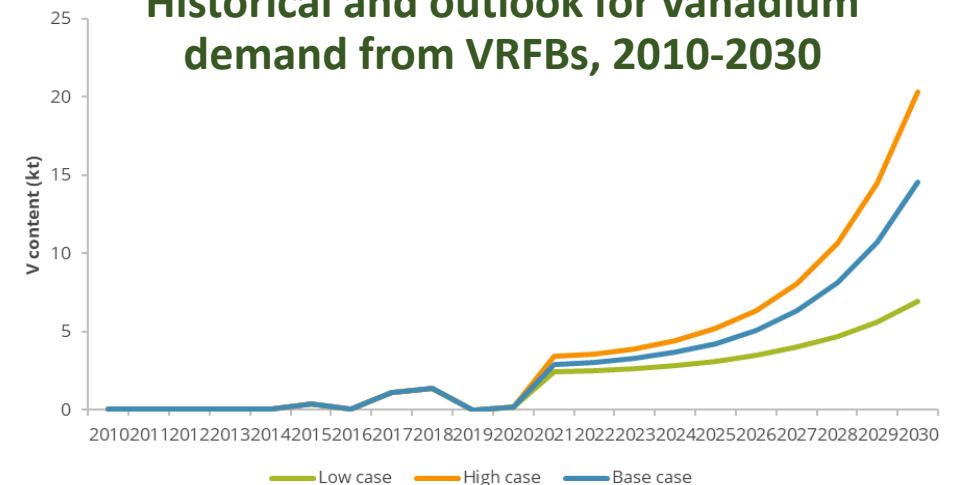
V₂O₅ for Vanadium Redox Flow Battery (VRFB)

- VRFB requires the highest V purity which can only be produced from the Primary Mine Output, with 20,434mt produced in 2020
- TNG plans to produce high purity V₂O₅ (99.6%)
- V constitutes 30-50% of the cost of VRFB
- Average estimated for 1kWh (April 2022): 9kg V₂O₅ or 5.040kg V making 55L VE (1MWh needs approximately 55,000 litres VE)
- 1 kg of V₂O₅ will produce approximately 6 litres of VE with approximately 2 mol/litre of V
- In 2030, the use of V₂O₅ for VRB will represent 10% of global use compared to 1% today

Historical and outlook for VRFB installations, 2010-2030 (GWh)



Historical and outlook for vanadium demand from VRFBs, 2010-2030



VRFB – A Sustainable Energy Storage Battery

VRFB USES VANADIUM ELECTROLYTE LIQUID SOLUTION TO STORE AND RELEASE LARGE AMOUNTS OF ENERGY OVER A LONG PERIOD OF TIME



TNG is a member of Vanitec, the Vanadium International Technical Committee

Carbon savings:

A VRFB produces less cradle-to-grave CO₂ emissions than other technologies, with savings ranging from 27 to 37%, when compared to multiple lithium ion technologies.

Low carbon footprint:

When coupled to renewable energy technologies, the carbon footprint of a VRFB is much smaller than a typical lithium-ion battery system.

Reusability:

100% of the vanadium in vanadium electrolyte is re-usable upon decommissioning of a VRFB can be fully redeployed into another VRFB or converted into vanadium oxides for use in other applications, such as steel alloys.

Recyclability:

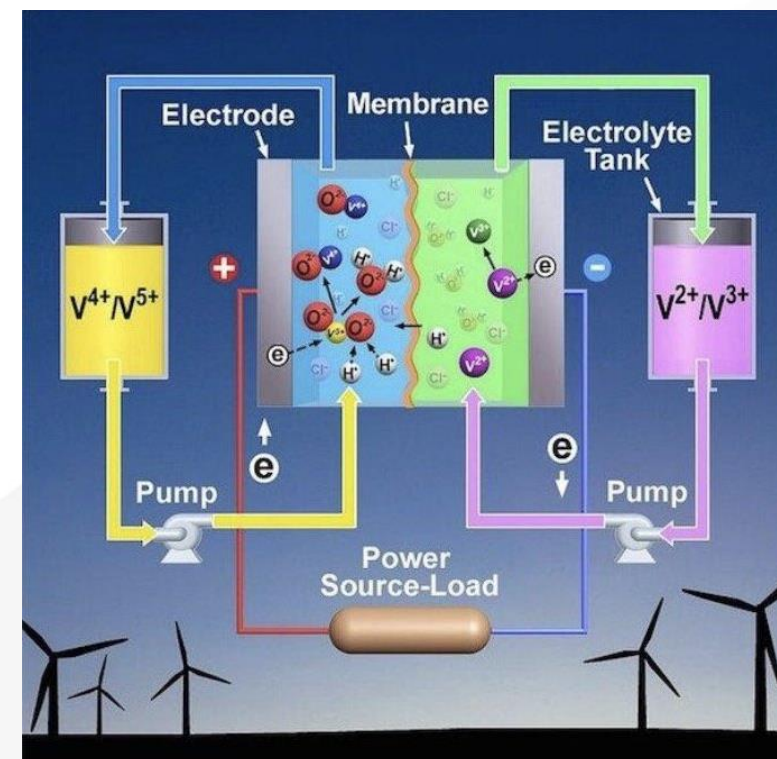
The recycling and conversion of liquid electrolyte costs a fraction of the vanadium's market value which guarantees that the chemistry in the VRFB will be recycled as opposed to being discarded.

Long life:

VRFB systems have a long service life, when compared to lithium ion technologies, with over 20,000 charge/discharge cycles and an operational life that can exceed 20 years.

VRFBs: A true circular economy technology

The Vanadium Redox Flow Battery (VRFB) is a sustainable energy storage battery that uses a vanadium electrolyte liquid solution to store and release large amounts of energy over long periods of time



VRFB Business Unit

TNG ENERGY

- TNG has established a VRFB business unit, under its green energy focused subsidiary TNG Energy, as part of the vertical integration strategy for the Mount Peake Project
- TNG has previously produced high-purity vanadium electrolyte from vanadium pentoxide produced in pilot scale testwork for Mount Peake
- Heads of Agreement joint venture with leading Singaporean-based battery technology development company, V-Flow Tech
- Technology and process design study for a Vanadium Electrolyte production facility underway
- Large scale Energy Storage Business plan completed
- Suitable sites in WA and NT are under investigation
- Support from government agencies



Vanadium Electrolyte sample
produced by TNG

Mount Peake Project Key Facts



Advanced stage of engineering and approvals ahead of a Final Investment Decision



Integrated mining and advanced processing operation



Major Project Status awarded by the Australian Federal Government and the Northern Territory Government



TIVAN® technology enabling production of three high-purity products at commercial grade



Large flat-lying, shallow vanadium-titanium deposits in Australia



Off-take agreements in place with global groups for all commodities



Partnerships with Tier 1 development companies

Mining licences and most regulatory permits/approvals in place



Mount Peake Project Readiness



REGULATORY

- ✓ Federal & NT Environmental approval received for the Mine Site
- ✓ Mining Management Plan Review submitted



TENURE & SOCIAL LICENCE TO OPERATE

- ✓ Native Title Agreement executed with Traditional Owners
- ✓ Mineral Leases granted
- ✓ Federal and NT Major Project Status



TECHNICAL

- ✓ FEED study for the Beneficiation Plant and TIVAN® Processing Facility completed by SMS group
- ✓ Appointment of Clough to support development of integrated single site
- ✓ Non-process Infrastructure pre-qualification tender process and short-listing of proponents completed



COMMERCIAL

- ✓ Off-take agreements in place for 100% of all TNG products
- ✓ KfW IPEX Bank mandated
- ✓ KPMG Corporate Finance engaged



Investor Highlights



Advanced development of the Mount Peake Project; A large battery and critical minerals project



Critical minerals will play an important role in the future of Australian resources



Exposure to value-add VRFB energy and Green Hydrogen business focused on environmentally sustainable resources



Disconnect between TNG's Market Cap value and its Project Value creates significant investor opportunity



THANK YOU

