

23 April 2025

Fast Track application  
lodged 15 April 2025



Taranaki VTM Project

Pre-Feasibility Study Presentation



*A **Nationally Significant Project** providing shareholders with strategic exposure to **Iron Ore and Critical Minerals** Vanadium and Titanium in **New Zealand***

# Disclaimer

This disclaimer applies to this presentation and the information contained in it (the **Presentation**). By reading this disclaimer you agree to be bound by it. The Presentation has been prepared by Manuka Resources Limited and relates to its subsidiaries, related parties and any new assets or entities subsequently acquired or incorporated (collectively the **Company**). The Presentation was prepared on 23 April 2025 and the information in it is subject to change without notice.

## Purpose

The Presentation is for information purposes only and is an overview of the Company and its assets at the time of preparation. This Presentation does not contain all information necessary to make an investment decision or that would be required in a prospectus or product disclosure statement prepared in accordance with the requirements of the Corporations Act 2001 (Cth) (**Corporations Act**). The Presentation is of a general nature and does not purport to be complete or verified by the Company or any other person.

## Distribution outside Australia

Distribution or release of this document outside Australia may be restricted by law. This document may only be distributed or released to a person that is not in the United States except as permitted under the U.S. Securities Act. Persons who come into possession of this document who are not in Australia should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

## Not an offer or financial product advice

The Presentation does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in the Company nor does it constitute financial product advice. The Presentation is not a prospectus, product disclosure statement or other offer document under Australian law or under any other law. The Presentation has not been filed, registered or approved by any regulatory authority in any jurisdiction. The Presentation is not intended to be relied upon as advice or a recommendation to investors and does not take into account the investment objectives, financial situation, taxation situation or needs of any particular investor.

An investor must not act on the basis of any matter contained in the Presentation and must make its own assessment of the Company and conduct its own investigations and analysis. Investors should assess their own individual financial circumstances and consider talking to a financial adviser, professional adviser or consultant before making any investment decision. Neither this Presentation nor anything contained in it forms the basis of any contract or commitment and no agreement to subscribe for securities will be entered into on the basis of this Presentation.

## No guarantee, representation or warranty

While reasonable care has been taken in relation to the preparation of the Presentation, none of the Company or their respective directors, officers, employees, contractors, agents, or advisers nor any other person (Limited Party) guarantees or makes any representations or warranties, express or implied, as to or takes responsibility for, the accuracy, reliability, completeness or fairness of the information, opinions, forecasts, reports, estimates and conclusions contained in the Presentation. No Limited Party represents or warrants that the Presentation is

complete or that it contains all information about the Company that a prospective investor or purchaser may require in evaluating a possible investment in the Company or acquisition of shares in the Company. To the maximum extent permitted by law, each Limited Party expressly disclaims any and all liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of or reliance on information contained in the Presentation including representations or warranties or in relation to the accuracy or completeness of the information, statements, opinions, forecasts, reports or other matters, express or implied, contained in, arising out of or derived from, or for omissions from the Presentation including, without limitation, any financial information, any estimates or projections and any other financial information derived therefrom.

## Forward-looking statements

The Presentation includes forward-looking statements and comments about future events, including the Company's expectations about the performance of its businesses. Forward-looking words such as "expect", "should", "could", "may", "predict", "plan", "will", "believe", "forecast", "estimate", "target" or other similar expressions are intended to identify forward-looking statements. Such statements involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company and which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements. Forward-looking statements are provided as a general guide only, and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, recipients are cautioned to not place undue reliance on any forward-looking statement. Subject to any continuing obligations under applicable law, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in the Presentation to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statement is based. No Limited Party or any other person makes any representation, or gives any assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements in the Presentation will occur.

## Past performance

Past performance is not indicative of future performance and no guarantee of future returns is implied or given.

## Previously reported information

The information in this presentation that relates to previously reported Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves is extracted from the Company's ASX announcements noted in the text of the presentation and are available to view on the Company's website. The Company confirms that, other than mining depletion, it is not aware of any new information or data that materially affects the information included in the original announcements and, in the case of estimates of Mineral Resources, Ore Reserves, Production Targets and Financial Forecasts, that all material assumptions and technical parameters underpinning the estimates in the relevant 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 presented have not been materially altered.



# About the Taranaki VTM Project

- ✓ 100% Owned by Manuka's subsidiary Trans-Tasman Resources ("TTR")
- ✓ Granted Mining Permit MMP55581 and exploration permit MEP54068
- ✓ 3.2Bt Resource<sup>1</sup> of Vanadiferous Titanomagnetite ("VTM") iron sands located in the shallow waters of the South Taranaki Bight, New Zealand
- ✓ NZD\$85m spent on Technical and Environmental Studies since 2009

**Updated Pre-Feasibility Study completed (2025) showing an NPV<sup>10</sup> of US\$1.26B and IRR of 39%<sup>2</sup>**

1. ASX Release 1 March 2023  
2. ASX Release 26 March 2025



*Location of the Taranaki VTM Project with respect to Mineral Resource outline, granted Mining Permit MMP55581 (within New Zealand's Exclusive Economic Zone) and Exploration Permit MEP54068 (within New Zealand Territorial Waters)*

# Pre-Feasibility Study Highlights

ASX Release 26 March 2025



**NPV<sub>10</sub>**  
**US\$1.26B**

---

**IRR 39%**

---

**US\$312M**  
**EBITDA**  
per annum

**3.2Bt Mineral Resource**

Large World Class Iron Sands Deposit, South Taranaki Bight NZ

**Initial 20-year Mine Life**

with material mine life extension opportunities

**4.9Mtpa 56-57%Fe**

+ Vanadium and Titanium (Critical Minerals) co-products

**US\$27.20/t C1 Cost**

excluding any co-product credits

**US\$602M Project Capex**

(inclusive 14% contingency)

**National Significance**

Project included in NZ Government's Fast Track Approvals Act 2024

Macroeconomic assumptions include 13.7% discount to a flat benchmark Fe concentrate pricing of US\$90/t CFR China, V<sub>2</sub>O<sub>5</sub> co-product pricing of US\$5.45/lb (multiplied by a 77% third party recovery rate and 50% payability) and Capesize freight rates of US\$10/t.

# Mineral Resource<sup>1</sup> and Production Target<sup>2</sup>

Resource	Bt	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	V <sub>2</sub> O <sub>5</sub>
Indicated	1.4	10.37%	1.05%	0.05%
Inferred	0.5	8.81%	0.90%	0.04%
<b>MMP55581</b>	<b>1.9</b>	<b>9.99%</b>	<b>1.01%</b>	<b>0.05%</b>
Indicated	0.7	10.61%	1.07%	0.05%
Inferred	0.6	10.26%	1.04%	0.05%
<b>MEP54068</b>	<b>1.3</b>	<b>10.44%</b>	<b>1.05%</b>	<b>0.05%</b>
<b>Total</b>	<b>3.2</b>	<b>10.17%</b>	<b>1.03%</b>	<b>0.05%</b>

Information relating to Exploration Results, Sampling Techniques and Data, and Mineral Resources for the Taranaki VTM Project is extracted from the announcement titled 'Maiden Vanadium Resource at Taranaki VTM Iron Sand Project' dated 1 March 2023 and available to view on the Company's website. The Company is not aware of any new information or data that materially affects the information used to compile the 2023 Mineral Resource and all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

1. ASX Release 1 March 2023  
2. ASX Release 26 March 2025

**Initial Mine Plan of 20 Years** is based on mining 1Bt of iron sands in granted Mining Lease MMP55581 to produce 4.9Mt pa of VTM Concentrate<sup>2</sup>

Total Resources within MMP55581 comprises 1.9Bt of 75% Indicated and 25% Inferred Resources

**Mining for the first 13 years** will focus on the Cook South block of the Resource which comprises **95% Indicated Resources** and 5% Inferred Resources<sup>1</sup>

**Metallurgical assumptions** supporting the Production Target are based **Davis Tube Recovery and bulk samples Pilot Plant Test Work** undertaken on samples collected from 726 drill holes across the Resource<sup>1,2</sup>

The Production Target underpinning PFS financial forecasts comprises 75% Indicated and 25% Inferred Resources. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the conversion of Inferred Resources to Indicated Resources or return the same grade and tonnage distribution. The Mineral Resource underpinning the Production Target has been prepared by a Competent Person in accordance with the requirements in the JORC Code.



# Operations

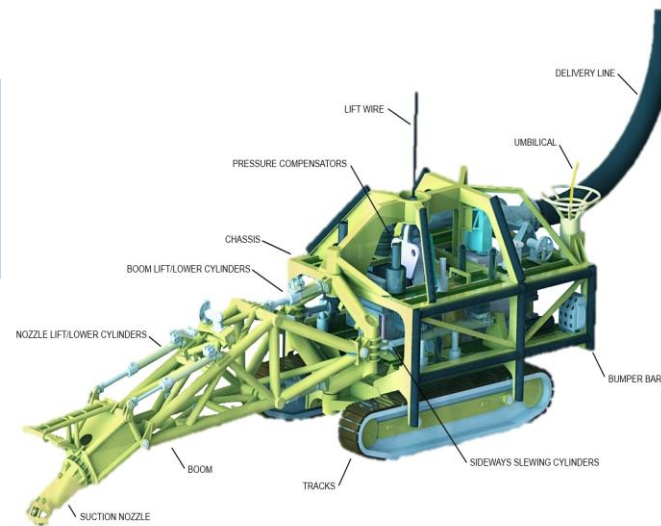
✓ Iron sands will be mined using seabed crawlers at a rate of 50Mtpa and pumped as a slurry to an Integrated Mining Vessel ("IMV") on the surface

✓ Onboard the IMV, the sand will be screened, magnetically separated and ground, before a final magnetic separation to produce a VTM concentrate grading ~57% Fe, 0.50%  $V_2O_5$  and 8.4%  $TiO_2$

✓ The Project is scheduled to produce **VTM concentrate** at a rate of **4.9Mtpa** over an initial period of **20 years**

✓ The 45Mt balance of the mined sand will be returned continuously to the seabed where it will be fully restored to its natural state within two years

## Integrated Mining Vessel



*A **mobile seabed crawler** has been selected as the preferred sediment extraction technology to be integrated into the IMV*

***Proven and tested technology** is very similar to the De Beers Marine extraction equipment operated offshore Namibia for over 30 years*

# Project Costs

✓ Operating costs have been estimated on the basis that all primary mining and process operations will be carried out by the Company

✓ All transfer and support operations will be contracted out to third parties

**Total C1 Operating Costs are forecast to be US\$27.20/t VTM concentrate**  
(before including Vanadium Credits)

✓ Total Capital Cost for the Project are estimated to be US\$602M including 14% (US\$84.4M) of contingency

✓ NZ\$2M included to establish a dedicated employee training facility in Hāwera and NZ\$3.9M for an environmental monitoring and research vessel

OPEX Costs by Input Item	US\$/t Concentrate
Contractor Costs	7.00
Fuel	8.12
Repairs & Maintenance	2.04
Labour	6.27
Insurance	0.57
Other Costs (Misc.)	2.20
Enviro Monitoring & Training	1.00
<b>Total Opex</b>	<b>27.20</b>

The Opex estimates of this PFS are considered to be  $\pm 30\%$  order of accuracy current at the first quarter of 2025.

Capex Cost by Component	Item	US\$M
IMV	Hull	61.2
	Equipment	38.0
	Integration	54.1
Process	Process Plant	183.9
	Dewatering	18.1
Mining Systems	Crawler	112.0
Auxiliary	Power Generation	74.5
	Desalination	26.1
Management	Procurement, Management, Engineering	34.4
<b>Total Capex</b>		<b>602.2</b>
included contingency		84.4

The Capex estimates of this PFS are considered to be  $\pm 30\%$  order of accuracy current at the first quarter of 2025.

# National Significance

✓ New Zealand's stated objective is to double mineral export earnings from NZ\$1.5B to NZ\$3B per annum over the next decade<sup>1</sup>

✓ The Taranaki VTM Project is forecast to generate NZ\$854M export revenue per annum representing over 50% of the targeted increase

✓ Both vanadium and titanium have recently been named on New Zealand's Critical Minerals List

✓ The Project will support the NZ Government delivering on its Critical Minerals List and Minerals Strategy for NZ to 2040 policy objectives

The Project was included in Schedule 2 (projects to be directly referred to an Expert Panel) of the recently passed New Zealand **Fast Track Approvals Act 2024**<sup>2</sup>

**The Company submitted its application on 15 April 2025 and has commenced the Fast Track approvals process**

***“The Project will deliver substantial benefits to the Taranaki and Whanganui regions, including:***

- ***Over 300 new full-time local jobs;***
- ***1,123 jobs in the region;***
- ***NZ\$238M p.a. expenditure injected into the local economy.”***

*New Zealand Institute of Economic Research*



1. <https://www.odt.co.nz/business/govt-aims-double-mining-exports-2035>  
2. <https://environment.govt.nz/acts-and-regulations/acts/fast-track-approvals>



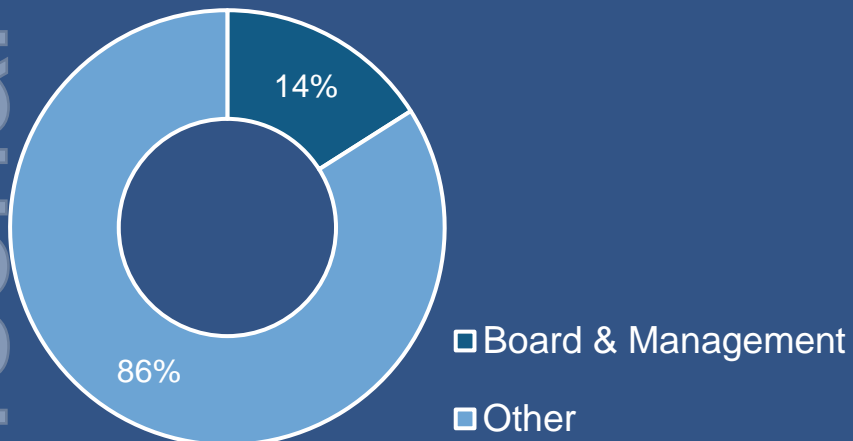
# Corporate Summary

## Capital Structure

Shares Outstanding	810M
Options Outstanding	206M
Share Price	A\$0.039
Market Capitalisation	A\$31.6M
Cash <small>As at 31 December 2024</small>	A\$2.0M
Debt Outstanding <small>As at 31 December 2024</small>	~A\$38.6M
<ul style="list-style-type: none"><li>A\$19.1M TransAsia Pty Ltd - Senior Debt Facility</li><li>A\$12.5M Tennant Metals SA Pty Ltd - Trade Finance Facility</li></ul>	

## Ownership Breakdown:

As at 31 December 2024



## Share Price History



## Share Price Catalysts for 2025:

- ✓ Final Fast Track Approval of the Taranaki VTM Project
- ✓ Commencement of the VTM Project Bankable Feasibility Study
- ✓ Continued strength in the Gold and Silver markets
- ✓ Refinance of the TransAsia Debt Facility
- ✓ Secure non-dilutive funding to support Restart of Precious Metal Production in the Cobar Basin
- ✓ Near Term Gold & Silver Production from Mt Boppy and Wonawinta

Thank you



**Corporate Office:**  
**Suite 405 Grafton Bond Building**  
201 Kent Street  
Sydney, NSW 2000 Australia  
Phone: 02 7253 2020  
Email: [admin@manukaresources.com.au](mailto:admin@manukaresources.com.au)