

23 April 2025

Fast Track application lodged 15 April 2025

Taranaki VTM Project Pre-Feasibility Study Presentation

MANUKA RESOURCES

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

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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 changes. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially altered.

Released by the Board

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[1] 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[10] of US$1.26B and IRR of 39%[2]**



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)*

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

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Pre-Feasibility Study Highlights

ASX Release 26 March 2025



NPV_{10}
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_2O_5 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.

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Mineral Resource[1] and Production Target[2]

Resource	Bt	Fe_2O_3	TiO_2	V_2O_5
Indicated	1.4	10.37%	1.05%	0.05%
Inferred	0.5	8.81%	0.90%	0.04%
MMP55581	**1.9**	**9.99%**	**1.01%**	**0.05%**
Indicated	0.7	10.61%	1.07%	0.05%
Inferred	0.6	10.26%	1.04%	0.05%
MEP54068	**1.3**	**10.44%**	**1.05%**	**0.05%**
Total	**3.2**	**10.17%**	**1.03%**	**0.05%**

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*

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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[2]

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[1]

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[1,2]

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.

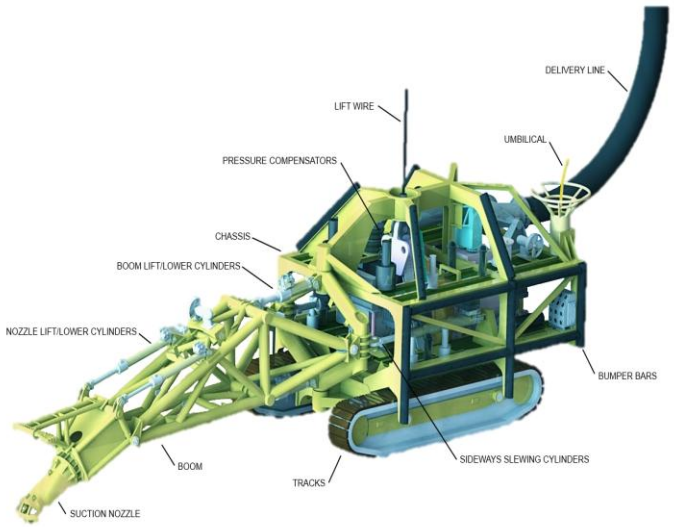
Operations

- ✓ 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

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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

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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
Total Opex	**27.20**

The Opex estimates of this PFS are considered to be ±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
Total Capex		**602.2**
included contingency		84.4

The Capex estimates of this PFS are considered to be ±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[1]
- ✓ 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[2]

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

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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*

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Corporate Summary

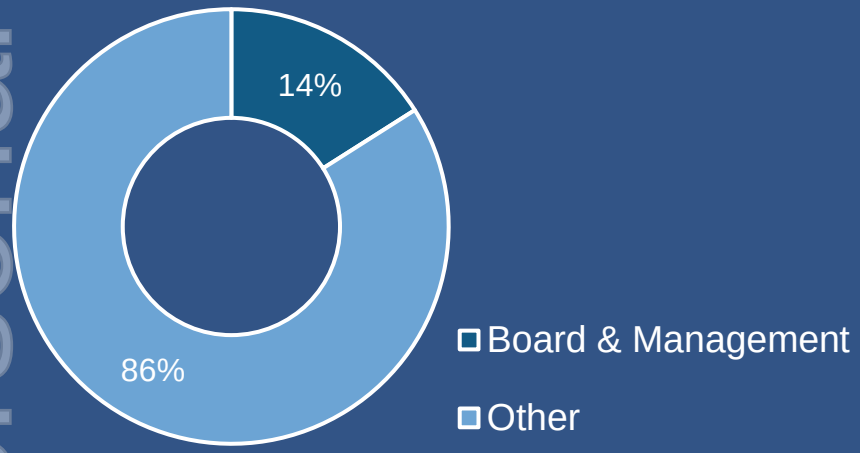
Capital Structure

Shares Outstanding	**810M**
Options Outstanding	**206M**
Share Price	**A$0.039**
Market Capitalisation	**A$31.6M**
Cash As at 31 December 2024	**A$2.0M**
Debt Outstanding As at 31 December 2024	**~A$38.6M**

- *A$19.1M TransAsia Pty Ltd - Senior Debt Facility*
- *A$12.5M Tennant Metals SA Pty Ltd - Trade Finance Facility*

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**

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Thank you



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