

VITAL METALS  
(ASX: VML)

# 2023 AGM Presentation

Dr Geordie Mark



# Important Notices & Disclaimers



**Nature of document:** This presentation has been prepared and issued by Vital Metals Limited (**Vital, Vital Metals** or the **Company**) to provide general information about the Company and its related bodies corporate (together, the **Group**). The information in this document is in summary form and should not be relied upon as a complete and accurate representation of any matters that a reader should consider in evaluating the Company. While management has taken every effort to ensure the accuracy of the material in this presentation, the Company and its advisers have not verified the accuracy or completeness of the material contained in this presentation.

**Forward looking statements:** This presentation contains forward-looking information about the Company and its operations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company.

It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements. Some of the underlying assumptions in this presentation are based on information which has not been independently verified.

**Not an offer:** This presentation and its contents are not an invitation, offer, solicitation or recommendation with respect to the purchase or sale of any securities in the Company in any jurisdiction and must not be distributed, transmitted, or viewed by any person in any jurisdiction where the distribution, transmission or viewing of this document would be unlawful under the securities or other laws of that or any other jurisdiction. This presentation is not a prospectus or any other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law.

This presentation has been prepared for publication in Australia and may not be released to US wire services or distributed in the United States. This presentation does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States or any other jurisdiction. Any securities described in this presentation have not been, and will not be, registered under the US Securities Act of 1933 (the "US Securities Act") and may not be offered or sold in the United States except in transactions exempt from, or not subject to, registration under the US Securities Act and applicable US state securities laws. The distribution of this presentation (including any electronic copy of this presentation) in the United States and elsewhere outside Australia may be restricted by law. Persons who come into possession of this presentation should observe any such restrictions, as any non-compliance could contravene applicable securities laws.

# Important Notices & Disclaimers



**Disclaimer:** No representation or warranty, express or implied, is made by the Company that the material contained in this presentation will be achieved or proved correct. Except for statutory liability which cannot be excluded, each of the Company, its directors, officers, employees, advisors and agents expressly disclaims any responsibility for the accuracy, fairness, sufficiency or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any effort or omission therefrom. The Company will not update or keep current the information contained in this presentation or to correct any inaccuracy or omission which may become apparent, or to furnish any person with any further information. Any opinions expressed in the presentation are subject to change without notice.

**Not financial product advice:** Neither the Company nor any of its related bodies corporate is licensed to provide financial product advice in respect of the Company's securities or any other financial products. You should not act and refrain from acting in reliance on this presentation. Nothing contained in this presentation constitutes investment, legal, tax or other advice. This presentation does not take into account the individual investment objectives, financial situation and particular needs of Company shareholders. Before making a decision to invest in the Company at any time, you should conduct, with the assistance of your broker or other financial or professional adviser, your own investigation in light of your particular investment needs, objectives and financial circumstances and perform your own analysis of the Company before making any investment decision.

**Compliance Statements:** This presentation contains information relating to Mineral Resource Estimates for the Nechalacho Project extracted from an ASX market announcement reported previously and published on the ASX platform on 14 February 2023, titled "Vital achieves 26% increase in Tardiff Mineral Resource Tonnes and 19% increase in contained NdPr". 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 estimates in the original market announcement continue to apply and have not materially changed.

This presentation contains information relating to Exploration Results extracted from ASX market announcement "Vital intersects up to 2.8% TREO in drilling at Tardiff" reported previously in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (**2012 JORC Code**) and published on the ASX platform on 30 May 2023. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

**Authorisation:** This presentation is authorised for market release by the Board of Vital Metals.

**All currency amounts are in Australian dollars unless specified otherwise.**

## Leveraging Asset Qualities, Jurisdiction and Capability to Develop a North American Rare Earth Supply Chain

### Pathway to Enabling a North American Rare Earth Supply Chain



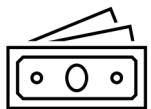
#### Asset Qualities: grade, size and compositional virtues of the Tardiff deposit

- Tardiff provides a differentiated value proposition given grade, size and rare earth composition
  - Focusing on grade and product differentiation to achieve value at lower risk (virtues of NdPr market)
  - *Drilling to grade and system extension- maximizing value and risk for MRE, mining & processing*



#### Jurisdictional Premium: combining asset surety with drivers for North American integration

- Domicile Advantages
  - 1<sup>st</sup> world jurisdiction: asset ownership, financial stability and framework
  - Funding and regulatory priorities to enable capability for North American rare earth supply
  - *Advancing permitting through capability, and agency partnership through engagement*



#### Skill Set Advantages: leveraging technical skill sets to enable and de-risk

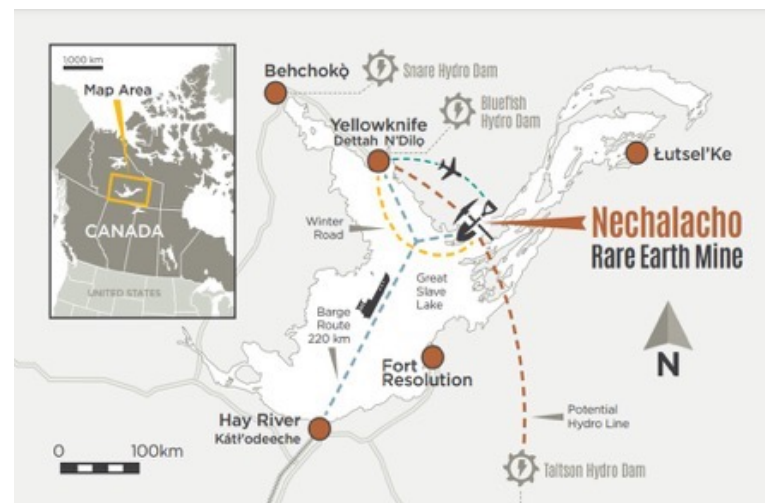
- Marrying capabilities to heighten value and de-risk pathway
  - Integration of front-end capability with rare earth market expertise (a rare combination)
  - Early feedback on market and value analysis, and metallurgical process pathway(s) de-risks and augments technical studies to affirm direction optimizing value, cost and time parameters
  - *Early material parametrization and feedback to inform augmented scoping study (streamlining future)*

# Jurisdiction: Vertical Integration is a Key Driver

**Tardiff's scale, grade and location offer attractive qualities to a North American Market**

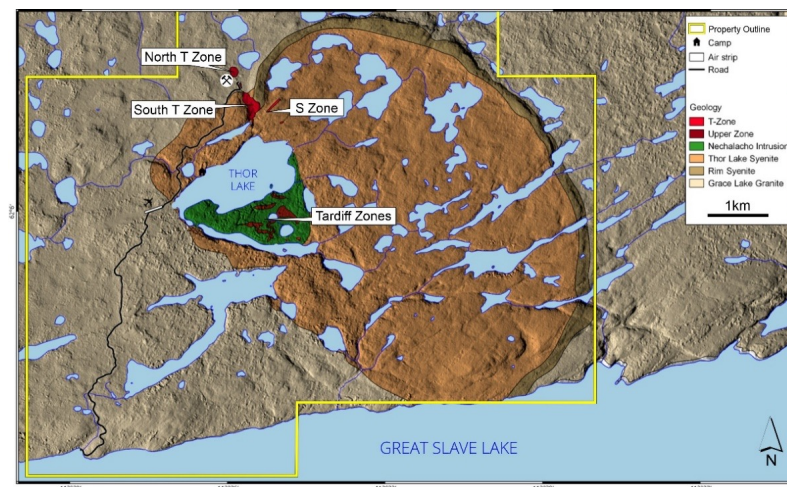
## Focusing on the largest known REE deposit at Nechalacho

- Vital aims to develop Tardiff to become a large-scale, long-life rare earth producer and is focused on key milestones:
  - ✓ Completing scoping and trade-off studies
  - ✓ Updating existing permits
  - ✓ Work collaboratively with Shenghe to frame orientation toward markets of value and size



## A World Looking to Integrate Vertically

- 1<sup>st</sup> world jurisdiction advantages
    - ✓ Asset ownership and fiscal regime stability
- compounded by:*
- ✓ Critical minerals focus
  - ✓ Funding and regulatory advantages to project maturation and funding



# Asset: Tardiff and a Picture of Differentiation

## Nechalacho: A Larger REE-rich System showing shallow grade

### Overview

- Tardiff Upper Zone – **119 Mt grading 1.4% TREO**, comprising 25.1% NdPr<sup>1</sup>

### Opportunities to Examine Later

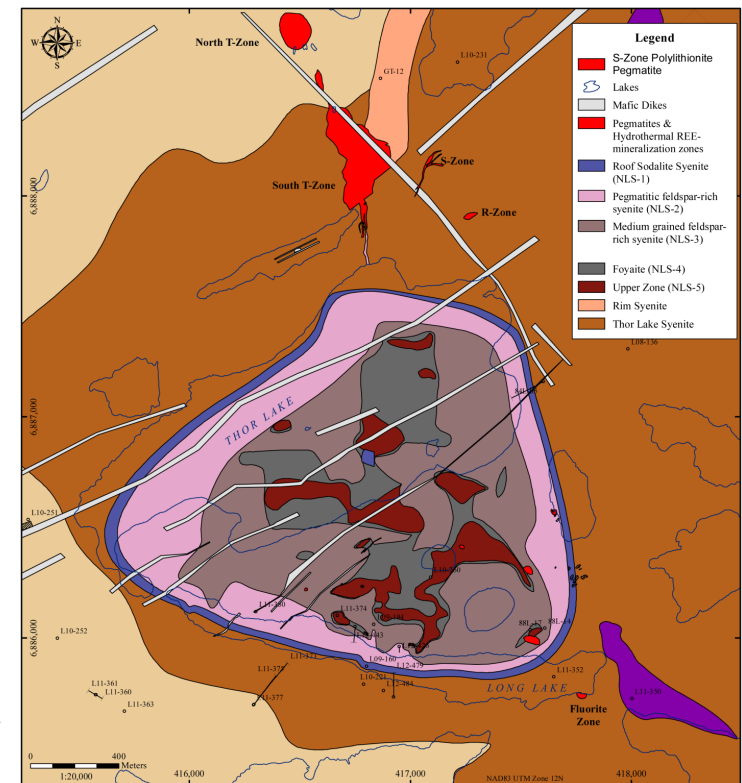
- Shallow high grades T Zone (e.g., 2020 MRE North T: 0.1 Mt grading 9.01% TREO, including 2.2% NdPr)<sup>2</sup>

Resource Clarification <sup>1</sup>	MT	TREO (%)	NdPrO: TREO Ratio	Nd <sub>2</sub> O <sub>3</sub> (%)
<b>Measured</b>	4.6	1.59	24.6%	0.31
<b>Indicated</b>	6.3	1.45	24.8%	0.28
<b>Inferred</b>	108.1	1.39	25.1%	0.28
<b>Measured, Indicated, &amp; Inferred</b>	119	1.4	25.1%	0.28

TREO = Total Rare Earth Oxides – La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>

NdPrO = Neodymium oxide and Praseodymium oxide: Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>

Source: “The Nature and Origin of the Nechalacho Rare Metal Deposit (REE, Nb,Zr), Northwest Territories, Canada.” Volker Möller Department of Earth and Planetary Sciences, McGill University, Montreal, April 2016



<sup>1</sup> Source: Vital Metals ASX announcement dated 14 February 2023

<sup>2</sup> Source: Vital Metals ASX announcement dated 15 April 2020



## 2023 developments

- **Shenghe investment:** Vital and Shenghe to benefit from combined technical and market expertise
- **Tardiff Mineral Resource Estimate:** 119Mt @ 1.4% TREO including 0.35% NdPr for 416 kt of contained NdPr
  - Completed a 6,664 m drilling in 74 holes at Tardiff
  - Commenced scoping-level studies for development of the Tardiff deposit
- **Drilling Results**

## Scoping Study to launch next chapter

- **2024 Drilling Results**
- **2024 MRE Update:** incorporating 2023 and 2024 results
- **2024: Augmented Scoping Study:** focus on maximising route to market, saleability and margin (*value and risk management*)
  - *Early product interfacing*
  - *Early processing flow sheet characterization*
  - *Mine plan grade optimization*
- **2024+ Permitting and DFS:** competitive advantage given ability to leverage earlier completed Nechalacho (Thor Lake) feasibility study and permitting
- **Financing and Construction:** Vital aims to work collaboratively with debt and equity funders including government agencies

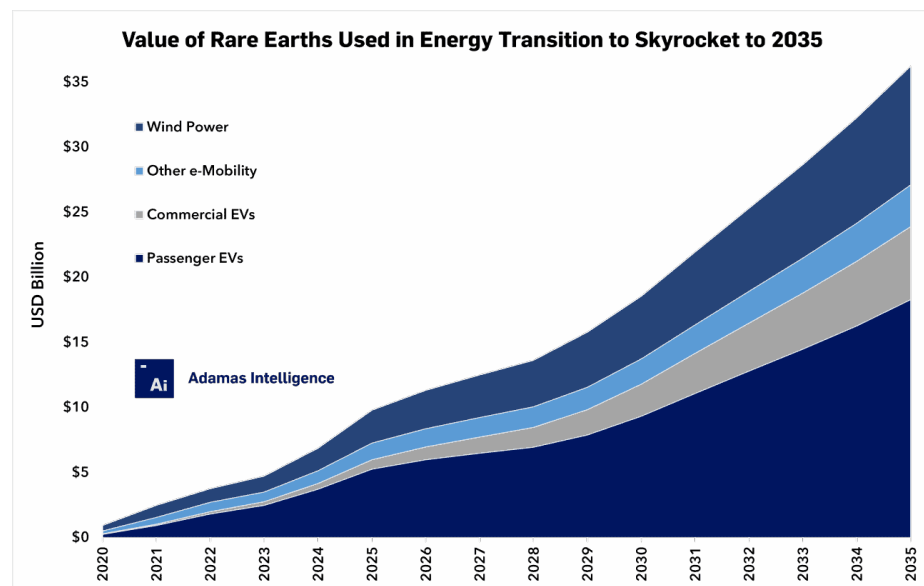
# Appendices



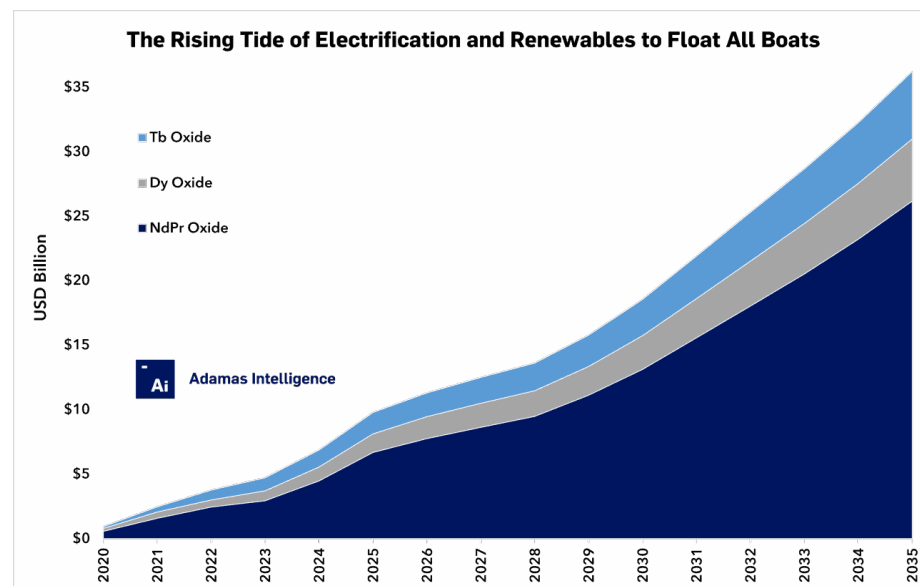
# A New Paradigm for Rare Earth Demand

Rare earth demand is surging both in volume and diversity of application as the world

- For Example, Neodymium-praseodymium (NdPr) are key rare earth elements (REE) in strong demand
  - ✓ NdPr are **crucial components** in the manufacture of strong permanent magnets used in electric vehicle (EV) motors, wind turbines, and other clean energy technologies
  - ✓ These magnets enable efficient energy conversion and are instrumental in driving the transition towards a **greener and more sustainable future**
- The market for NdPr oxide has experienced **substantial growth** in recent years, driven by the **increasing demand** for EVs, wind energy, and other high-tech applications
- Neodymium demand is projected to increase by 48% by 2050<sup>1</sup>
- Near-medium term forecasts indicator supply will remain tight for elements suite (e.g., dysprosium and neodymium)
  - ✓ Prices are forecast to increase (e.g., Nd to \$266.00 per kg by 2035, Source: Adamas Intelligence, 2023)



Source: Adamas Intelligence, *The Skyrocketing Value of Rare Earths Powering the Energy Transition*. 3 Feb, 2023.



Source: Adamas Intelligence, *The Skyrocketing Value of Rare Earths Powering the Energy Transition*. 3 Feb, 2023.

<sup>1</sup> Source: Columbia Climate School

<sup>2</sup> Source: Massachusetts Institute of Technology: Rare Earth Elements Supply and Demand