



# Becoming Canada's First Rare Earths Producer

March 2021

[www.vitalmetals.com.au](http://www.vitalmetals.com.au)

North America Critical Minerals Day  
**October, 2021**

# Disclaimer

This presentation provides an overview of prospective rare earth projects ("the Projects") and development opportunities and contains "forward looking statements". Forward-looking statements are all statements other than statements of historical fact included in this presentation including and without limitation those regarding the Projects' strategy, financial positions, plans and identification of additional resources and reserves. Such forward looking statements are subject to risk factors associated with exploration, development and the acquisitions of mining tenements and involve known and unknown risks, uncertainties and other factors. These risk factors could have a material effect on the operating, financial performance and achievements of the Projects and may cause the actual results to be materially different from any future operating, financial performance and achievements expressed or implied in the forward-looking statements contained in this presentation. Although there are reasonable grounds for making the forward-looking statements, such forward looking statements may be materially affected by changes in the underlying assumptions and changes to the environment which the Projects will operate in the future and such assumptions may or may not prove to be correct. Some of the underlying assumptions in this presentation are based on information which has not been independently verified.

This presentation does not constitute, or form part of, an offer to sell or the solicitation of an offer to subscribe for or buy any securities, nor the solicitation of any vote or approval in any jurisdiction, nor shall there be any sale, issue or transfer of the securities referred to in this presentation in any jurisdiction in contravention of applicable law.

To the extent permitted by law, neither Vital Metals, nor any directors, officers, employees or advisors nor any other person shall have any liability whatsoever for any errors or omissions or any loss however arising, directly or indirectly, for any use of this information or its contents or otherwise arising in connection therewith. Therefore, any potential investor or shareholder should consult with their professional advisors and seek independent advice before making any investment decisions regard to investing in Vital Metals or the Projects.

## ASX LISTING RULE INFORMATION

This presentation contains information relating to Mineral Resources for the Nechalacho Project extracted from ASX market announcements reported previously and published on the ASX platform on 13 December 2019, 19 February 2020 and 15 April 2020. 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 and that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed.

Investors should note that the Mineral Resource and Reserves estimates for the Wigu Hill Rare Earth Project and Kipawa Project are foreign estimates and are not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify these foreign estimates as a mineral resource in accordance with the JORC Code and it is uncertain that following further exploration or evaluation work that these foreign estimates will be able to be reported as a mineral resource in accordance with the JORC Code. The Company has previously disclosed the foreign estimates in compliance with ASX Listing Rule 5.12 in the announcements dated 25 June 2019 titled "Vital to Transform into Rare Earth Oxide Developer" and 11 August 2021 titled "Vital Metals Ltd Enters Agreement to Acquire Heavy Rare Earth Projects" ("Announcements"). The Company is not in possession of any new information or data relating the foreign estimates that materially impacts on the reliability of the estimates or the Company's ability to verify the foreign estimates in accordance with Appendix 5A (JORC Code). The Company confirms that the supporting information provided in the Announcements continues to apply and has not materially changed.

This presentation contains information relating to exploration results extracted from ASX market announcements reported previously and published on the ASX platform on 26 May 2021, 23 June 2021 and 3 August 2021. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market.

This presentation includes aspirational statements which have been reported in accordance with ASIC's guidance on 'Forward-looking Statements' and ASX Guidance Note 31. These statements are not predictive in nature and the Company does not yet have reasonable grounds to assert that these aspirational statements can be achieved.

## REFERENCES

1. ASX announcement dated 15 April 2020 titled "Substantial Increase in Resource Size and Grade at North-T Zone Nechalacho" (<https://www.asx.com.au/asxpdf/20200415/pdf/44qytlw5ckfbyr.pdf>); and ASX announcement dated 13 December 2019 titled "Vital Announces JORC 2012 Compliant Resources for the Nechalacho Rare Earth Deposit" (<https://www.asx.com.au/asxpdf/20191213/pdf/44ckgzdngkmzpj.pdf>)
2. ASX announcement dated 25 June 2019 titled "Vital to Transform Into Rare Earth Oxide Developer" (<https://www.asx.com.au/asxpdf/20190625/pdf/446361nxqnn9w8.pdf>)
3. ASX announcement dated 19 February 2020 titled "Vital Intersects Ultra-High Grade, Near-Surface REO at Nechalacho" (<https://www.asx.com.au/asxpdf/20200219/pdf/44f74511z68r0.pdf>)
4. ASX announcement dated 5 December 2019 titled "Vital Demonstrates Ability to Produce Rare Earth Concentrate with Grades Above 35% REO" (<https://www.asx.com.au/asxpdf/20191205/pdf/44c9nq180gpl7h.pdf>)
5. ASX announcement dated 25 June 2019 titled "Vital to Transform into Rare Earth Oxide Developer" ([https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02117124-6A934624?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02117124-6A934624?access_token=83ff96335c2d45a094df02a206a39ff4))
6. ASX announcement dated 26 May 2021 titled "Vital Intersects Broad High Grade REO in Near Surface Drilling at Tardiff Zone" ([https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02378307-6A1034348?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02378307-6A1034348?access_token=83ff96335c2d45a094df02a206a39ff4))
7. ASX announcement dated 23 June 2021 titled "Vital's Metallurgical Testwork Returns Positive Results" (<https://www2.asx.com.au/markets/trade-our-cash-market/announcements.vml>)
8. ASX announcement dated 3 August 2021 titled "Vital Intersect High Grade REO in Tardiff Zones 2&3 including outside existing resource at Nechalacho" ([https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02402947-6A1044224?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02402947-6A1044224?access_token=83ff96335c2d45a094df02a206a39ff4))
9. ASX announcement dated 11 August 2021 titled "Vital Metals Ltd Enters Agreement to Acquire Heavy Rare Earth Projects" ([https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02405866-6A1045257?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02405866-6A1045257?access_token=83ff96335c2d45a094df02a206a39ff4))



# Guaranteeing Feedstock to the Rare Earths' Supply Chain



# Vital is Canada's first RE producer building the capability to supply both light and heavy rare earths in the RE Supply Chain

## Highlights

### World class REO Development Team - ex Lynas Corporation Ltd

#### 3 World Class Rare Earth projects

- Nechalacho (Canada): 95mt at 1.46% TREO
- Kipawa (Canada): Reserve 19.7 Mt at 0.41% TREO \*
- Wigu Hill (Tanzania): 3.3mt at 2.6% TREO \*

### Building the capability to be the first REE company with the ability to supply commercial quantities of both heavy and light rare earths

#### Supporting a non-China supply chain

- Europe: Binding Off-take agreement signed with REEtec, a Norwegian rare earth separation company
- North America: Off-take MOU signed with Ucore Rare Metals to supply feedstock to the ALASKA2023 project

#### Canadian Government Support

- Funding agreement signed with The Canadian Northern Economic Development Agency (CanNor)

#### Stage 1 Mining Operations Commenced April 2021

- Canada's first rare earth producer
- North America's second rare earth mine

\* Investors should note that the Mineral Resources and Reserves estimates for Kiipawa and Wigu Hill rare earth Projects are foreign estimates and are not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify these foreign estimates as a mineral resource and reserve in accordance with the JORC Code and it is uncertain that following further exploration or evaluation work that the foreign estimates will be able to be reported as a mineral resource in accordance with the JORC Code



# Company Overview

## VML Share Price Performance



## Capital Structure

ASX Code	VML
Shares on Issue	4,165m
Options on Issue	432m
Share Price (as 18 October 2021)	\$0.06
Market Capitalisation	\$258m
Cash (30 June 2021)	\$34.9m

## Board and Management

Geoff Atkins	Managing Director
Evan Cranston	Chairman
James Henderson	Non-executive Director
Tony Hadley	Chief Operating Officer
Mathew Edler	Executive Vice President – Corporate Development
Ray Angelov	Canada Operations Manager

# Vital's leaders are world experts in developing rare earth projects

## Senior Management

### **GEOFF ATKINS** Managing Director

25 years of project and corporate development experience including four (4) years as Corporate Planning Manager at Lynas Corporation where he oversaw the development of and implementation of the strategic planning process and the development of the Mt Weld Concentration Plant and Lynas Advance Materials Plant in Malaysia.

### **TONY HADLEY** Chief Operating Officer

Over 25 years metallurgical process experience including General Manager, Mt Weld where he successfully designed and commissioned the world's first rare earth phosphate flotation concentrator and General Manager, Browns Range where he successfully designed and commissioned the world's first heavy rare earth process plant for xenotime feedstock.

### **MATHEW EDLER** Executive VP Corporate Development

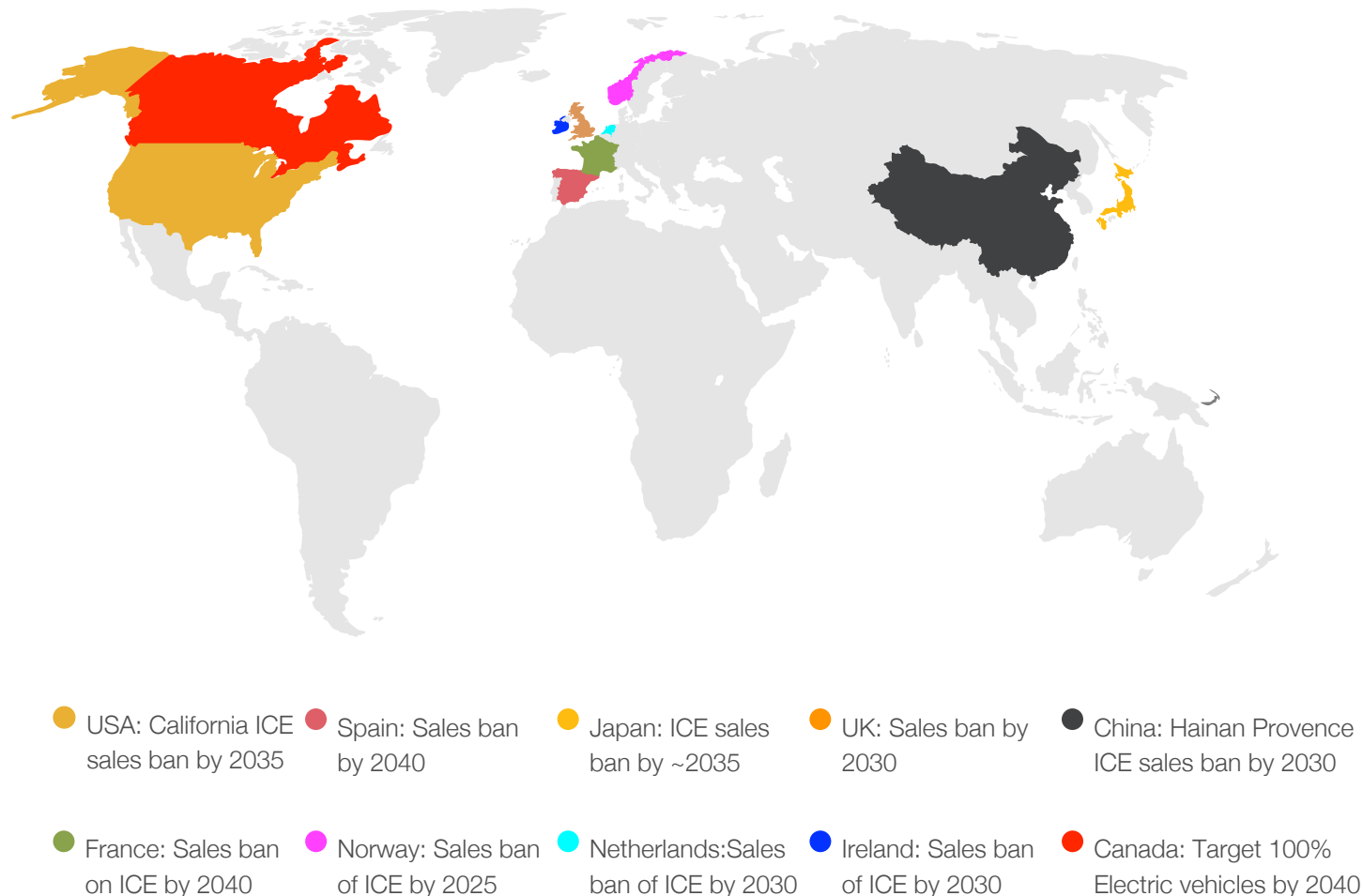
Former General Manager for Lynas Corporation and was responsible for all in-country activities for the Kangankunde rare earth project – Malawi.

### **RAY ANGUELOV** Canada Operations Manager

Over 25 years metallurgical process experience. Ray started as the senior metallurgist at North Minerals in 2018 and was later promoted to metallurgical superintendent. Ray was involved with all aspects of the day to day operations including plant commissioning and optimisation, and managing test work programs, metallurgical accounting, plant safety audits.

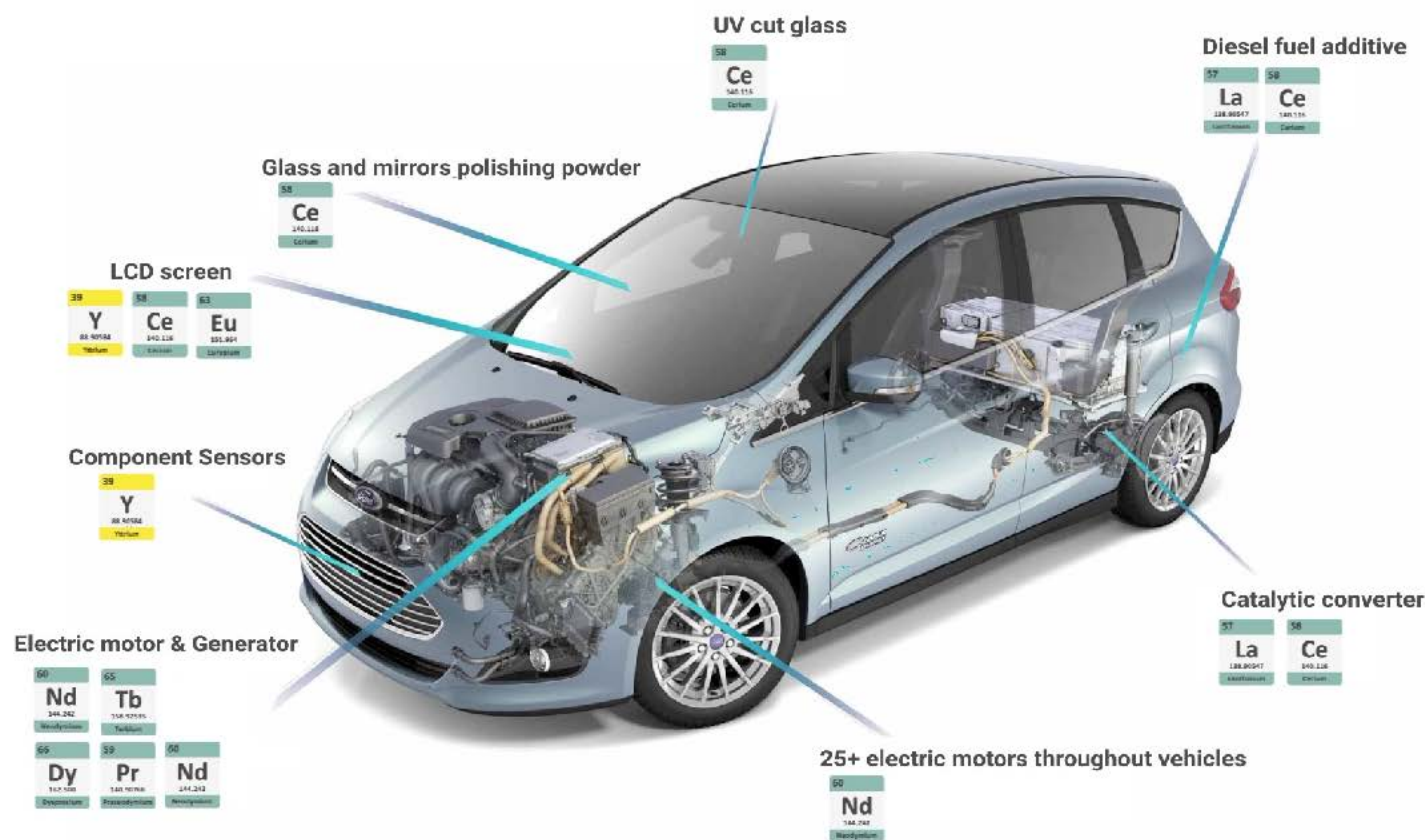
# Emissions legislations and international co-operation is driving electric vehicle demand

## Global Critical Minerals Initiatives



The drive towards vehicle electrification is dependant on electric motors and their rare earths

## The Link between EVs and Rare Earths





Vital's Canada base can supply to customers in Europe,  
North America and Asia

## Vital's Rare Earth Supply Chain



Vital will provide a one stop shop for the rare earth supply chain, supply both light and heavy rare earths



NORTH T

TARDIFF

WIGU HILL

KIPAWA

OTHER ?

### Rare Earth Carbonate Production

Through its extraction facilities, Vital will produce a mixed rare earth product of guaranteed quality



### One-Stop Shop



With access to a portfolio of deposits, Vital will guarantee the rare earth supply chain both overall quantities in addition to the specific demands for light and heavy rare earths

### Downstream Rare Earth Supply Chain

REETEC

UCORE

CUSTOMER 3?

CUSTOMER 4?

CUSTOMER 5?

Vital's development strategy will ensure Vital is able to guarantee the supply of the full suite of rare earths to the global supply chain

## Vital's 3 Stage Development Strategy

### Stage 1: Foundations

#### **Project Start-up: Nechalacho North T**

- Demonstrate the ability to supply rare earth feedstock at specification
- Generate positive cashflow to fund expansion

### Stage 2: Expansion and Growth

#### **Nechalacho Tardiff**

- Long term/large scale commercial operation providing long term security to the rare earth supply chain

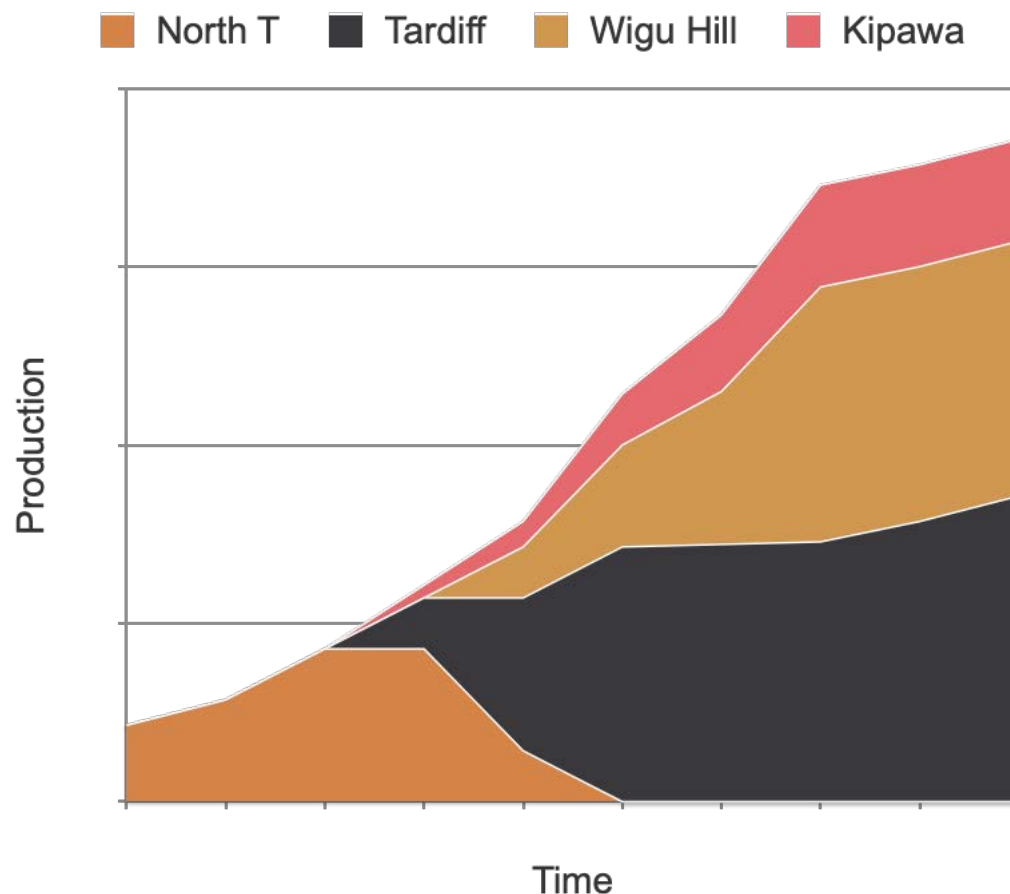
#### **Wigu Hill**

- Expansion capability through additional project
- Multiple projects enable flexibility to react quickly to changes in market and customer requirements

### Stage 3: Heavy Rare Earth Production

#### **Kipawa**

- Enable Vital to be a single stop shop for the supply of the full suite of rare earths





## Rare Earth Carbonate Production Building the Foundations to Success

- > Saskatoon Extraction Plant Under Construction
- > Procurement of all key equipment complete
- > First feed on track for end of 2021
- > Expansion to be funded from the sale of Mixed RE Carbonate



Vital has signed off-take agreements with the most advanced new separation facilities entering Europe and North America

## Off-take Agreements

### Europe

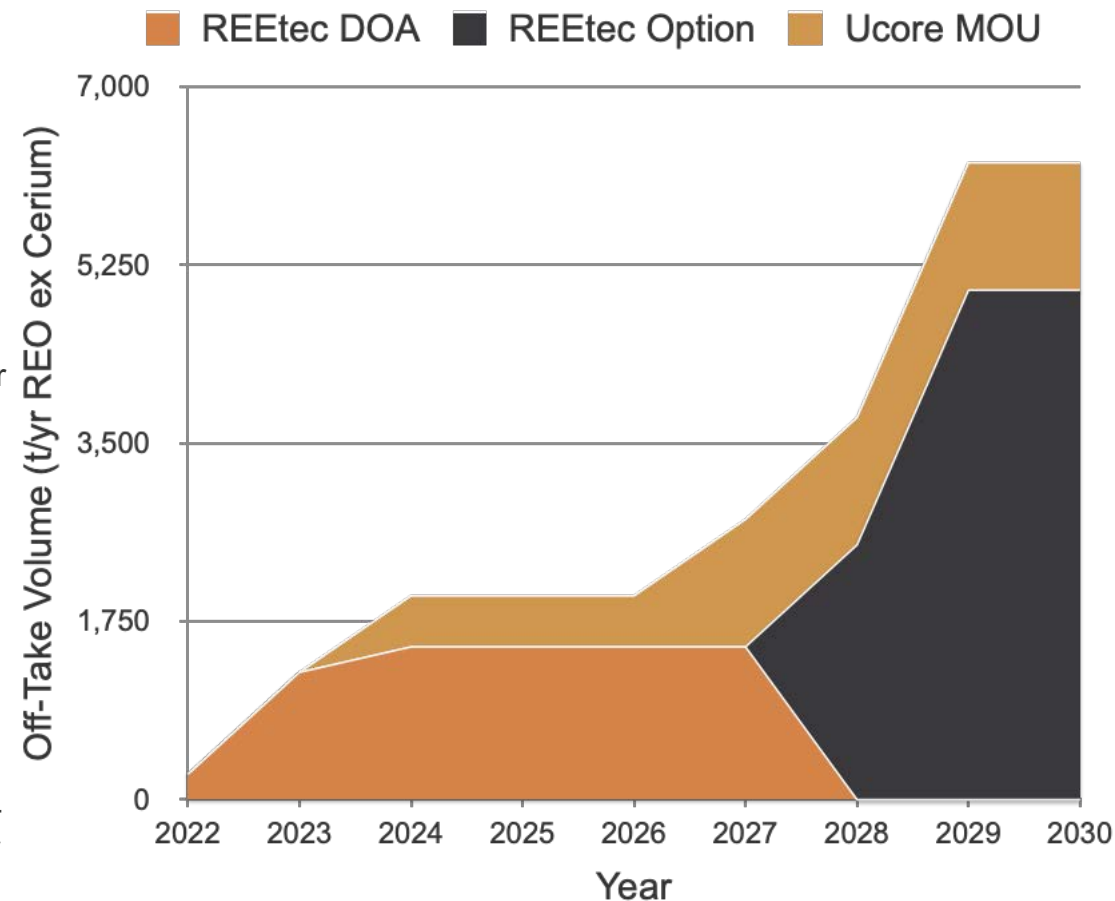
#### REEtec - Norway

- Developed a completely new and game changing process for the manufacturing of high purity rare earth elements.
- Technology has been proven through the successful operation of an industrial scale demonstration plant
- Definitive Off-take Agreement (**DOA**): Supply of rare earth carbonate feedstock containing 750t/yr NdPr over 5 years (1,500t REO ex Cerium)
- Option: Supply of rare earth carbonate feedstock containing 2,500t/yr NdPr over 10 years, from 2028 (~5,000t REO ex Cerium)

### North America

#### Ucore Rare Metals - USA

- Developing rare earth processing technologies through its ALASKA2023 project, with the goal of fostering an independent American REE supply chain
- The Alaska Strategic Metals Complex (SMC) has a scheduled commencement date of H1 2024 (2,000t TREO/yr) with expansion capacity to 5,000t TREO/yr by 2026
- Memorandum of Understanding (**MOU**):
  - Initial: Minimum 500t REO (ex-cerium)/yr, commencing H1 2024
  - Expansion: Minimum 50% of Ucore's envisioned 5,000t TREO/yr processing capability by 2026





# Vital's rare earth Extraction Plant is on track to accept first feed by the end of 2021

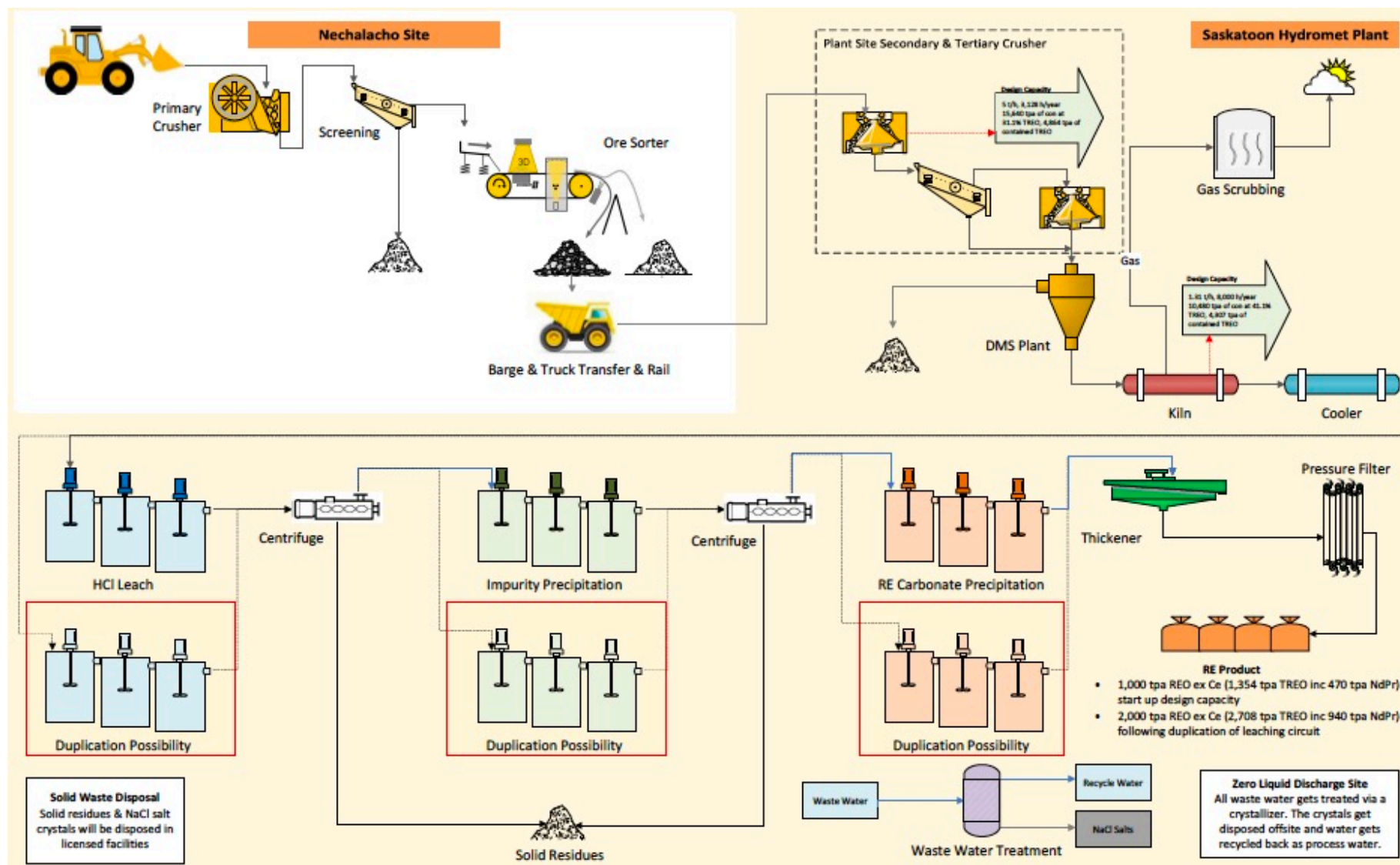
## Saskatoon Plant Update

- Construction is underway on Vital's rare earth extraction Plant in Saskatoon, Saskatchewan, Canada
- All major processing equipment procured within budget with agreements/purchase orders issued for equipment including the following:
  - Dense Media Separation (DMS)
  - Calciner
  - Waste Gas Scrubber
  - Hydromet Tanks
  - Centrifuges
  - Candle Filters
- Halyard International have been engaged to oversee project management and general engineering of the facility
- Saskatchewan Research Council (SRC) to provide technical support during plant construction and operation
- First feed into the plant is on track CY21 with first production by the end of H1 CY22





The Plant will have an initial capacity of 1,000t REO (ex-Cerium) per year with the ability to double within 2 years



Off-take agreements have been signed on an ex-Cerium basis with the majority of Cerium removed during leaching

## REE Distribution

Element	REEttec (ex-Cerium) Distribution (%) <sup>1</sup>	Market Price (as at August 24, 2021) US\$/kg <sup>2</sup>	Market Price (as at September 23 2021) US\$/kg <sup>3</sup>
La <sub>2</sub> O <sub>3</sub>	47.4%	\$1.41	\$1.35
Pr <sub>6</sub> O <sub>11</sub>	10.4%	\$101.46	\$102.32
Nd <sub>2</sub> O <sub>3</sub>	34.3%	\$96.44	\$96.53
Sm <sub>2</sub> O <sub>3</sub>	3.5%	\$2.08	\$2.08
Eu <sub>2</sub> O <sub>3</sub>	0.4%	\$30.09	\$30.12
Gd <sub>2</sub> O <sub>3</sub>	1.5%	\$39.73	\$39.54
Tb <sub>4</sub> O <sub>7</sub>	0.2%	\$1,273.05	\$1,305.04
Dy <sub>2</sub> O <sub>3</sub>	0.5%	\$405.06	\$409.27
Y <sub>2</sub> O <sub>3</sub>	1.4%	\$6.56	\$6.02
<b>Total</b>	<b>100%</b>	<b>\$49.75</b>	<b>\$49.92</b>

### Separated Rare Earth Oxides at Current Prices

<sup>1</sup>Rare earth distribution as determined under the Company's 2012 JORC Report (refer 15 April 2020) and as detailed in announcement 2<sup>nd</sup> February 2021

<sup>2</sup>Rare earth prices sourced from Shanghai Metals Market ([www.metal.com](http://www.metal.com)) as at 24<sup>th</sup> August 2021

<sup>3</sup>Rare earth prices sourced from Shanghai Metals Market ([www.metal.com](http://www.metal.com)) as at 23<sup>rd</sup> September 2021



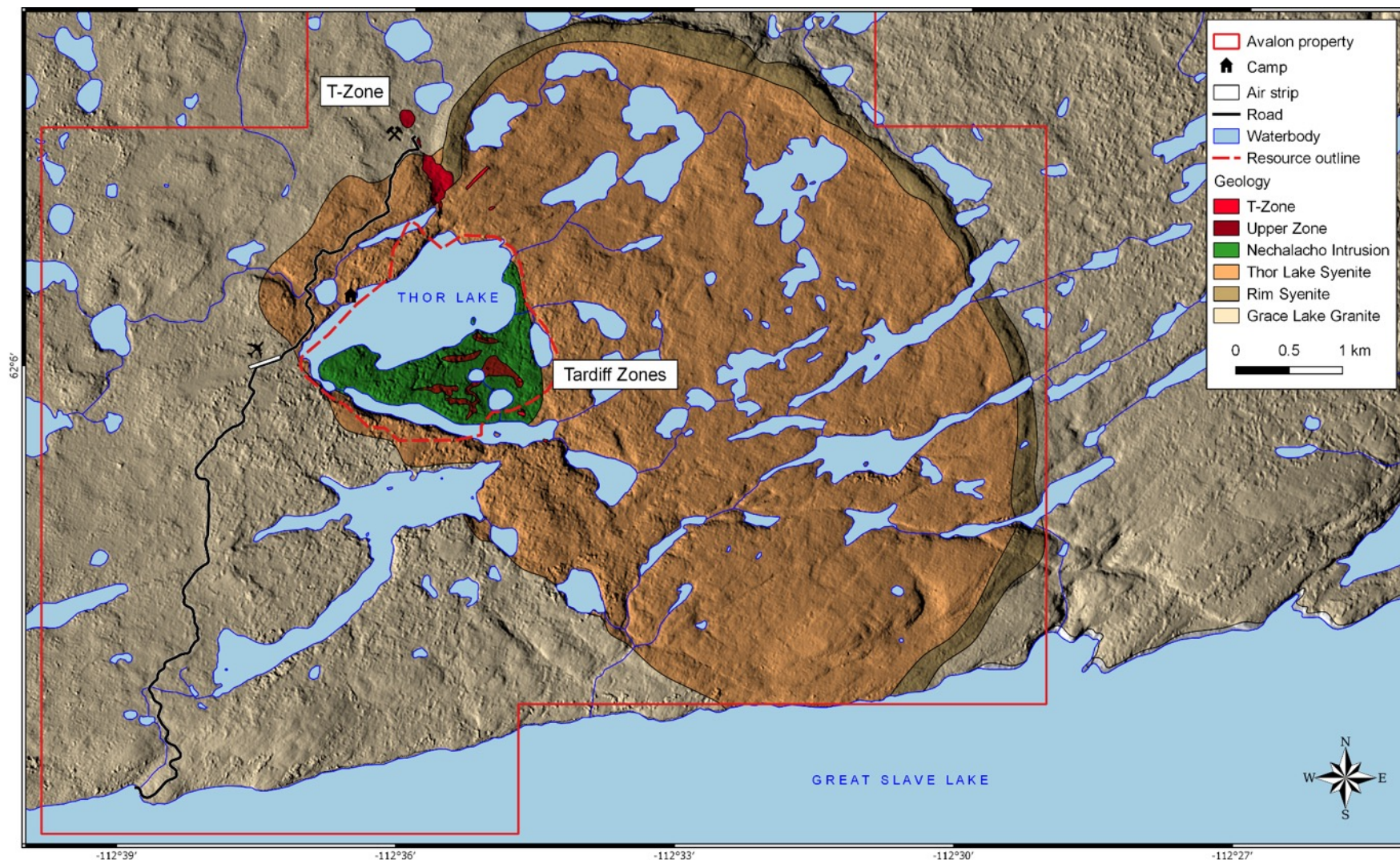
## Implementation Stage 1: Building the Foundations to Success

- > Nechalacho North T
- > Mining Operations commenced April 2021
- > Product bagged and ready to ship for further processing
- > Expansion to be funded from the sale of Mixed RE Carbonate





The Nechalacho project consists of two distinct zones, the T Zone and Tardiff Zone





2021 Mining and sorting operations have been completed

## Site Status





# Nechalacho North T Operations are on track to deliver product to Saskatoon for production of RE Carbonate

## **Campaign mining operations nearing completion**

- Over 30,000t of ore has been mined and stockpiled from the North T pit
- Mining has exposed high grade ore zones which were not part of our existing North T mineral resource
- Mining fleet commencing demobilisation at end of September

## **Ore Sorter operated as expected**

- Commissioning successfully completed
- Ongoing production and bagging of beneficiated product has in line with expectations
- Barge access in summer, ice road in winter

## **Beneficiated Product being prepared for transport to Saskatoon**

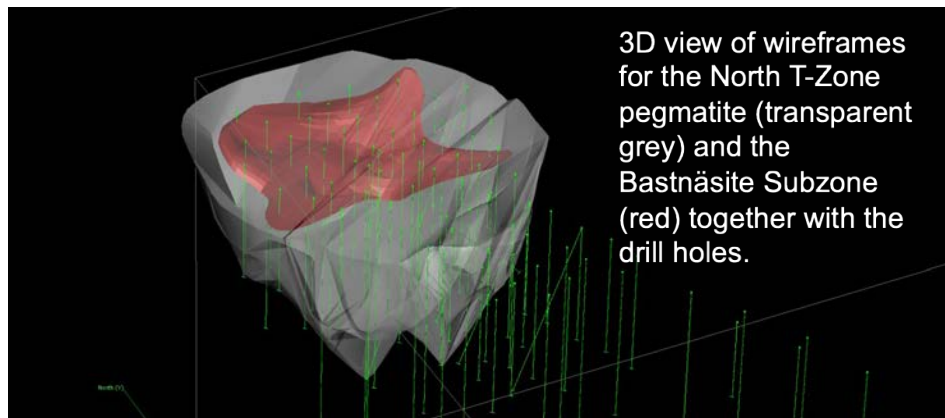
- Vital expects to ship approximately 1,000t of beneficiated product to Saskatoon
- High grade ore has been crushed and direct bagged due to grade being higher than expected
- Upper Zone acquired for C\$5M in 2018





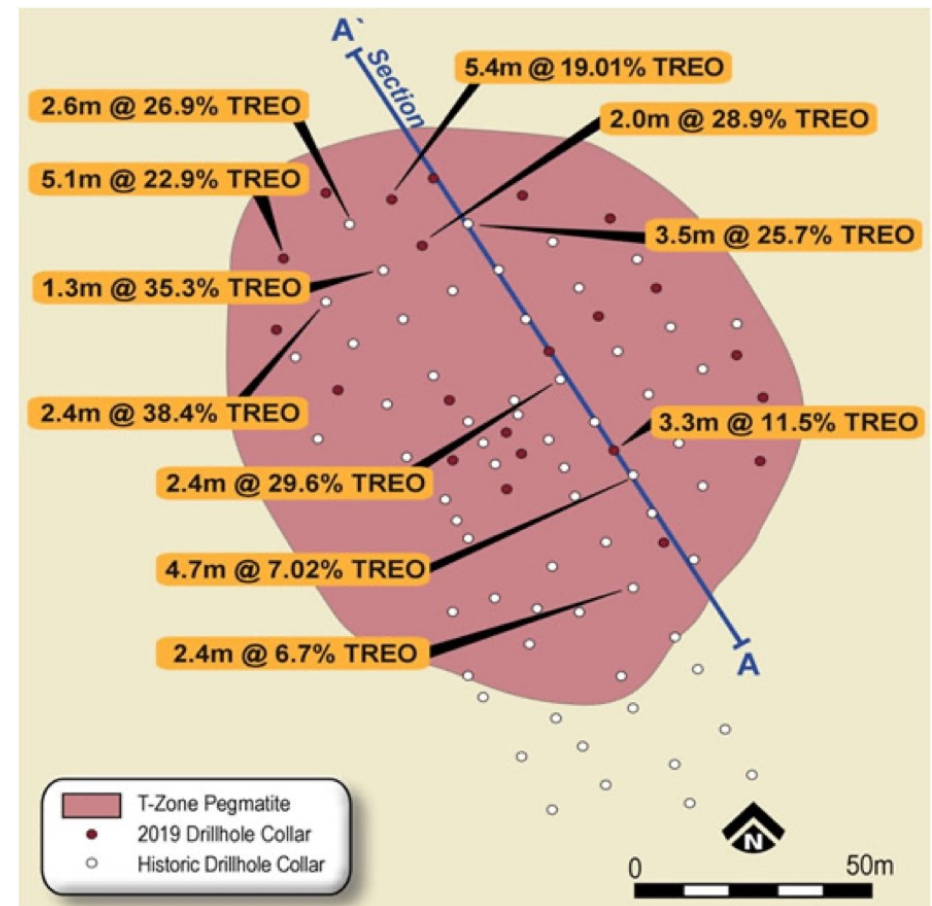
# The North T Zone is one of the world's highest grade rare earth deposits making it ideal for start-up

## North T Resource



Resource Type	Kt	LREO (%)	Pr <sub>6</sub> O <sub>11</sub> (%)	Nd <sub>2</sub> O <sub>3</sub> (%)
Measured	68	9.6%	0.5%	1.8%
Indicated	33	7.8%	0.4%	1.5%
Inferred	4	5.8%	0.3%	1.1%
Total	105	8.9%	0.5%	1.6%

Light Rare Earth Mineral Resources of the Nechalacho North T Bastnaesite Sub-zone. Mineral Resource Estimation prepared in accordance with JORC 2012 under the supervision of Brendan Shand, member of AusIMM as the Competent Person. The cut-off grade for the resource estimate is preliminary, at pre-scoping study level, as no detailed market, metallurgical or engineering studies have been performed. Refer to ASX announcements dated 25 June 2019, 5 December 2019, 13 December 2019, 19 February 2020 and 15 April 2020.





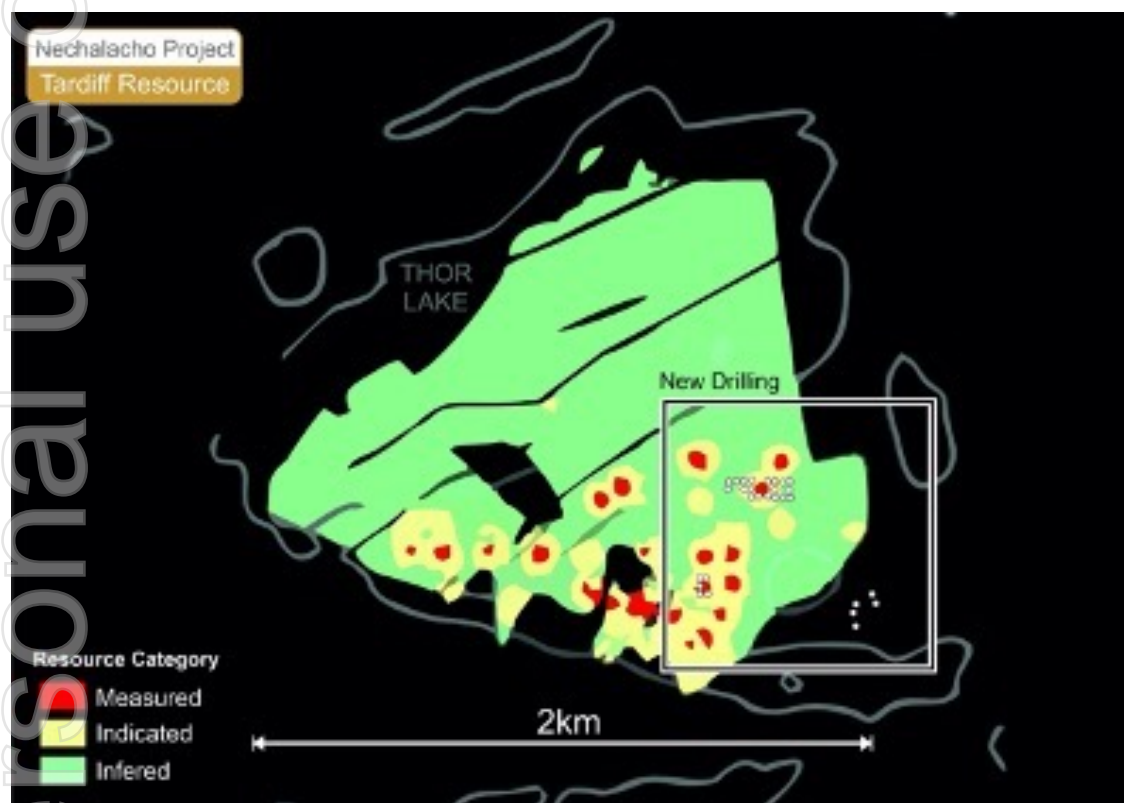
## Implementation Stage 2: Expansion and Growth

- > Long term growth and expansion through the development of Tardiff and Wigu Hill projects
- > Production targeted to commence 2025
- > Expansion to be funded from the balance and debt funding



The Nechalacho project contains over 1.3Mt of contained rare earths, providing opportunities for significant expansion

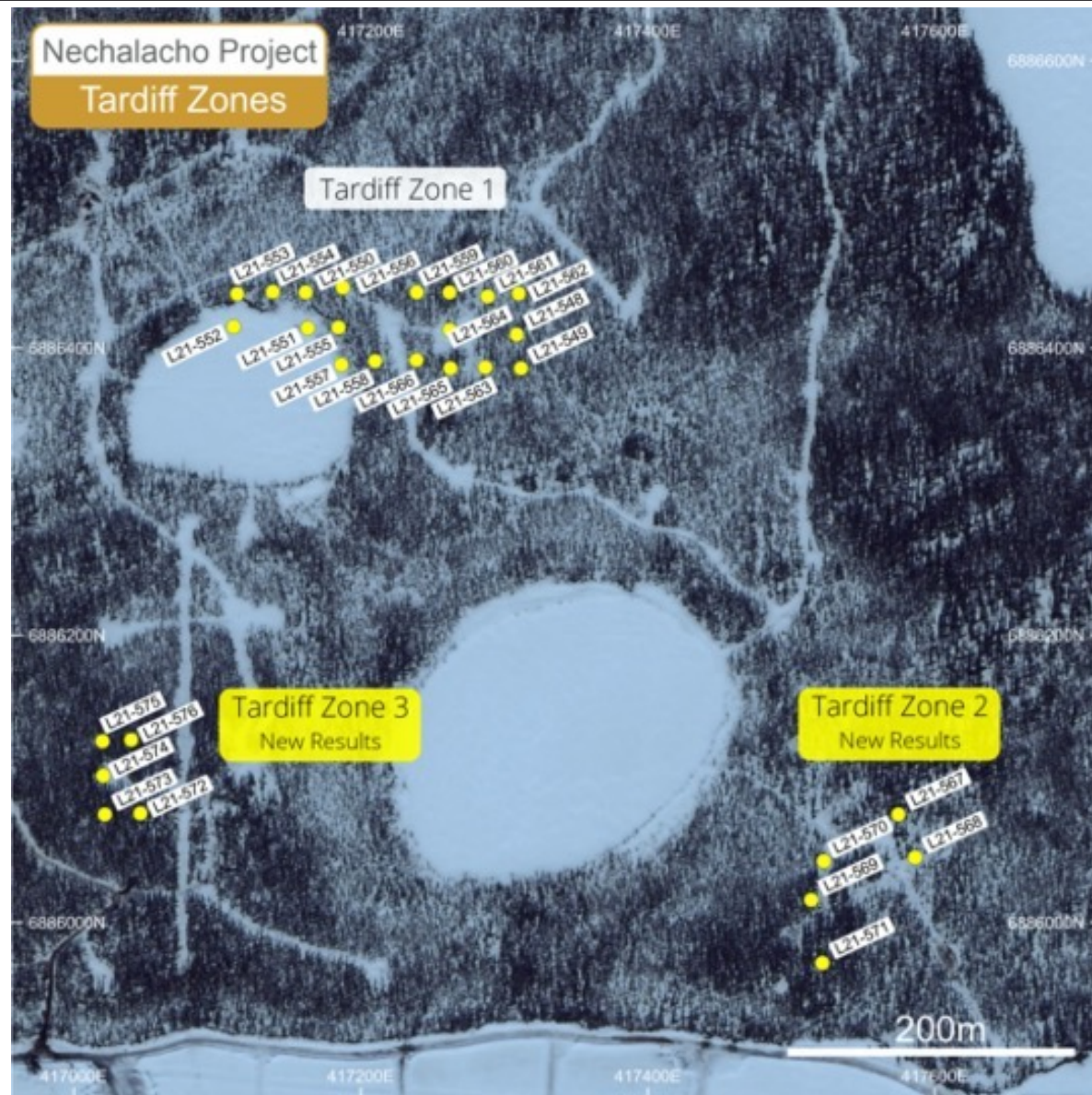
## Nechalacho - Tardiff Deposit



ZONE	MT	TREO (%)	HREO (%)	NdPr:TREO (%)
Measured	2.914	1.468%	0.142%	24.9%
Indicated	14.662	1.508%	0.161%	24.9%
Inferred	77.159	1.456%	0.133%	25.3%
Measured, Indicated and Inferred	94.735	1.464%	0.134%	25.2%

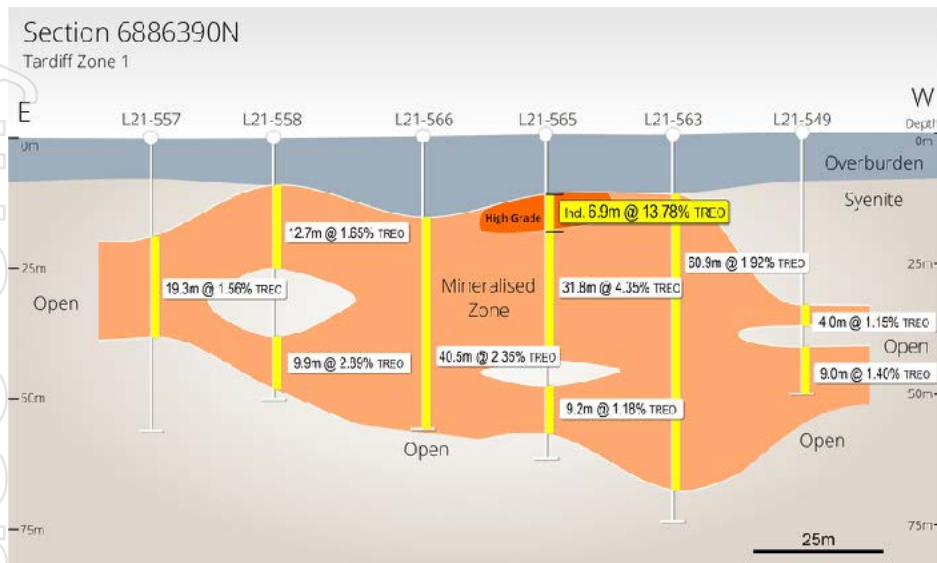
Refer to ASX announcements dated 25 June 2019, 19 February 2020 and 14 April 2020

Expansion operations will be focussed on Tardiff Zones 1, 2 and 3



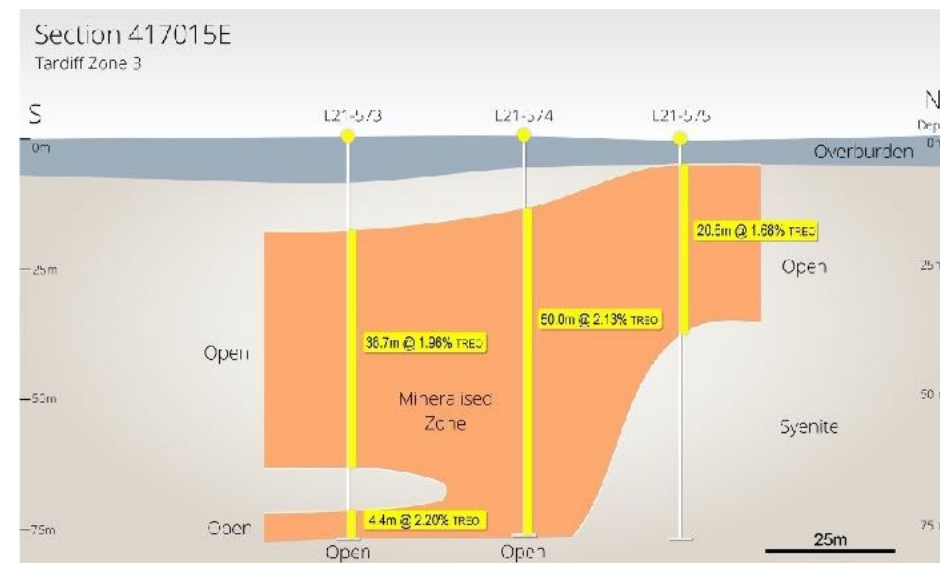
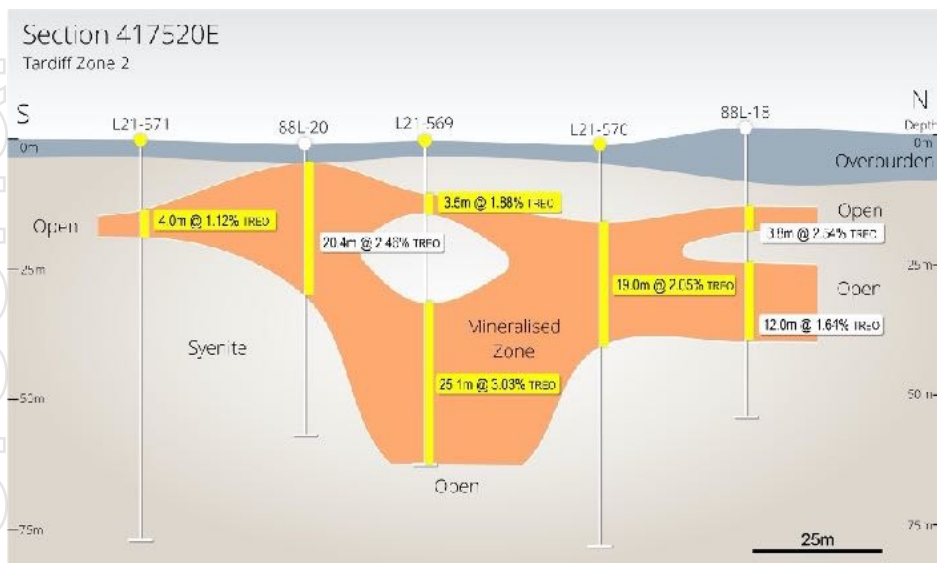


# Recent drilling at the Tardiff Zones have identified significant intercepts with all three zones open



High grade intercepts include:

- 31.8m @ 4.35% TREO including 6.9m @ 13.78% TREO
- 13m @ 3.12% TREO including 4m @ 7.06% TREO
- 25.1m @ 3.03% TREO
- 25.8m @ 2.56% TREO
- 40m @ 2.54% TREO
- 51.0m @ 2.13% TREO
- 19.0m @ 2.05% TREO
- 60.0m @ 1.92% TREO



# Tardiff zone mineralogy will allow rapid development by utilising the same plant and equipment as North T

## Tardiff Zone

### Development of the Tardiff Zone will be leveraged off the North T project

- The Tardiff Zone contains red basnaesite crystals similar to the North T Deposit (refer image)
- Preliminary metallurgical test work has demonstrated the amenability of Tardiff ore to North T's process flowsheet
- With rare earth contained in the same minerals as the North T deposit, the Tardiff Zone will be a scaled up version of the North T project

### Development timelines to be fast tracked

- Utilising operational infrastructure will enable the fast tracking of process test work
- Construction of an expanded operation will be funded through North T sales
- Operations are targeted to commence by 2025





# The Wigu Hill Project (90%) is targeted as VML's second rare earth project to enter production

## Excellent Infrastructure

- Rail and power within 10km of project

## Previous Owners spent US\$10m+

- Acquired rights for US\$1m in 2018

## Potential to be a large world class resource

- Current high grade NI43-101 resource of 3.3Mt at 2.6%\*

## Mineralisation widespread over entire hill with only 2 out of 10 known targets drilled

## Barrick and Tanzania Government recently resolved mining issues

## Vital to target Wigu Hill to be the second rare earth project to enter production



\*Refer foreign estimate cautionary statement on page 4

Similar to Nechalacho's T Zone the Twiga deposit contains large, discrete bastnaesite crystals





# Drilling completed on 2 of 8 development targets providing the potential for expansion of the resource

## Wigu Hill contains a historical NI43-101 Resource of 3.3M @ 2.6%REO

ZONE	MT	TREO (%)	LA2O3 %	CeO2 %	Pr6O11 (%)	Nd2O3 (%)
Twiga NE	1.6	2.6%	0.98%	1.26%	0.1%	0.23%
Twiga SW	0.5	3.6%	1.33%	1.71%	0.13%	0.3%
Tembo NW	0.9	2.2%	0.78%	1.09%	0.09%	0.23%
Tembo SE	0.2	2.2%	0.69%	1.1%	0.1%	0.27%
Total Inferred Resource	3.3	2.6%	0.96%	1.27%	0.1%	0.24%

1. The effective date for this Inferred Mineral Resource Statement is 25 August 2011 and reported on SEDAR (contained in a Canadian National Instrument NI 43-101 Technical Report by AMEC Earth and Environmental UK Ltd.).
2. A selective mining unit (SMU) size of 3m by 3m by 3m was assumed when creating the block model.
3. Reported grades are based on consideration of the grades of mineralised material and weakly to non-mineralised wallrock material estimated to fall within each SMU
4. The reported Mineral Resource is based on a grade cut-off of 1.0% LREO5 (sum of estimated grades of La2O3, CeO2, Pr6O11, Nd2O3 and Sm2O3).
5. The Mineral Resources for the Twiga and Tembo deposits have been constrained by an optimised pit shell defined by the following assumptions, slope angles of 50o; a mining dilution of 0% (already incorporated in the SMUs); a mining cost of USD2.85/t; process operating costs of USD12.0/t; G&A costs of USD3.0/t of resource, with a 90% recovery of REOs to a 45% LREO5 bastnaesite concentrate; and a concentrate price of USD10/kg

\*Refer foreign estimate cautionary statement on page 4



## Implementation Stage 3: Heavy Rare Earth Production

---

- > Located in Quebec, Canada
- > Definitive Feasibility Study completed in 2013, contemplating 15yr mine life
- > High percentage of heavy rare earths
- > Will provide Vital the capability to supply both light and heavy rare earths in commercial quantities



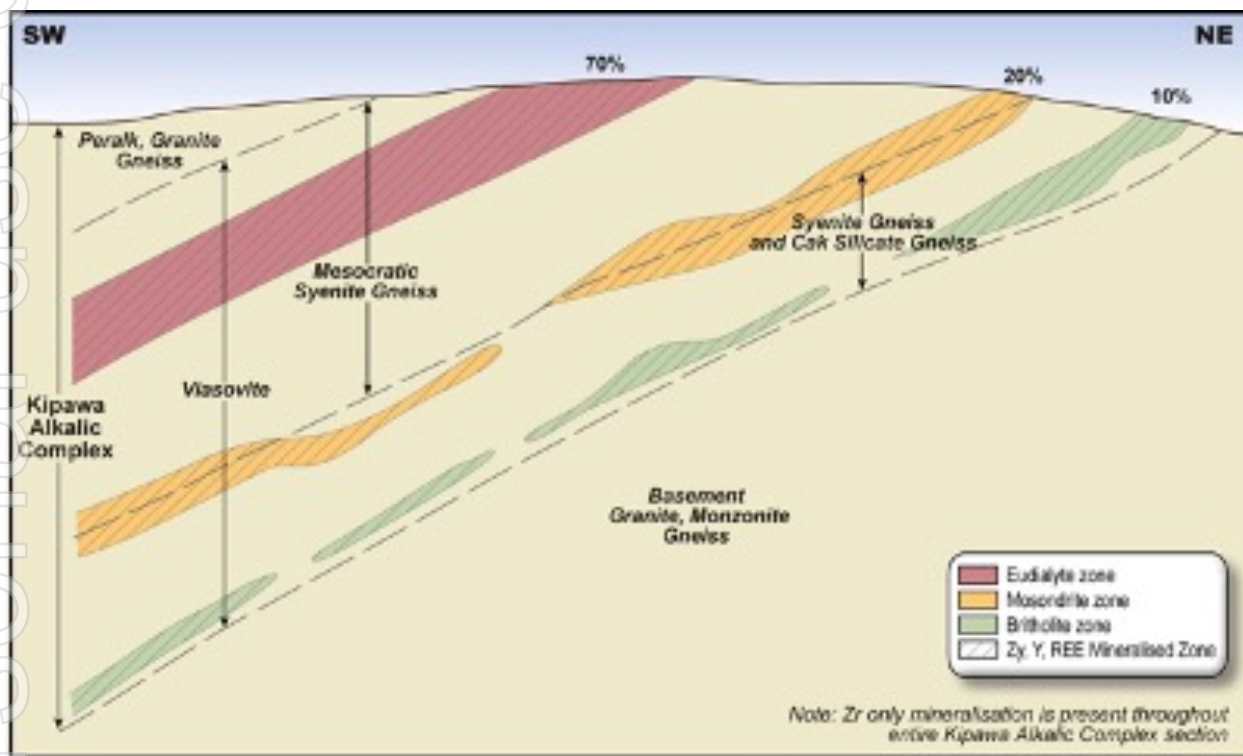
The Kipawa project lies 50km east of the town of Temiscaming and 140km south of Rouyn-Noranda Quebec





Kipawa is a heavy rare earth project, which will complement our existing LREE deposits

## Mineralisation



Eudialyte: Y-Fe-Zr  
Source of HREE and Zr



Yttrium-Titanite/Mosandrite: Na-Ca-Ti silicate  
Source of HREE

Britholite:  
Ca-Y-Fe silico-phosphate  
Source of HREE





# The high distribution of HRE at Kipawa has the potential to make VML the first supplier of LRE and HRE outside of China

## Rare Earth Distribution

- The addition of Kipawa into Vital's project portfolio will provide a significant increase in heavy rare earth production.
- From 1,000t TREO/yr production, Kipawa will produce more terbium and dysprosium that a 5,000t TREO/yr operation at Tardiff will achieve
- This will make Vital the only producer of the full suite of rare earths outside of China
- This will position VML as a key strategic player in the North American rare earth supply chain
- The introduction of heavy rare earths into our product suite will increase the value of the rest of our offering as we will be a single source of supply of rare earths

### Rare Earth Oxide distribution at Current Prices

<sup>1</sup>Rare earth distribution of North T and Tardiff zones as determined under the Vital's 2012 JORC Report (refer 15 April 2020) and as detailed in announcement 2<sup>nd</sup> February 2021.

<sup>2</sup> Rare earth distribution of Kipawa 2013 Feasibility Study (refer <https://www.qpmcorp.ca/en/projects/kipawa/>)

<sup>3</sup> Rare earth prices sourced from Shanghai Metals Market ([www.metal.com](http://www.metal.com)) as at 23rd September 2021

	\$/kg (23 Sep 2021) <sup>3</sup>	North T <sup>1</sup>		Tardiff <sup>1</sup>		Kipawa <sup>2</sup>	
		% REO	\$/kg	% REO	\$/kg	% REO	\$/kg
<b>La<sub>2</sub>O<sub>3</sub></b>	\$1.35	23.95%	\$0.32	23.19%	\$0.31	14.32%	\$0.19
<b>Ce<sub>2</sub>O<sub>3</sub></b>	\$1.41	49.62%	\$0.70	44.7%	\$0.63	29.10%	\$0.41
<b>Pr<sub>6</sub>O<sub>11</sub></b>	\$102.32	5.42%	\$5.55	5.1%	\$5.22	3.56%	\$3.64
<b>Nd<sub>2</sub>O<sub>3</sub></b>	\$96.53	18.1%	\$17.47	18.7%	\$18.05	13.40%	\$12.93
<b>Sm<sub>2</sub>O<sub>3</sub></b>	\$3.08	1.88%	\$0.06	2.83%	\$0.09	3.00%	\$0.09
<b>Eu<sub>2</sub>O<sub>3</sub></b>	\$30.12	0.15%	\$0.05	0.26%	\$0.08	0.37%	\$0.11
<b>Gd<sub>2</sub>O<sub>3</sub></b>	\$39.54	0.64%	\$0.25	1.97%	\$0.78	2.90%	\$1.15
<b>Tb<sub>4</sub>O<sub>7</sub></b>	\$1,305.04	0.05%	\$0.65	0.2%	\$2.61	0.54%	\$6.99
<b>Dy<sub>2</sub>O<sub>3</sub></b>	\$409.27	0.1%	\$0.41	0.64%	\$2.62	3.58%	\$14.65
<b>Ho<sub>2</sub>O<sub>3</sub></b>	\$145.95	0.01%	\$0.01	0.08%	\$0.12	0.78%	\$1.14
<b>Er<sub>2</sub>O<sub>3</sub></b>	\$31.74	0.01%	\$0.00	0.12%	\$0.04	2.46%	\$0.78
<b>Tm<sub>2</sub>O<sub>3</sub></b>			0		\$0.00	0.39%	\$0.00
<b>Yb<sub>2</sub>O<sub>3</sub></b>	\$20.85		\$0.00	0.04%	\$0.01	2.34%	\$0.49
<b>Lu<sub>2</sub>O<sub>3</sub></b>	\$756.77		\$0.00	0.01%	\$0.08	0.32%	\$2.40
<b>Y<sub>2</sub>O<sub>3</sub></b>	\$6.56	0.06%	\$0.00	2.19%	\$0.14	22.97%	\$1.51
<b>TREO</b>			\$25.48		\$30.77		\$46.47

# The Reserves contains an estimated 15+ years of mine life

## Resource and Reserves

ZONE	Classification	Tones	TREO (%)	ZrO <sub>2</sub>
Eudialyte	Measured	6,024,000	0.529	0.959
	Indicated	7,790,000	0.387	0.842
	Inferred	1,678,000	0.312	0.710
	<b>Total</b>	<b>15,492,000</b>	<b>0.434</b>	<b>0.873</b>
Mosandrite	Measured	3,135,000	0.396	1.019
	Indicated	2,790,000	0.379	1.029
	Inferred	409,000	0.431	0.940
	<b>Total</b>	<b>6,334,000</b>	<b>0.391</b>	<b>1.018</b>
Britholite	Measured	1,278,000	0.309	0.940
	Indicated	2,725,000	0.284	0.957
	Inferred	1,088,000	0.264	0.915
	<b>Total</b>	<b>5,091,000</b>	<b>0.286</b>	<b>0.944</b>

Classification	Tones	TREO (%)
Proven	10,218,867	0.440
Probable	9,550,047	0.379
<b>Total</b>	<b>19,768,914</b>	<b>0.411</b>

\*Refer foreign estimate cautionary statement on page 4



# Vital is on track to guarantee supply of both heavy and light rare earths to rare earth supply chains

## Conclusion

### Work Class Rare earth Development Team - ex Lynas Corporation

- Lead by Vital Metals MD Geoff Atkins

### 3 World Class Projects

- Nechalacho REO Project (Canada): 95Mt at 1.46% TREO
- Kipawa (Canada)\*: Reserve 19.7 Mt at 0.41% TREO \*
- Wigu Hill (Tanzania)\*: 3.3Mt at 2.6% TREO \*

### Flexibility and Scaleability to Meet Market Demand

- Wigu Hill project to provide additional ability to increase scale of production and the flexibility to react quickly to increased market demand

### Vital to be capable of guaranteeing the supply of the full suite of rare earth

- Kipawa to meet demand for heavy rare earths

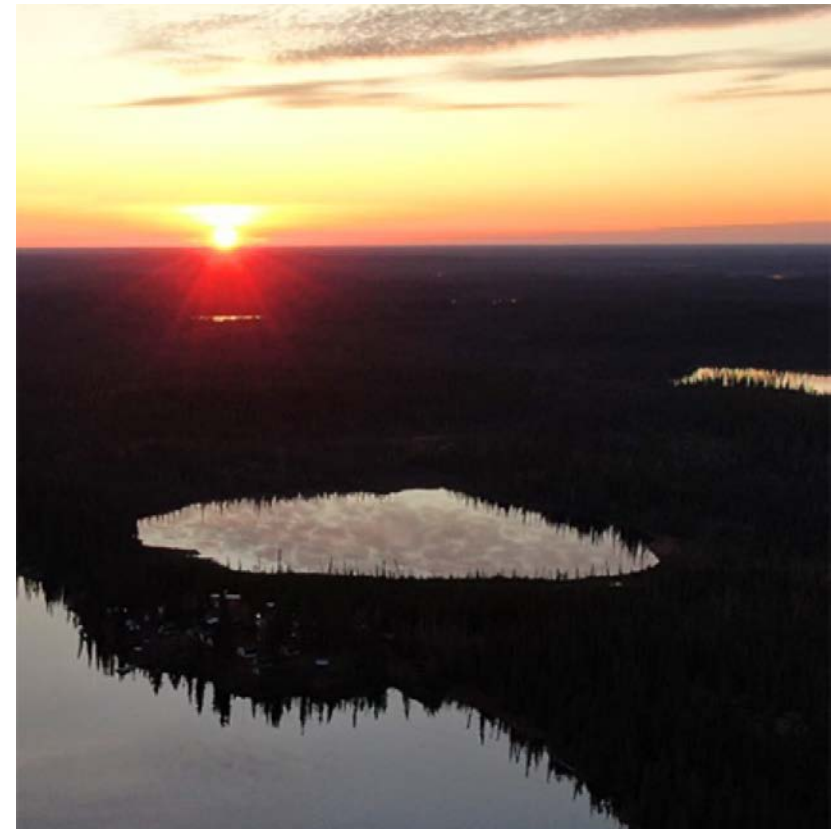
### Rare earth feedstock supplier to both Europe and North America

- Binding off-take agreement with REEtec - Supplier to Europe
- MOU with Ucore - Supplier to North America

### Expansion Funded through Cashflow

- Revenue from the North T project be used to fund both the increase in production volumes from Nechalacho but also the development of new projects

\*Refer foreign estimate cautionary statement on page 4



## Contact us

---

Geoff Atkins  
Managing Director

[vital@vitalmetals.com.au](mailto:vital@vitalmetals.com.au)  
+61 2 8823 3100