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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.

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#### **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.

#### 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/44gytlw5ckfbyr.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/44f7451l1z68r0.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 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)

# Vital Metals: Guaranteeing Feedstock to the Global Rare Earths' Supply Chain

### The Problem

USA and Europe need a diversified and transparent supply of Rare Earths to ensure decarbonization targets are met

### The Solution

Vital's Nechalacho project is the only North American rare earth deposit that is capable of supplying both Light and Heavy rare earths



# Highlights



# Vital is about to commence production of RE Carbonate, building the capability to be the only North American REO asset capable of supplying both HREO and LREO

# World Class REO Development Team with Proven Track Record

- Executive and Senior Management, led by Vital Metals MD Geoff Atkins, all with significant rare earths development and operational experience
- Over the past 2 1/2 years the Vital team have demonstrated their capability by successfully developing the Nechalacho Stage 1 project establishing VML's credibility in the market

### **World Class Downstream Partners**

- Offtake agreements established with REEtec in Norway and MOU with Ucore in USA.
- Focus on core business. Partner, not Build, for downstream supply chain
- REEtec has signed a binding agreement with Schaeffler which represents a mine to electric drive supply chain

### **World Class 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\* returns
- Over 340,000 contained tonnes of NdPr in defined resources
- Over 15,000 contained tonnes of TbDy in defined resources

# Rare Earth Oxide Prices and Demand at Record Highs

- NdPr oxide prices > \$150,000 per tonne<sup>1</sup>
- Tb oxide prices > \$1,800,000 per tonne<sup>1</sup>
- Dy oxide Prices > \$460,000 per tonne<sup>1</sup>

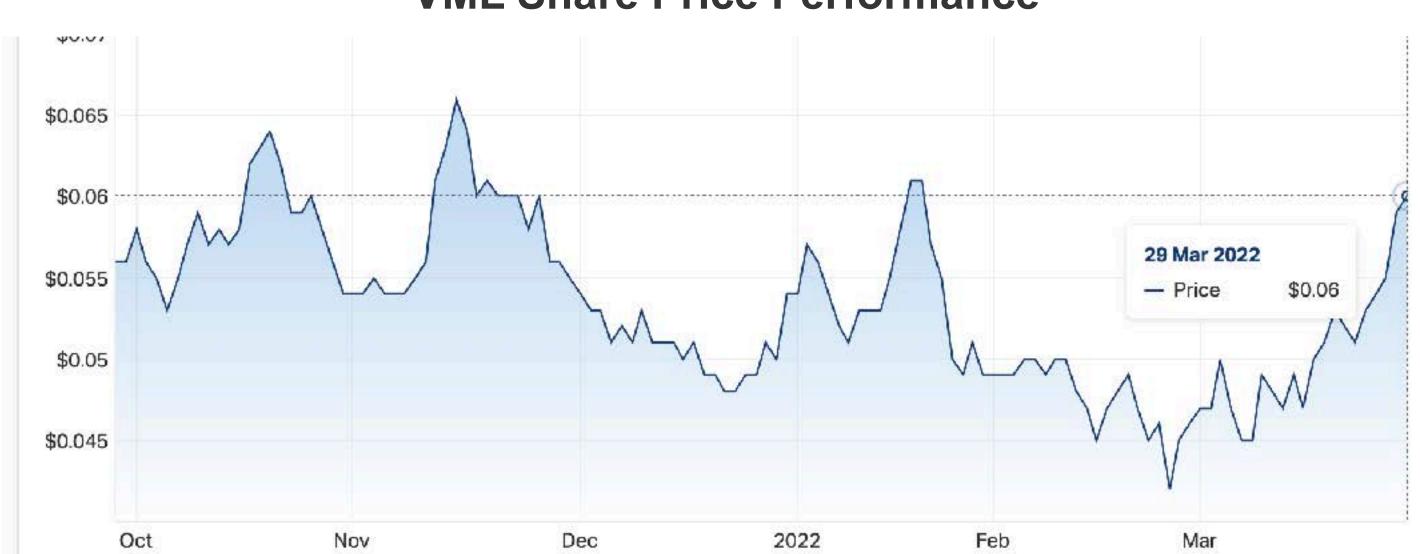
<sup>&</sup>lt;sup>1</sup> Rare earth prices sourced from Shanghai Metals Market (www.metal.com) as at 1st April 2022

<sup>\*</sup> 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 in accordance with the JORC Code and it is uncertain that following further exploration or evaluation work that the foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code

# **Company Overview**







Capital Structure	
ASX Code	VML
Shares on Issue	4,170m
Options on Issue	447m
Share Price (as 29 March 2022)	A\$0.060
Market Capitalisation	A\$250m
Cash (31 March 2022)	\$9.2m

### **Production Status**

Market Cap	A\$250m
(at 29 March 2022)	Αψ230111

<b>Contained Critical</b>	> 300kt NdPr
Minerals	> 15kt TbDy

Binding - RE Carbonate containing 750t/yr NdPr

Off-Take

Option - RE Carbonate containing

3,750t/yr NdPr by 2028

NdPr Oxide Price (1st April 2022)

US\$158.25/kg\*

Rare Earth
Concentrate
Production Status

Mining and Beneficiation operations commenced 2021 with

1st campaign completed

Rare earth
Carbonate
Production Status

First Feed to Rare Earth Extraction Plant June 2022

<sup>&</sup>lt;sup>1</sup> Rare earth prices sourced from Shanghai Metals Market (www.metal.com) as at 1st April 2022

# **Board and Senior Management**





GEOFF ATKINS Managing Director

25 years of project and corporate development experience including four 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.



EVAN
CRANSTON
Non-Executive
Chairman

Mr Cranston is an experienced mining executive with a background in corporate and mining law.

He is the principal of corporate advisory and administration firm Konkera Corporate and has extensive experience in the areas of equity capital markets, corporate finance, structuring, asset acquisition, corporate governance and external stakeholder relations.

He holds both a Bachelor of Commerce and Bachelor of Laws from the University of Western Australia.



JAMES
HERNDERSON
Non-Executive
Director

Over 35 years experience in providing financial advisory services in Australia and overseas across a wide range of industries including mining, medical devices, aged care, clean energy and natural resources.

Specialises in providing advice to emerging companies relating to corporate transactions and strategies, including corporate advice, financial and corporate structuring, capital raisings and commercial negotiations. Proven ability to assist companies execute their business plan and advise on all aspects of development of emerging companies

Prior to Transocean James was National Chairman at Sothertons Chartered Accountants in Western Australia specialising in taxation, accountancy and corporate structures.



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.



LOUISA MARTINO Company Secretary

Ms Martino has provided company secretarial and accounting services for eight years to a number of listed entities. Previously she worked for a corporate finance company, assisting with company compliance (ASIC and ASX) and capital raisings.

Prior to that, Ms Martino worked for a major accounting firm in Perth, London and Sydney where she provided corporate advisory services and performed due diligence reviews.

She has a Bachelor of Commerce from the University of Western Australia, is a member of Chartered Accountants Australia and New Zealand, a member of the Financial Services Institute of Australasia and a Fellow of the Corporate Governance Institute.



MATTHEW
EDLER
General
Manager

Mr Edler is a geologist with more than 30 years of resource development experience in Africa and the Americas. He is a consultant in the management of Feasibility Studies and managing the early development of projects centered on non-precious and industrial minerals.

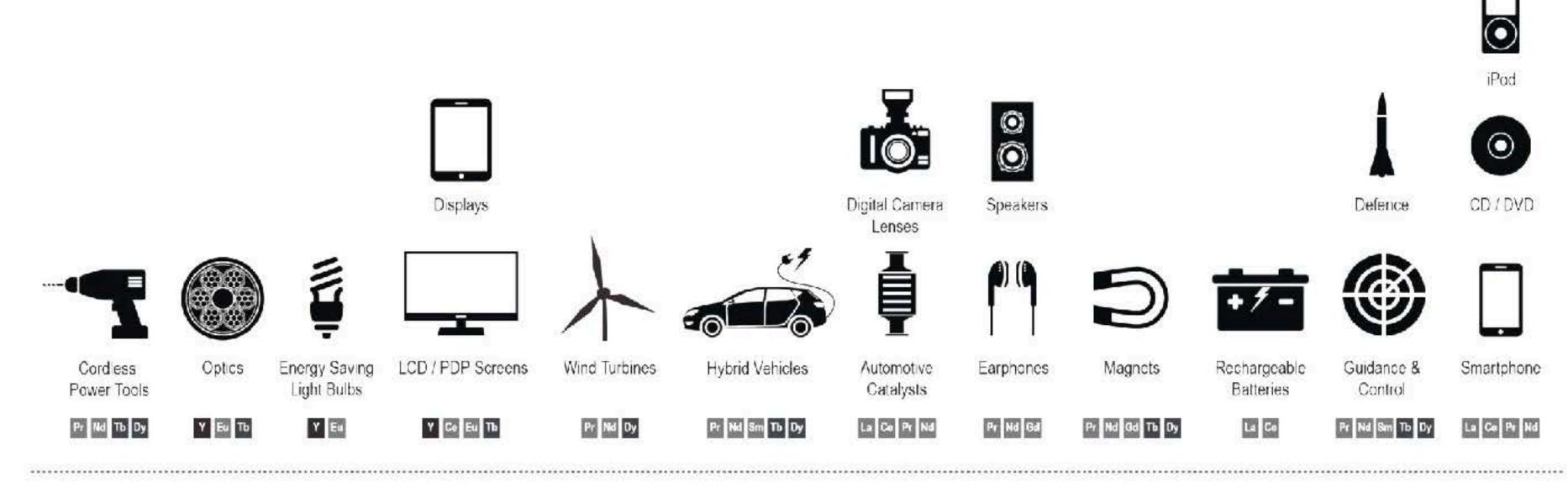
Former General Manager for Lynas Corporation and was responsible for all in-country activities for the Kangankunde rare earth project – Malawi.



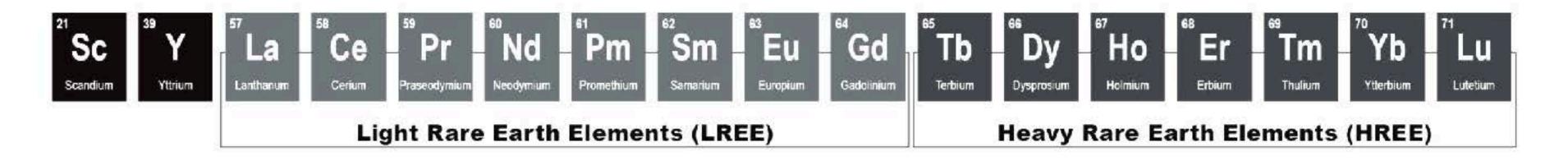
# The Importance of Rare Earth Elements.



# A critical enabler of future facing decarbonisation applications and technologies



### CLASSIFICATION



# Vital's Strategic Importance



Vital's Nechalacho project has capacity to satisfy US 2026 requirements for both light and heavy rare earths

### **USA Rare Earth Strategic Developments**

- Rare Earth production (HREO and LREO) dominated by China
- North America currently contains no rare earth separation capabilities nor supplies of heavy rare earth feedstock
- In January 2022, USA introduced legislation in the US Senate that would force defence contractors to stop buying rare earths from China by 2026 and use the Pentagon to create a permanent stockpile of the strategic minerals
- March 2022 President Joe Biden planning on invoking Cold War powers to encourage domestic production of critical minerals for electric vehicles and other types of batteries
- Vital's Nechalacho deposit contains over 300kt of NdPr and 10kt of TbDy with an additional heavy rare earth resource at North T





Vital is well positioned in Canada to supply customers in Europe, North America and Asia



# Off-take Partnerships in place



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

### Europe

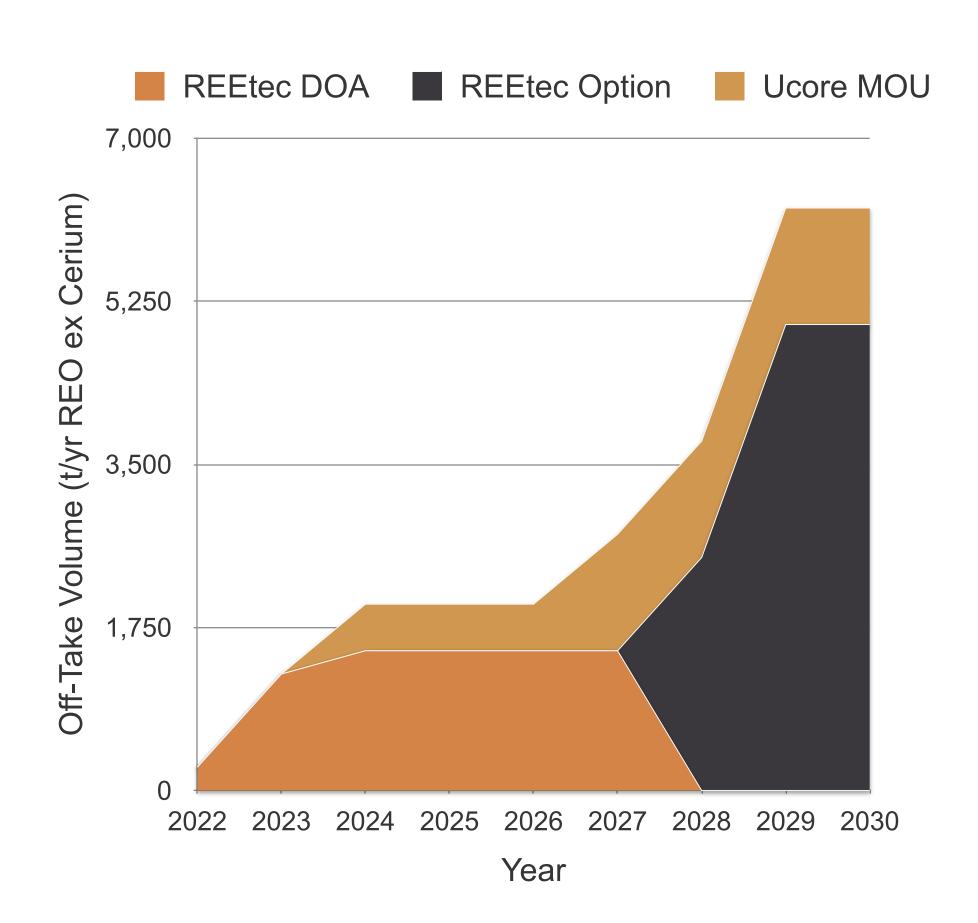
### **REEtec - Norway**

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

### **North America**

### **Ucore - USA**

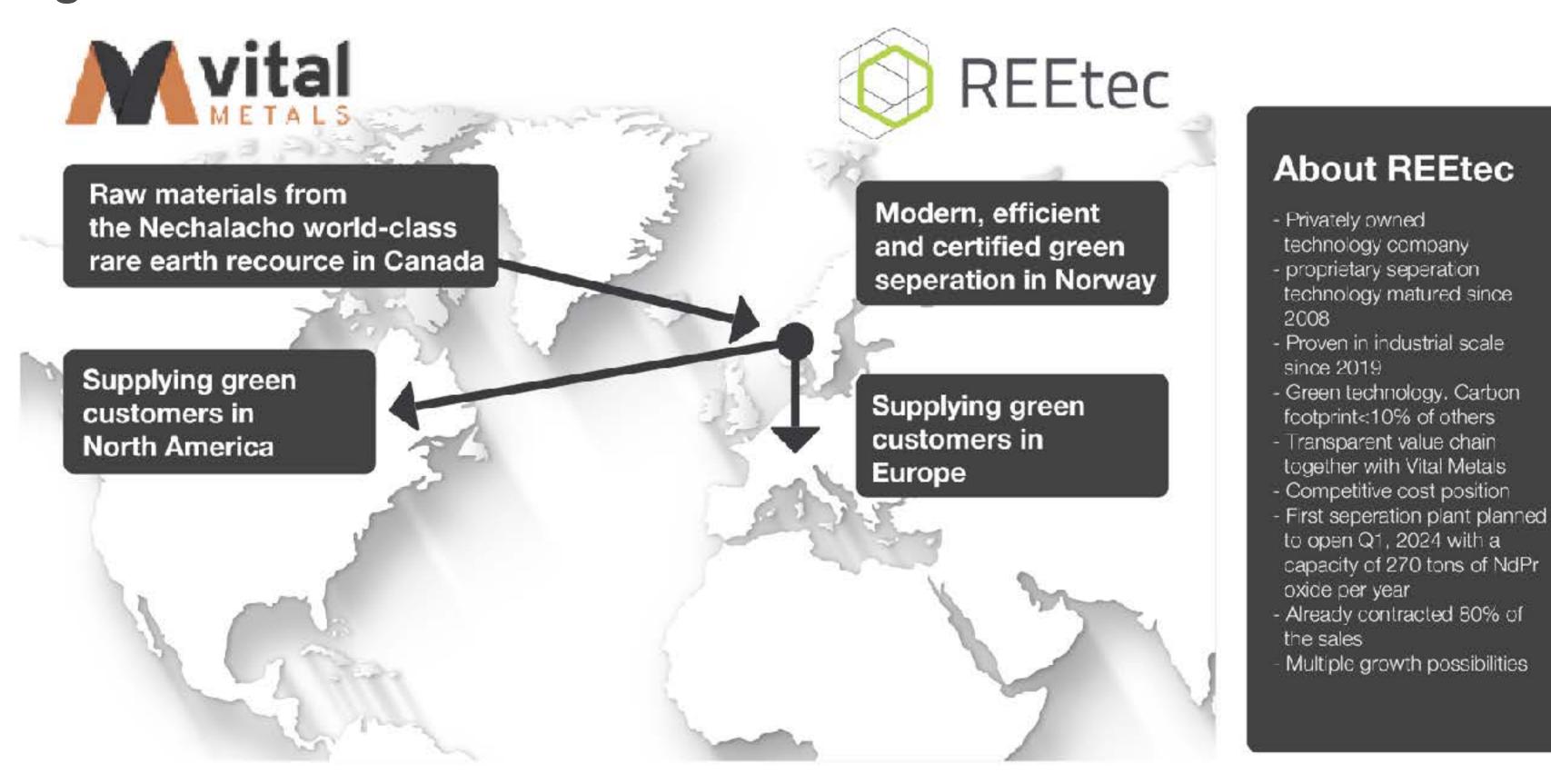
- Developing rare earth processing technologies through its ALASKA2023 project, with a goal of fostering an independent American REE supply chain
- The Alaska Strategic Metals Complex (SMC) has a scheduled commencement of H1 2024 (2,000t TREO/yr) with expansion capacity to 5,000t TREO/yr from 2026
-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



## **About REEtec**



# Vital Metals and REEtec enabling a clean, transparent and competitive Magnet Metals value chain



REEtec building separation plant in Norway for making NdPr, Tb and Dy oxides for the permanent magnet market, using raw material from Vital Metals in Canada

### **About REEtec**



## REEtec have successfully operated an industrial scale separation facility since 2019

- Industrial scale facility represents a single, full scale train which has successfully operated since 2019.
- Successfully operating a full scale greatly reduces process and scale up risk
- The final plant will duplicate the existing process equipment
- REEtec have successfully delivered separated rare earths under the EU's SecREEts program demonstrating REEtec's credibility to deliver products at spec and on time
- REEtec have signed a multi-year off-take agreement with Schaeffler utilizing Vital feedstock. This represents the first binding off-take agreement in the rare earth industry which encompases the entire rare earth supply chain from mine to Tier 1 Electric Drive manufacturers







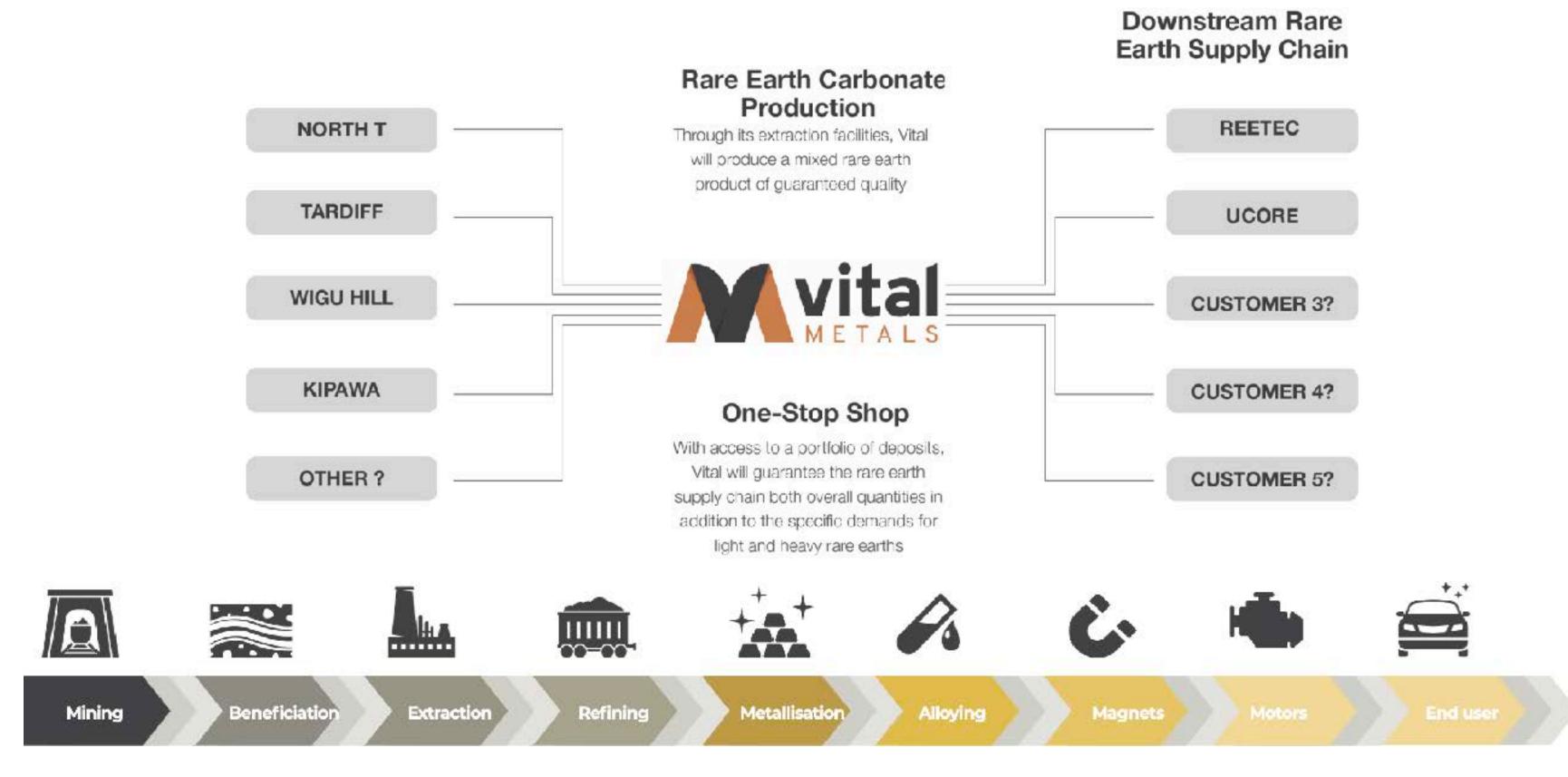
Current Plant Utilizes Equipment at Full Industrial Scale

REEtec is building a separation plant in Norway for making NdPr, Tb and Dy oxides for the permanent magnet market, using raw material from Vital Metals in Canada

# The Importance of Rare Earth Elements



## Vital will supply feedstock for the rare earth supply chain









# Vital's 3 Stage Development Strategy



# Vital's development strategy has seen production commence in 2021 with significant expansion plans underway

### Stage 1: Foundations: Establish Customer Acceptance

### **Nechalacho North T - Production Underway (first mine in Canada)**

- REO production highly specialised and requires long customer acceptance protocols
- Vital has commenced customer acceptance protocols in under 2 years
- Start-up 500t NdPr/yr expanding to 1,000 t NdPr/yr. First deliver of carbonate to customers 2H 2022

### Stage 2: Expansion and Growth of NdPr Supply

### Nechalacho Tardiff - Expanded REO production planning underway

- Tardiff contains large inferred resource >330,000t NdPr
- Infill drilling commenced to upgrade resource to measured / indicated categories
- EngineeringStudy numbers to follow (2H 2022) on potential expansion options

### Wigu Hill

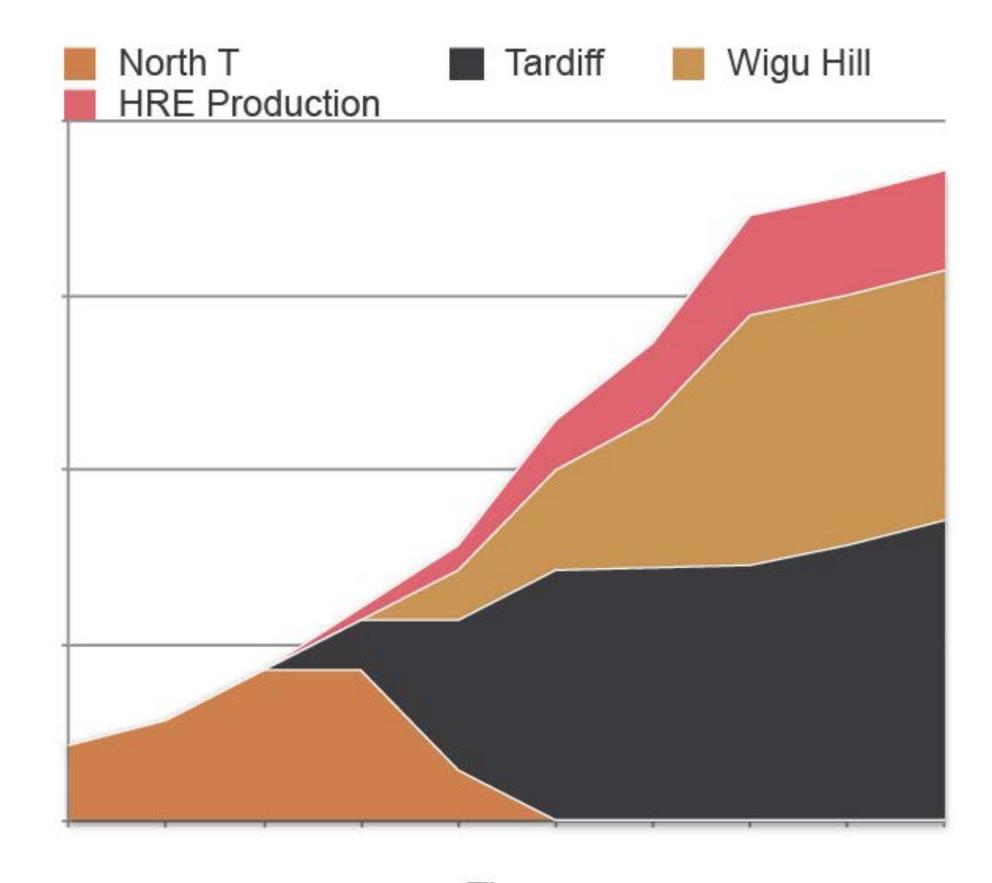
- Expansion capability through additional project
- Multiple projects enable flexibility to react quickly to changes in market and customer requirements

### **Stage 3: Heavy Rare Earth Production**

### North T Xenotime/Kipawa - Strategy to include HREO into the production mix

- Xenotime resource sits adjacent North T pit
- USA in desperate need of alternate HREO supply
- Vital to be the ONLY company to be able to supply commercial quantities of both HREO and LREO



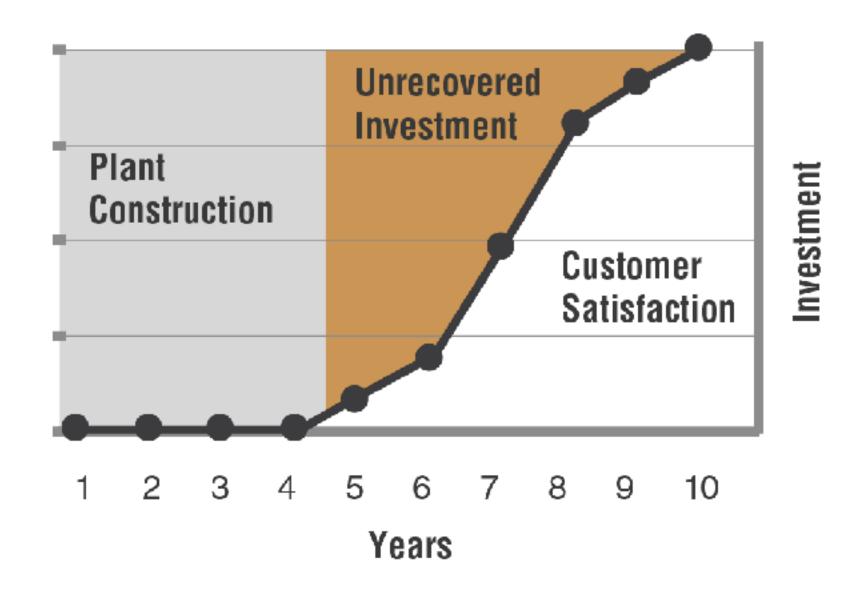


Time

# Traditional rare earth construction and ramp-up profile



The traditional development approach has historically resulted in returns not being achieved for 8-10 years after the commencement of construction

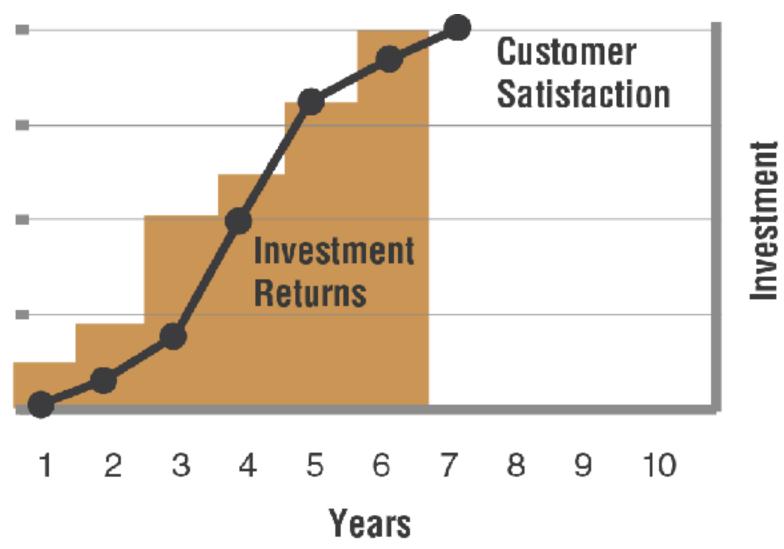


- Due to the complex nature of rare earth production, particularly when including separation, commissioning a large process plant will take a number of years before product is regularly produced at specification
- As rare earths' uses are highly specialised, once production at specification is achieved, qualification processes will commence which may take 3-4 years to finalise before end users will purchase large volumes of off-take
- Between plant commissions and customer qualification, it may take 4-5 years, following completion of construction, before the production capacity of a large start-up plant will be achieved with product sold at contract prices

## Vital's innovative model



# Vital is implementing an agile development platform which has the flexibility to match customer demands whilst increasing returns

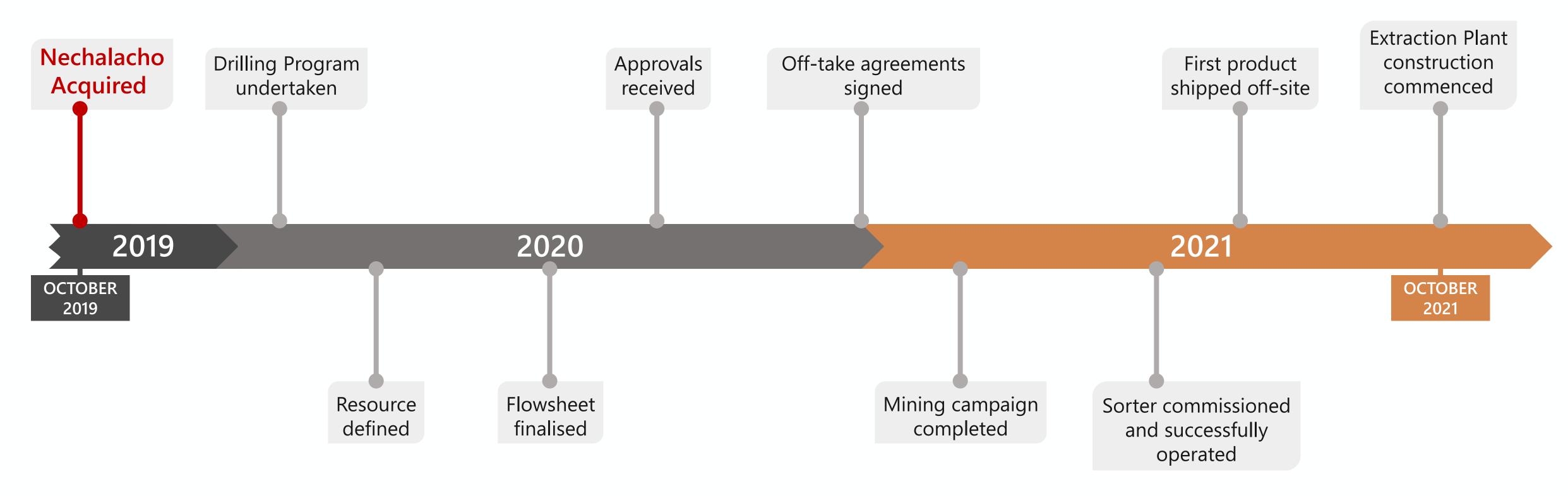


- Vital's business model is built around the ability to be flexible.
- Vital's strategy commences customer qualification with a simple, low risk project
- Our agile development platform then enables the development of the larger-long term operation to occur in parallel with the qualification process and customer ramp-up to match customer demand

# Achievements and demonstrated capability



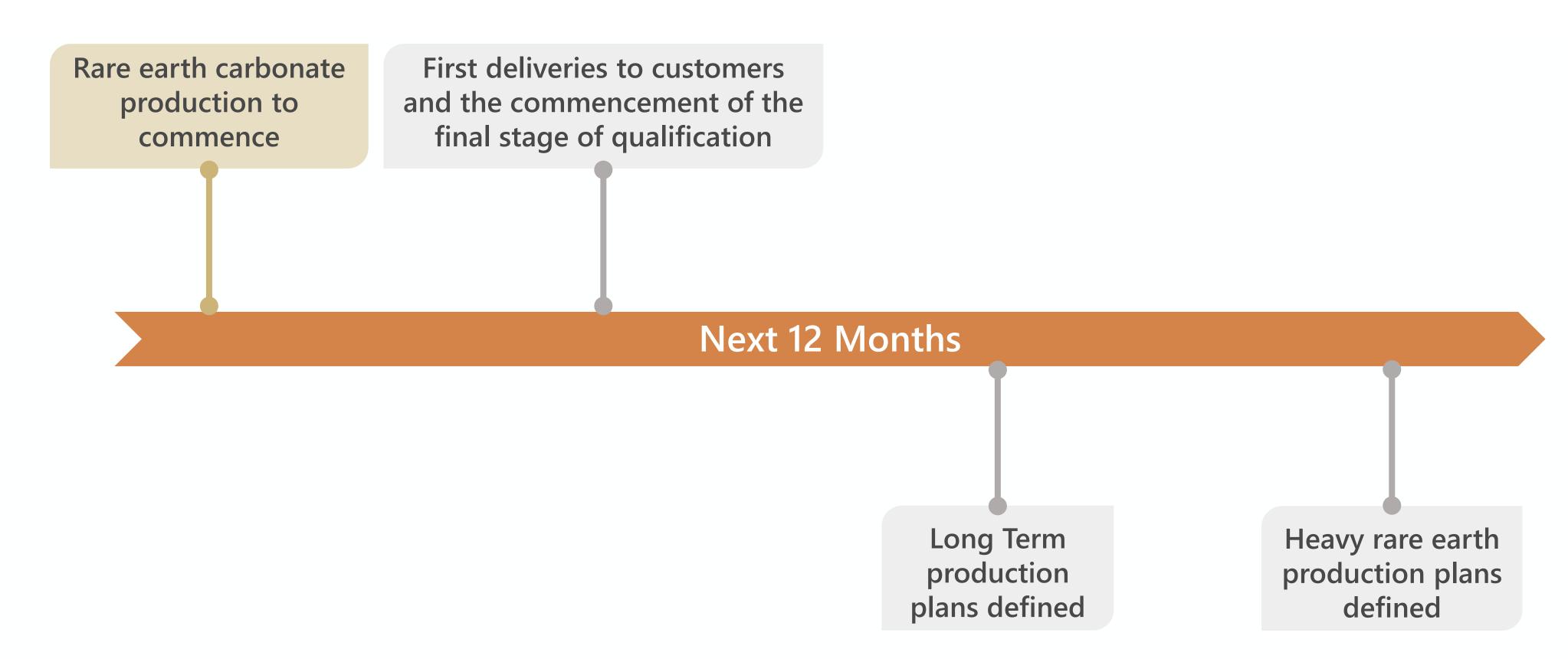
Over the past two years Vital has demonstrated its capabilities by bringing Nechalacho North T project into operation despite the world being in a pandemic



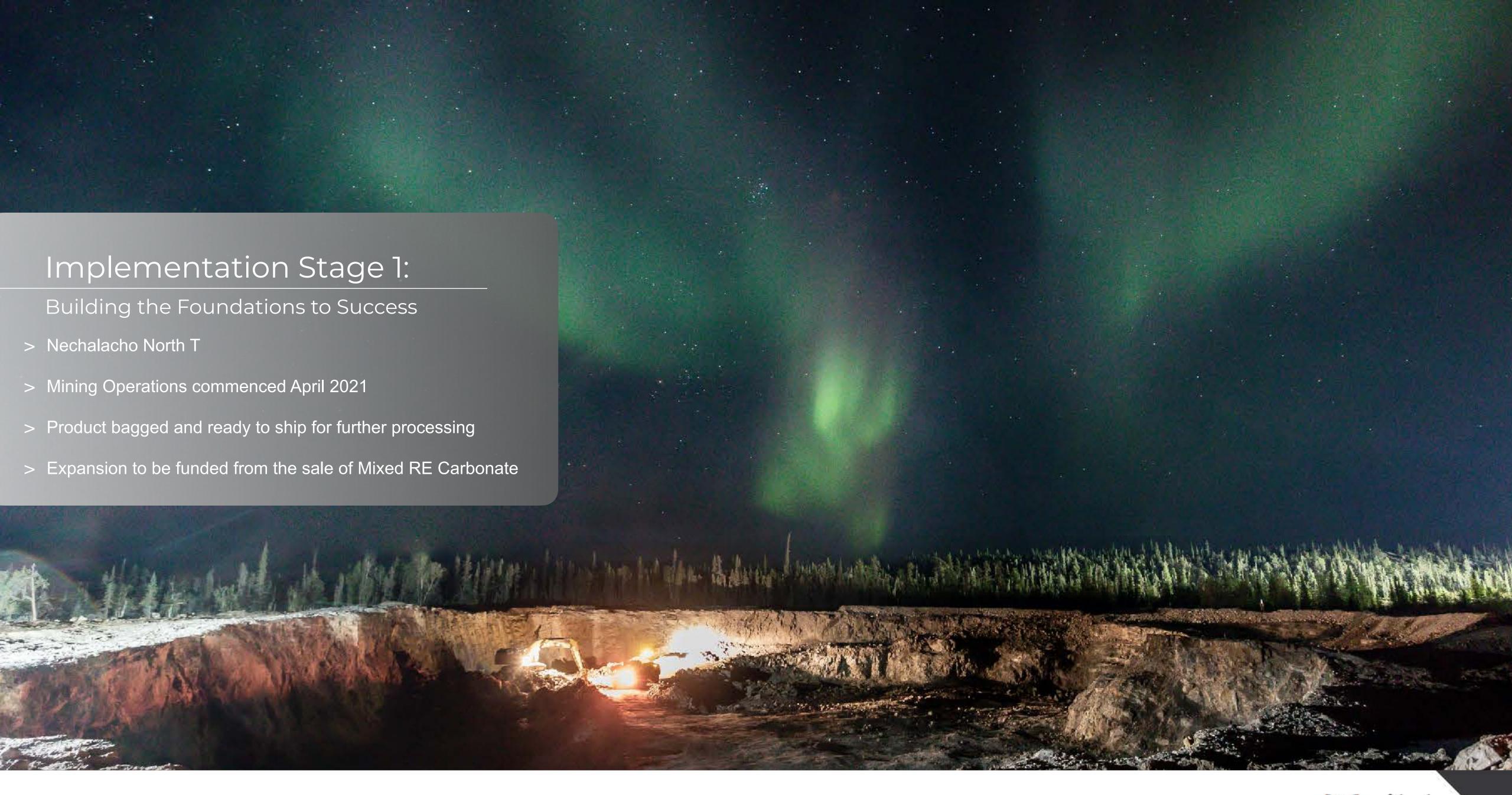
# Outlook



## 2022 will see Vital complete its transformation into a rare earth producer



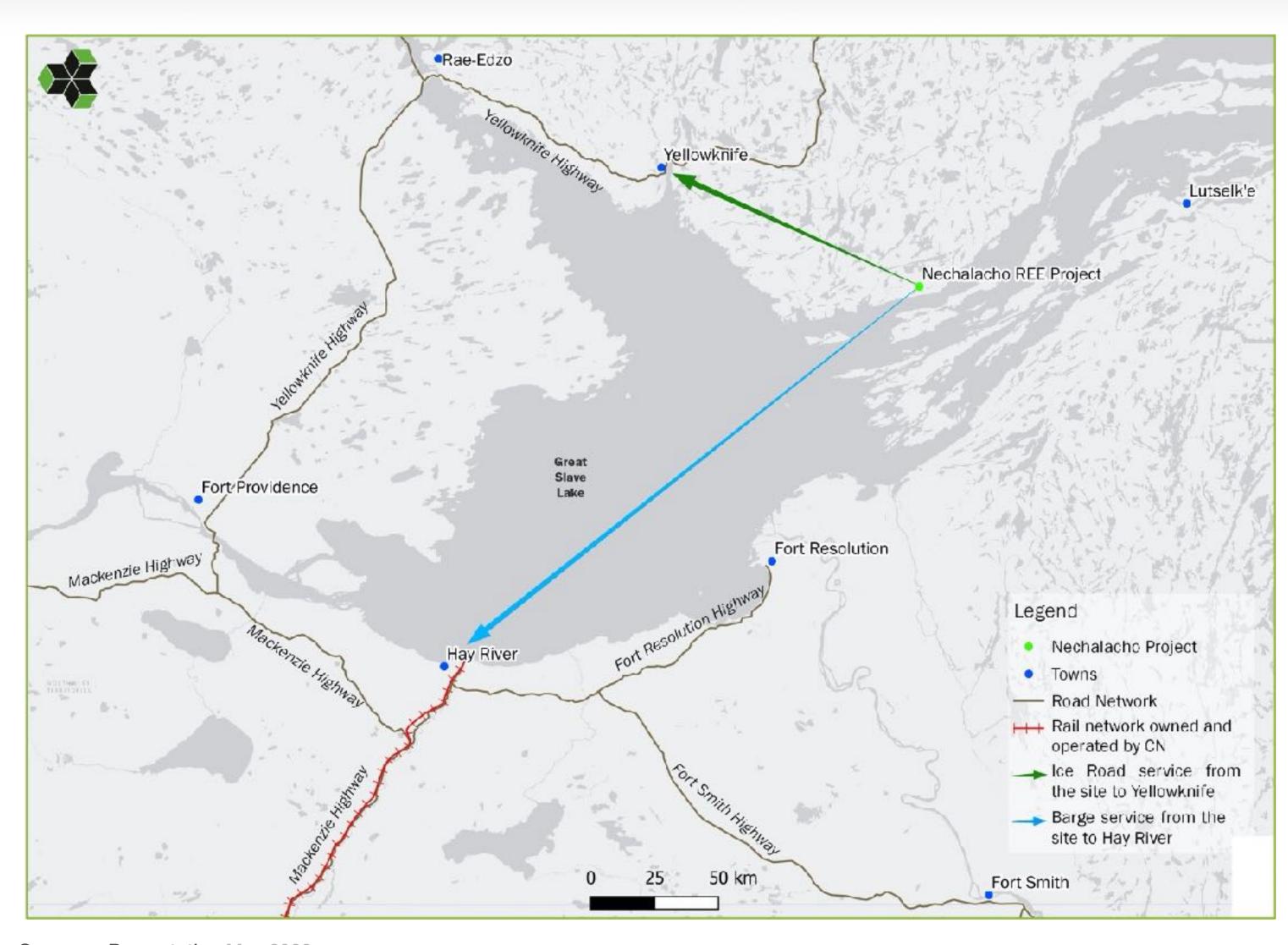


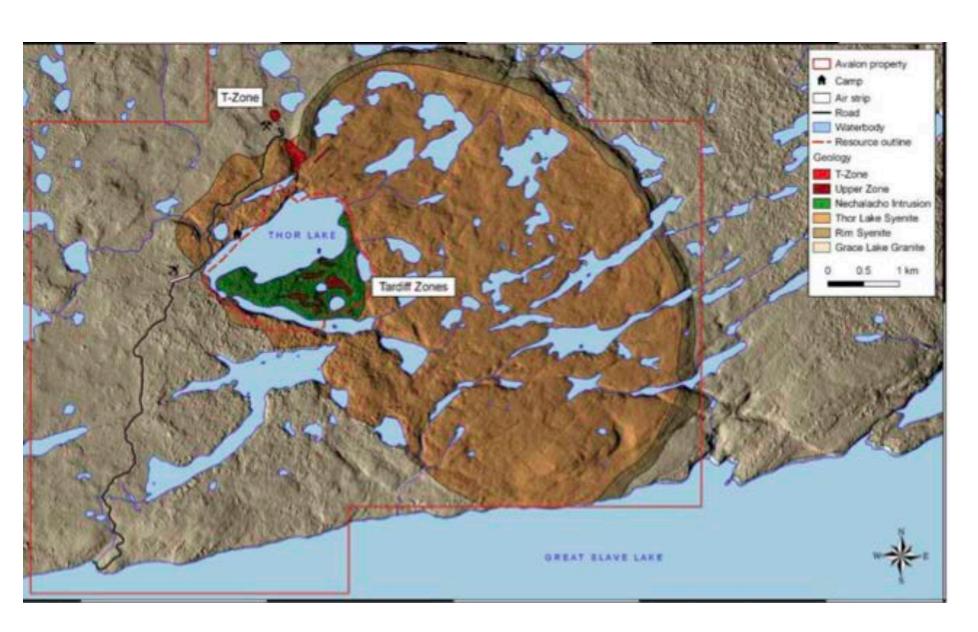




# **Nechalacho Project**







# **Demonstrated Capability**



# 2021 Mining and sorting operations have been completed











# Saskatoon Rare Earth Extraction Facility

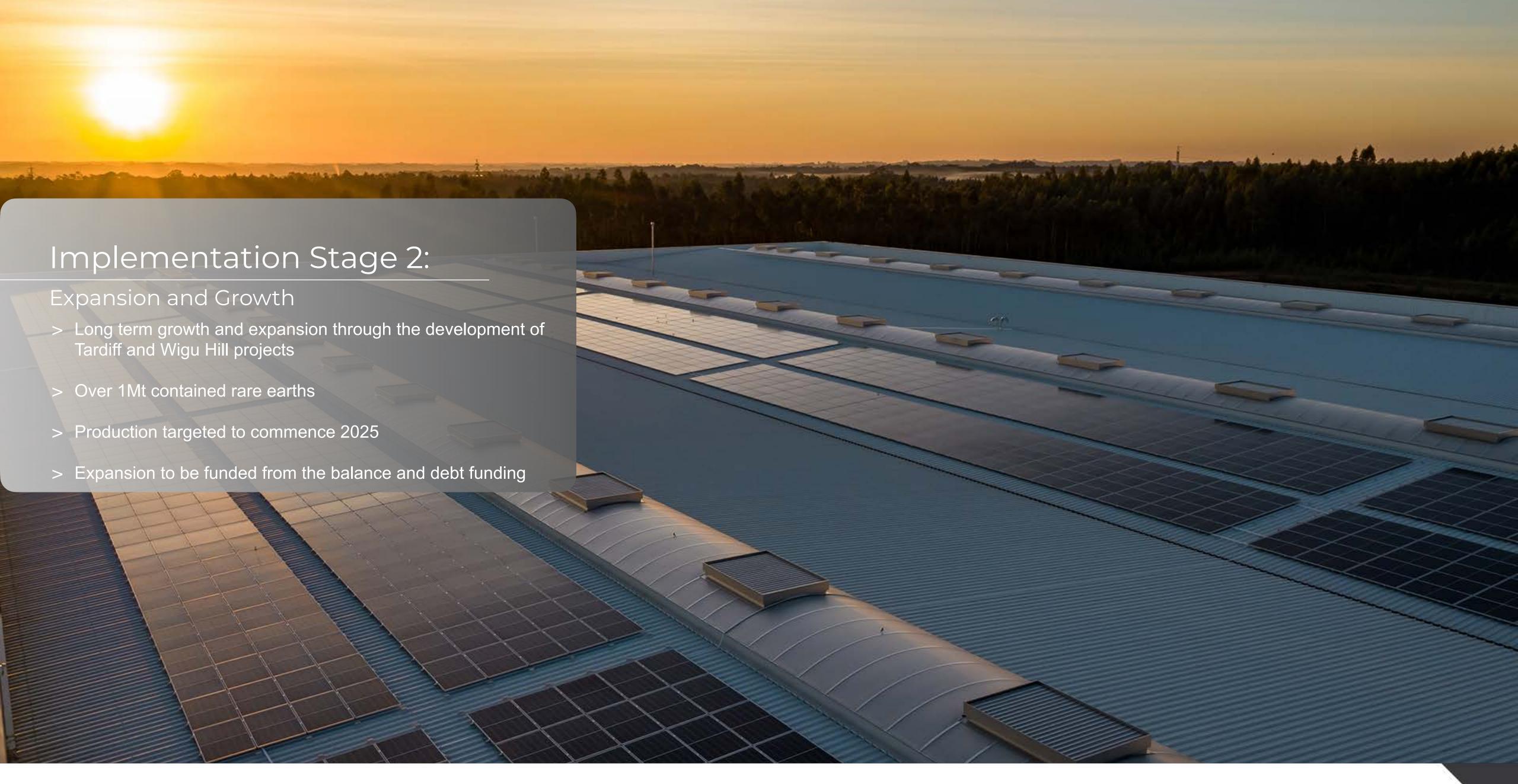


## Vital's Rare Earth Extraction Facility is on track for first feed in June 2022

- Construction is advancing on Vital's Rare Earth Extraction Facility in Saskatoon, Saskatchewan, Canada
- All major processing equipment has been procured with installation commencing
- Commissioning of the Extraction Facility to be undertaken in a sequential manner, with first feed scheduled to occur June 2022.
- Commissioning will occur in a sequential manner over the upcoming months in the following sequence:
  - Dense Media Separation
  - Calcination
  - Leaching
  - Purification & Precipitation



SMS Plant Ready for Installation



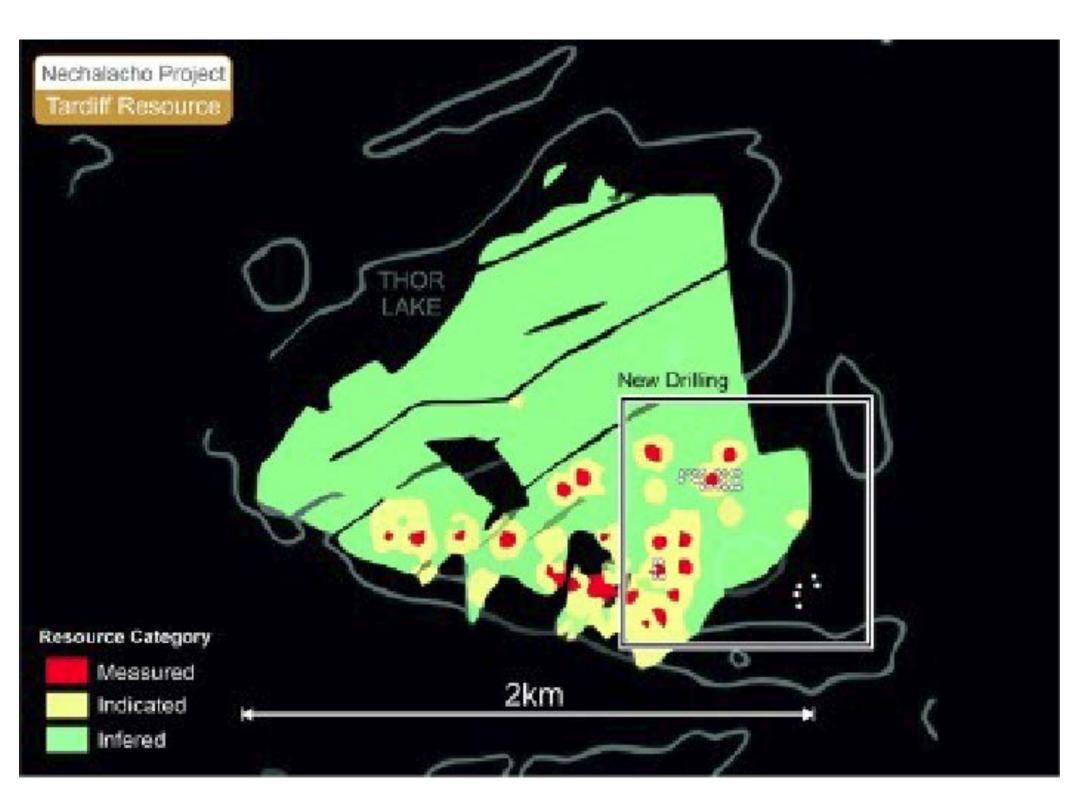


# Stage 2 - Expansion and Growth



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

Resource Classification	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%	25.2%
Measured, Indicated and Inferred	94.735	1.464%	0.134%	25.2%



# Nechalacho - Tardiff Development & Growth Model



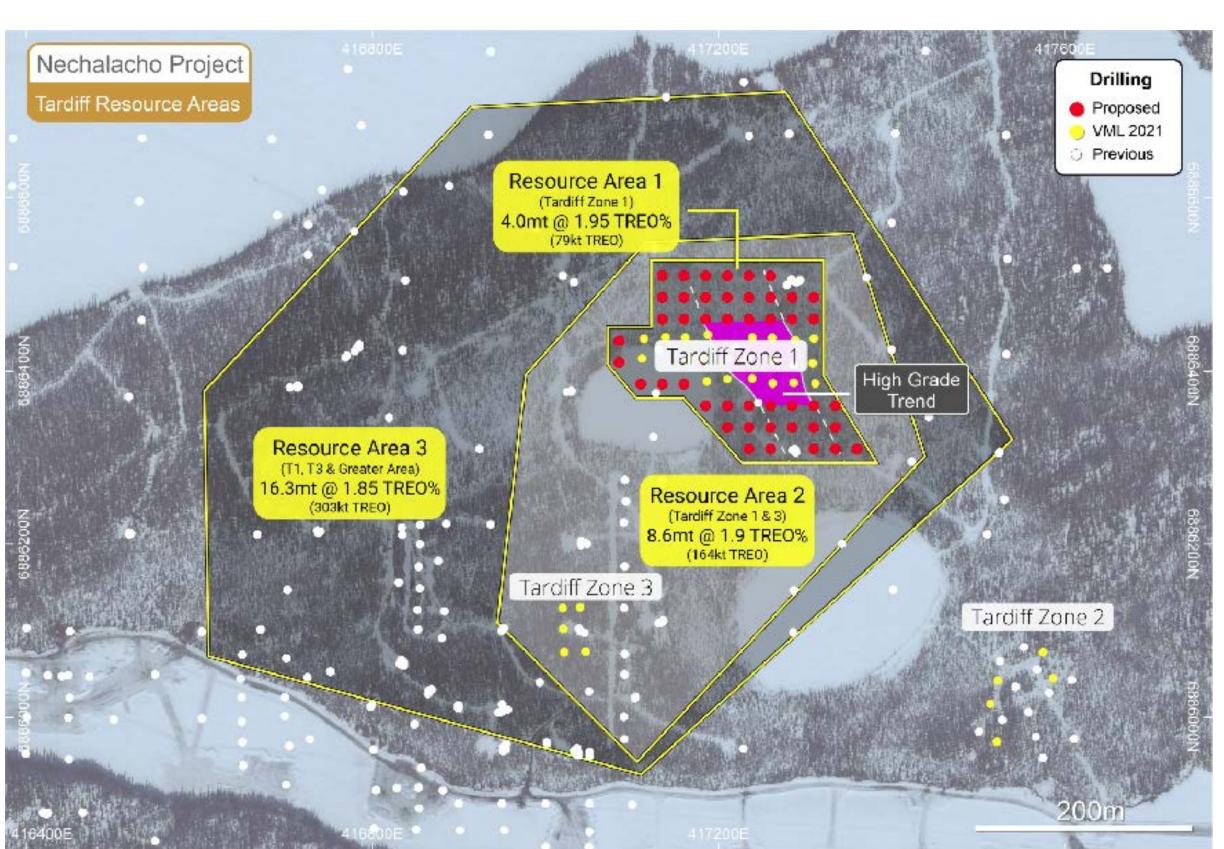
# Tardiff forms the basis for a growth strategy for large scale, long life light and heavy rare earth production

### **Modular Development**

- Tardiff will be development in a modular fashion, commencing at Tardiff Zone 1, before expansion to Zone 3, with further expansion along open boundaries
- Modular development will enable Vital to apply flexibility to its operations to meet the requirements of customers and increase production as required
- The current resource for the three target modules (without consideration of recent drilling programs) is 16.3Mt @ 1.85% TREO (or 303kt contained REO)
- At the completion of these three modules further expansion may be considered through the remainder of the 1.3Mt contained resource

### **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 partly funded through North T sales
- Operations are targeted to commence 2026



## **Production at Scale**



# Vital's resources contain over 300,000 tonnes of NdPr and 15,000 tonnes of TbDy providing the potential to satisfy significant demand growth in both light and heavy rare earths

	Tar	diff	Kipawa*		
	% REO	T REO	% REO	T REO	
<b>Total Resource</b>	1.46%	1,387,000	0.41%	80,770	
NdPr	23.8%	330,106	16.95%	13,691	
TbDy	0.84%	11,651	4.12%	3,324	
Total		341,757		17,016	

<sup>\*</sup> Refer foreign estimate cautionary statement on page 4

Rare Earth Oxide distribution at Current Prices

	US\$/kg	North T¹		Tardiff <sup>1</sup>		Kipawa <sup>2</sup>	
	(1 April 2022) <sup>3</sup>	% REO	\$/kg	% REO	\$/kg	% REO	\$/kg
La <sub>2</sub> O <sub>3</sub>	\$1.39	23.95%	\$0.33	23.19%	A\$0.32	14.32%	A\$0.20
Ce <sub>2</sub> O <sub>3</sub>	\$1.38	49.62%	\$0.68	44.7%	A\$0.62	29.10%	A\$0.40
Pr <sub>6</sub> O <sub>11</sub>	\$150.37	5.42%	\$8.15	5.1%	A\$7.67	3.56%	A\$5.35
Nd <sub>2</sub> O <sub>3</sub>	\$158.25	18.1%	\$28.64	18.7%	A\$29.59	13.40%	A\$21.20
Sm <sub>2</sub> O <sub>3</sub>	\$4.17	1.88%	\$0.08	2.83%	A\$0.12	3.00%	A\$0.12
Eu <sub>2</sub> O <sub>3</sub>	\$30.70	0.15%	\$0.05	0.26%	A\$0.08	0.37%	A\$0.11
Gd <sub>2</sub> O <sub>3</sub>	\$85.03	0.64%	\$0.54	1.97%	A\$1.68	2.90%	A\$2.46
Tb <sub>4</sub> O <sub>7</sub>	\$2,070.57	0.05%	\$1.04	0.2%	A\$4.14	0.54%	A\$11.09
Dy <sub>2</sub> O <sub>3</sub>	\$418.05	0.1%	\$0.42	0.64%	A\$2.68	3.58%	A\$14.97
Ho <sub>2</sub> O <sub>3</sub>	\$267.47	0.01%	\$0.03	0.08%	A\$0.21	0.78%	A\$2.08
Er <sub>2</sub> O <sub>3</sub>	\$57.08	0.01%	\$0.01	0.12%	A\$0.07	2.46%	A\$1.40
Tm <sub>2</sub> O <sub>3</sub>			0		A\$0.00	0.39%	A\$0.00
Yb <sub>2</sub> O <sub>3</sub>	\$21.26		\$0.00	0.04%	A\$0.01	2.34%	A\$0.50
Lu <sub>2</sub> O <sub>3</sub>	\$803.04		\$0.00	0.01%	A\$0.08	0.32%	A\$2.54
Y <sub>2</sub> O <sub>3</sub>	\$13.62	0.06%	\$0.01	2.19%	A\$0.30	22.97%	A\$3.13
TREO			\$39.97		\$47.56		\$65.56

<sup>&</sup>lt;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 2nd February 2021.

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

<sup>&</sup>lt;sup>3</sup> Rare earth prices sourced from Shanghai Metals Market (www.metal.com) as at 1st April 2022

# Wigu Hill Project



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



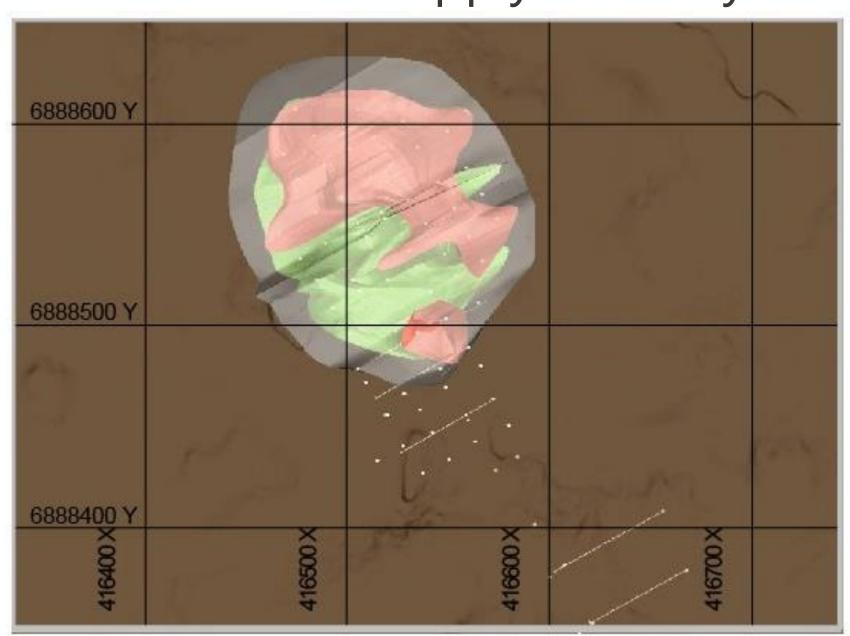


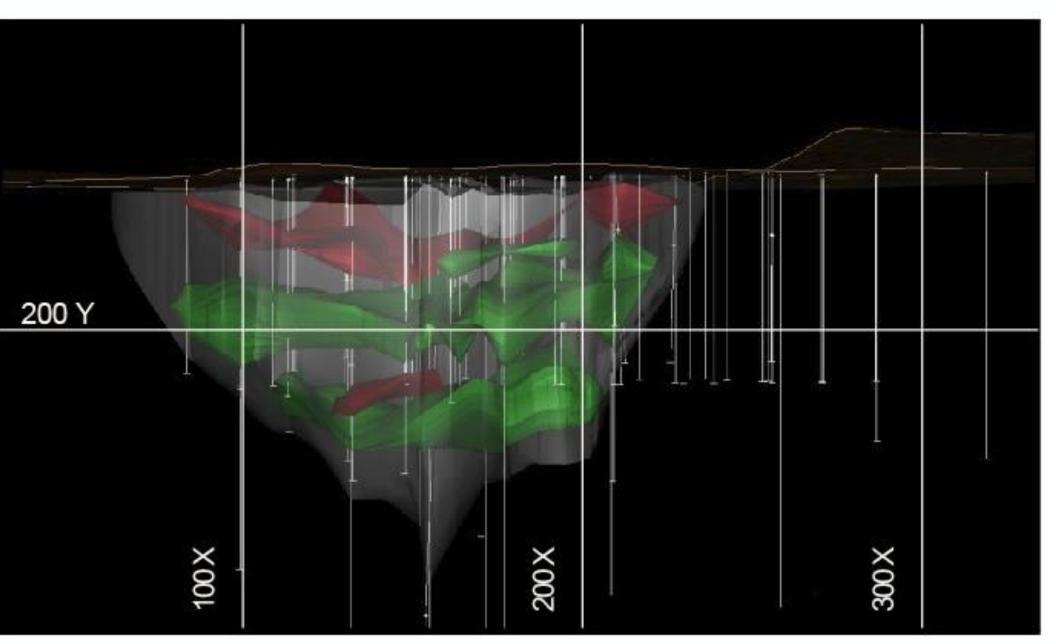


## Canada - North T



North T's xenotime zone, which sits adjacent to the bastnaesite zone, provides the best opportunity for a near term supply of heavy rare earths



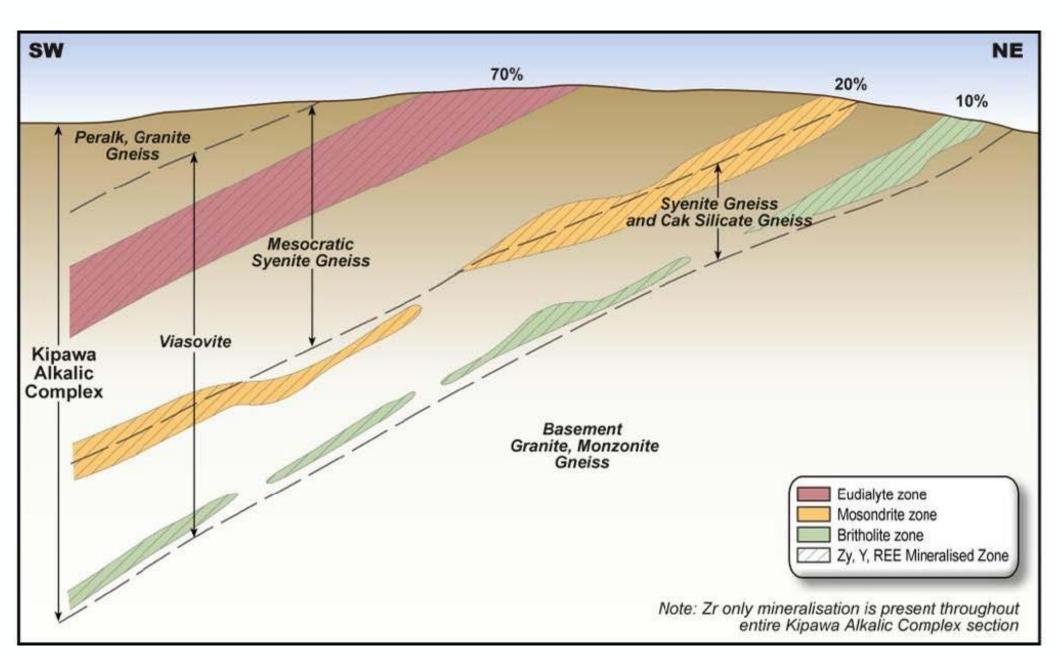


Vanatima Pagauras	Cutoff Grade	Toppodo	CeO <sub>2</sub>	Y <sub>2</sub> O <sub>3</sub> %	
Xenotime Resource	$Y_2O_3$	Tonnage	%		
Indicated	>0.1%	346,270	0.156%	0.271%	
Inferred	>0.1%	4,700	0.177%	0.224%	
Indicated + Inferred	>0.1%	350,970	0.156%	0.270%	

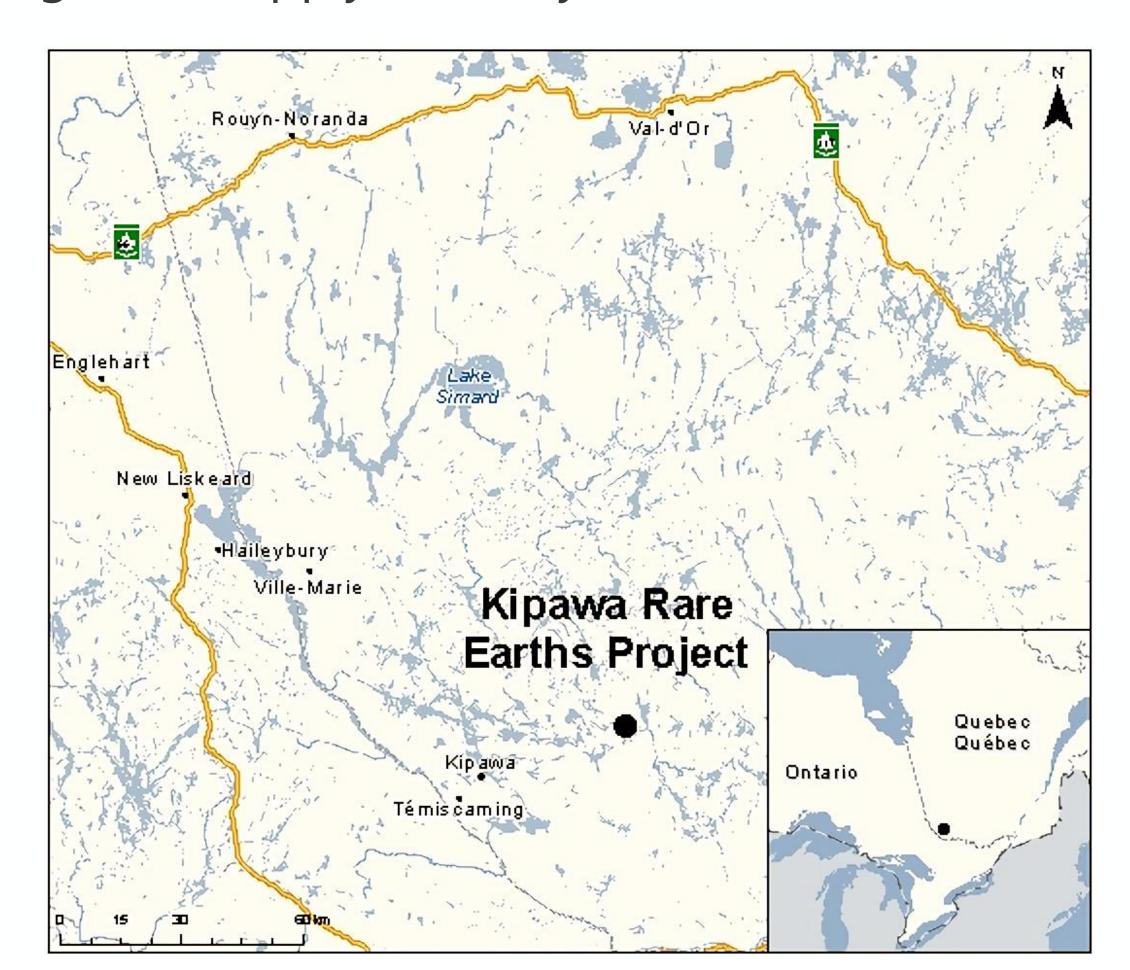
# Canada - Kipawa



## The Kipawa project provides the potential for a long-term supply of heavy rare earths



Kipawa Reserve *	Tonnage	TREO
Ripawa Reserve	Tomage	%
Proven	10,218,867	0.440%
Probable	9,550,047	0.379%
Total	19,768,914	0.411%



### Conclusion



Vital is the only new producer with the combination of strategy, growth opportunity and demonstrated capability to satisfy the demands of a diversified rare earth supply chain

### Rare Earth Expertise

 VML has the team to deliver with Rare Earth development and operations expertise

### **Credibility & Capability**

 Over the last 2 years Vital has demonstrated the ability to bring rare earth projects into production, establishing credibility in the market

### **Innovative Business Model**

- Modular expansion plans deliver low risk market entry and supports highmargin growth strategy
- A partner, not build, approach allows VML to focus on its core business and scale rapidly whilst achieving the benefits from downstream processing

### **Growth and Scale**

 Business is underpinned by secure and defined resources capable of delivering meaningful scale

### Strategic Opportunity

 Positive market tailwinds with Rare Earth Elements being a critical enabler of decarbonization and future facing industries

### **Competitive Advantage**

 Aiming to be the first global producer of both light and heavy rare earth products







## **Saskatoon Extraction Plant**



Vital's rare earth Extraction Plant is on track for first product produced mid-2022

