

The Next Major Player in Rare Earths

**AGM Presentation** 

November 2024

ASX:PEK www.peakrareearths.com



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#### **Compliance Statement**

Information in this presentation references the Company's ASX announcements dated 24 October 2022 "Completion of Ngualla Project BFS Update", 30 November 2023 "Completion of FEED Study", and for drilling and exploration results, 5 February 2024 'Breccia Zone Trench Samples – Assay Results', 26 February 2024 'Phosphate Bioavailability Test Results', 4 March 2024 'Further Northern Zone Assay Results', and 20 March 2024 'Major High-Grade Fluorspar Discovery' which are available to view on <a href="https://www.peakrareearths.com/announcements/">https://www.peakrareearths.com/announcements/</a>. The Company confirms that at this time it is not aware of any new information or data that materially affects the information included in the relevant announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed, save that (i) the 30 November 2023 announcement "Completion of FEED Study" provides new information and updates to estimates in the 24 October 2022 "Completion of the Ngualla Project BFS Update" and (ii) the change to the rare earths price assumptions as set out in the December 2023 Quarterly Activities Report and Review of Operations Section of the December 2023 Half-Year Financial Report. The Company further confirms that at this time the form and context in which the Competent Person's findings presented in the reserve and resource estimates and exploration result announcements have not been materially modified from the original market announcements.

This presentation is authorised for release by the Company's Chief Executive Officer.



## **Executive Summary**

## Peak is in the strongest position in its history

Notwithstanding a challenging market backdrop over the past 12 months ...

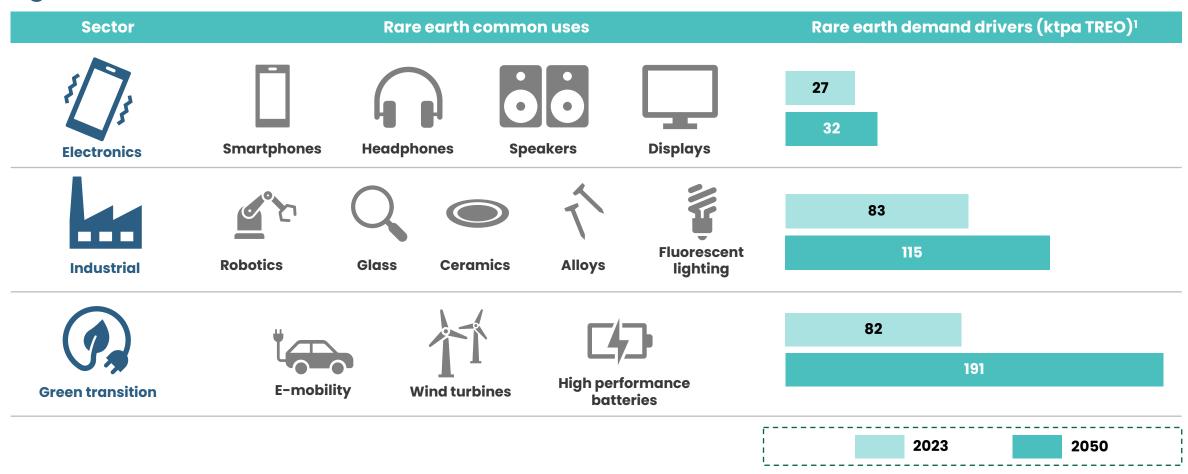
- Outlook for rare earths remains robust
- Tanzania is rapidly developing as a leading African mining jurisdiction
- Ngualla remains the most attractive and advanced undeveloped rare earth project in the world
- Significant progress has been made in preparing Ngualla for a Final Investment Decision
- Peak's funding position supported by recent capital raise as well as near-term sale of its Teesside site

Peak's focus remains on a near-term Financial Investment Decision and the commencement of construction



## Rare earth outlook ... compelling fundamentals aligned to decarbonisation

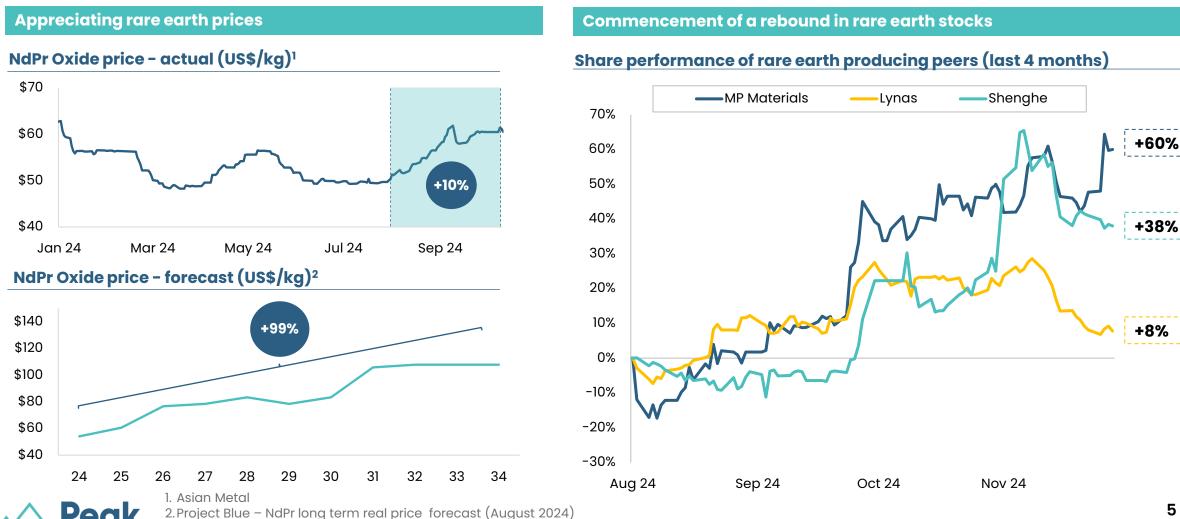
Outlook supported by the electrification of transport, renewable energy generation, high-end electronics and robotics





## Rare earth sector ... attractive long-term prices and improving sentiment

NdPr oxide price is recovering from temporary headwinds with the emergence of a rebound in positive market sentiment



## Tanzania ... open for business

## Rising international visibility and a rapidly growing economy

#### Tanzania economy ... at a glance

- Economic Freedom score of 60.0 4<sup>th</sup> highest in Africa
- Politically stable 60 years since independence
- One of the fastest growing economies in Africa average GDP growth over last 10 years of 6.1%
- Unemployment rate of ~3%
- Recent Moody upgrade to a B2 positive due to reduced political risk, community engagement and structural reform agenda
- Key logistics hub with proximity to Asia and the Middle East

#### **Recent developments**

**April 2023:** MOU between the Export-Import Bank of the United States (EXIM) and the Government of Tanzania for up to **US\$500m** in export financing

November 2023: U\$\$1b contract executed with China Civil Engineering Construction Corporation (CCECC) to upgrade part of the existing TAZARA railway



Ongoing development of national standard gauge network



Recent completion of 2GW Julius Nyerere Hydropower Station



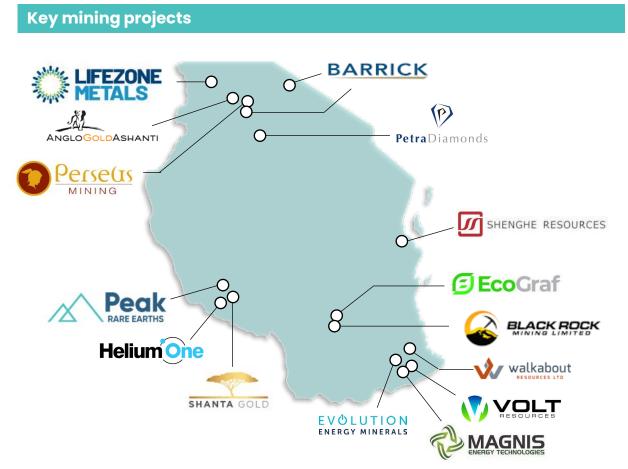
US Vice President Kamala Harris' Tanzanian visit (March 2023)



## Tanzania ... a rapidly developing mining sector

Tanzania benefits from world-class critical minerals projects and is attracting significant investment from highly reputable international mining companies







## Ngualla Project ... a world-class rare earth project

The Ngualla Project is one of the largest and highest grade undeveloped rare earth deposits in the world, with significant exploration and development upside

## High-grade Ore Reserve<sup>1</sup>

TREO - 4.80% and NdPr - 1.02%

#### **Multi-generational**

 214Mt Mineral Resource and initial 24-year life supported by Ore Reserves<sup>1</sup>

#### Low radionuclides<sup>1</sup>

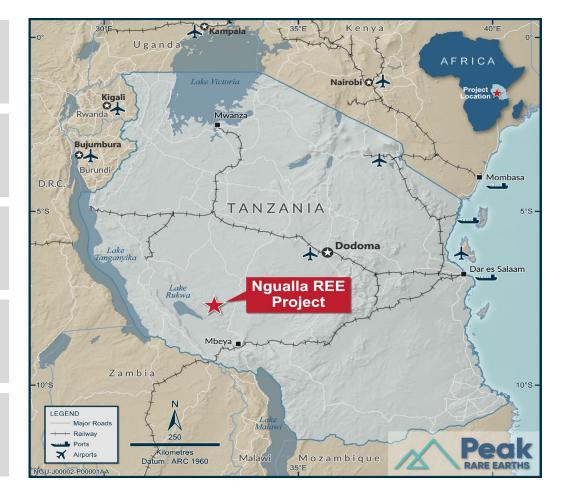
U - 15 ppm and Th - 53ppm

#### World scale<sup>2</sup>

 16.2ktpa of high-grade rare earth concentrate containing 3.6ktpa of NdPr

### Significant exploration upside

Includes fluorspar, niobium and phosphate

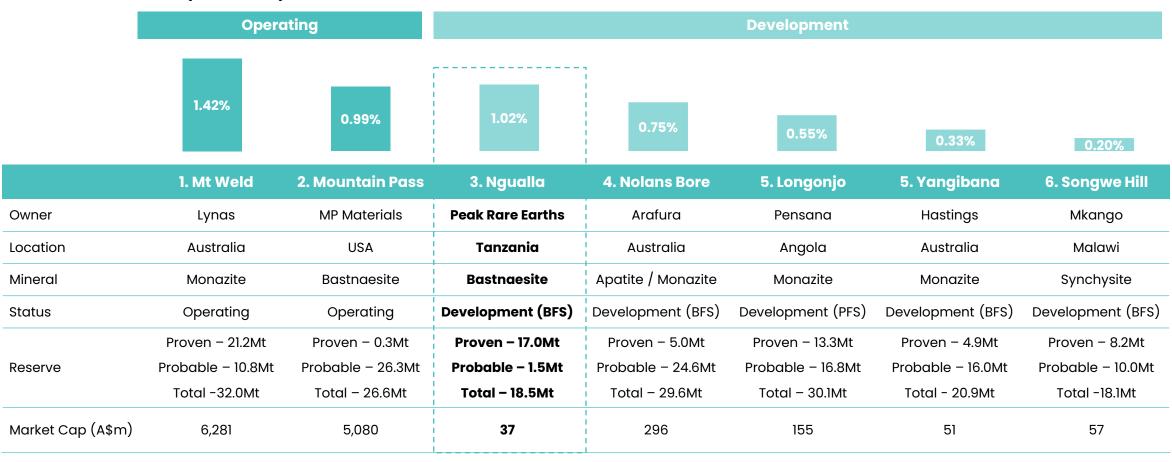




## World-class and high-grade deposit ... supporting a long mine life

### One of the world's highest grade undeveloped NdPr deposits

#### %NdPr (Ore Reserve)

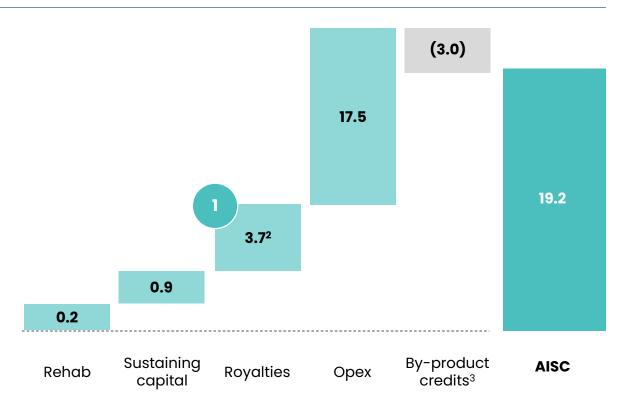




## Competitive cost profile ... supporting robust margins

## An all-in sustaining cost of ~US\$19.2/kg NdPr at US\$100/kg flat pricing supporting attractive margins through rare earth price cycle

#### All-in sustaining cost breakdown (US\$/kg NdPr)<sup>1</sup>



Royalty sensitivity (US\$/kg NdPr)			
NdPr Oxide price (LOM average)	Net price	AISC	Net margin
US\$60/kg	26.48	17.88	21%
US\$80/kg	38.38	18.53	44%
US\$100/kg	49.88	19.25	55%
US\$120/kg	61.03	20.00	62%



## Derisked ... the most advanced rare earth development project

Non-binding Term Sheet with Shenghe positions Ngualla as the only rare earth project globally with a complete offtake, development and funding solution<sup>1</sup>



#### **Key licences in place**

Special Mining Licence granted and Framework Agreement executed with the Government of Tanzania



#### Technically de-risked

Completed BFS Update and FEED studies and further optimisation study underway



### **Binding offtake**

7-year take-or-pay agreement for 100% of concentrate and 50% of any future downstream products



#### **Full project funding solution**

No requirement for Peak to contribute any additional development equity funding



# Last 12 months ... progressing towards a Final Investment Decision Significant progress made across technical and commercial workstreams

- 1. Enlargement of SML area
- 2. Project reconfiguration and optimisation opportunities
- 3. Advancement of early and enabling works
- 4. Resettlement and valuation activities
- 5. Unconditional binding offtake agreement
- 6. Non-binding investment, development and funding term sheet
- 7. Critical minerals exploration and development activities
- 8. Commencement of Teesside site sales process
- 9. Equity placement of A\$6m and commencement of an A\$2m SPP





## Enlargement of SML area ... creating further optionality

## SML area successfully expanded from ~18km² to ~51km²

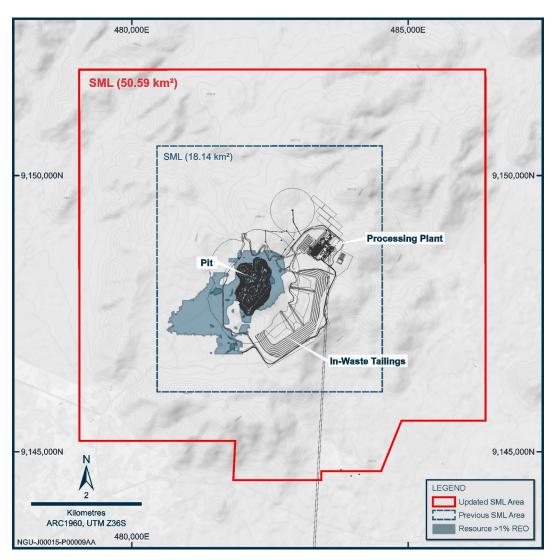
#### Ngualla SML expansion ... key benefits





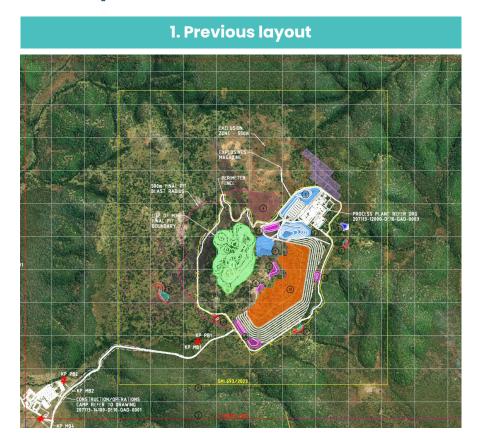
- Potential site for future development of an MREC facility and other downstream operations
- Supported by SML tenure of 30 years with the ability for further extensions
- Opportunity to reconfigure the layout of the Ngualla Project

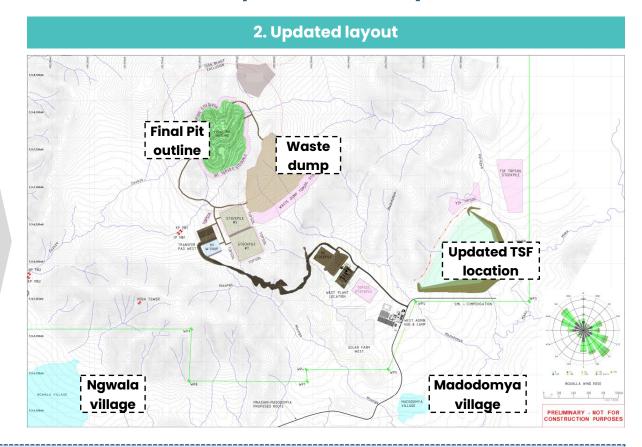




## Expanded SML area ... layout enhancements

## New layout delivers material reductions in costs and improved safety





- √ Material savings in bulk earthworks
- ✓ Enhanced solar insolation (power plant)
- Reduced pumping costs
- Improved safety of TSF

- Reduced vehicle traffic on hill
- ✓ Land availability for future expansions



## Ngualla Project ... optimisation opportunities

### Collaboration with Shenghe on further optimisation and cost reduction opportunities

#### Optimisation opportunities identified post FEED

- 1. Building relocation and layout optimisation
- 2. Optimisation and contract packages
- 3. Deferral of new airstrip
- 4. Increased plant availability
- 5. Re-scope buildings and storage facility
- 6. More competitive tendering solutions

#### Additional opportunities to be progressed with Shenghe

- 1. Relocation of TSF
- 2. Adoption of a single stage flotation process
- 3. Redesign of the process plant
- 4. Adoption of lower cost plant, equipment and engineering solutions



## Peak and Shenghe ... a transformational partnership

Binding offtake in combination with a non-binding investment, development and funding Term Sheet with Shenghe underpins an integrated development solution<sup>1</sup>

#### Shenghe partnership ... key elements



#### Offtake

Binding offtake agreement in place



#### **Funding**

Full project funding solution via Shenghe's A\$96m investment into NGUK as well as project-level debt facility



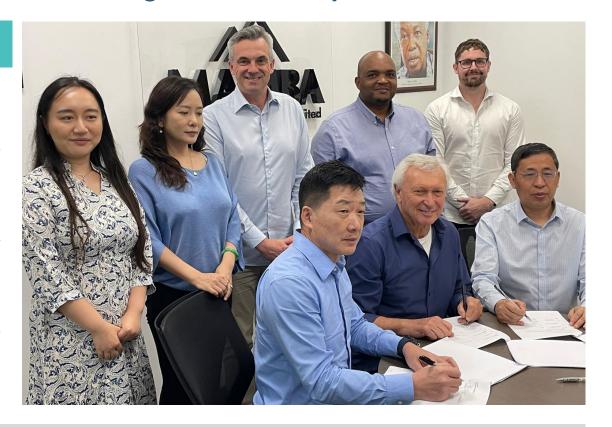
#### **Project construction and development**

Shenghe to participate in tender for project EPCM, EPC or EPS execution package



#### **Technical collaboration**

Ongoing optimisation of current flowsheet as well as collaboration around in-country downstream development





We continue to believe that the Ngualla Project is the premier undeveloped rare earth project in the world. This Term Sheet demonstrates our commitment to work with Peak and Mamba Minerals to further optimise the Ngualla Project and to expedite its development and funding

Mr. Huang Ping, Vice Chairman of Shenghe Resources Holding Co., Ltd



## Binding offtake agreement ... 'bankable' with high payability

Binding offtake agreement with Shenghe delivers attractive payabilities across rare earth pricing cycle

Binding offtake agreement – key terms

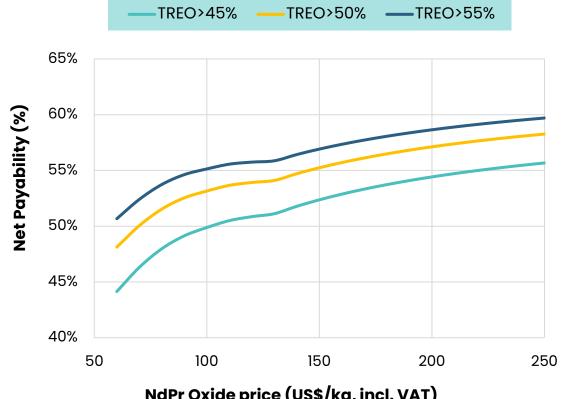


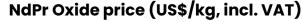










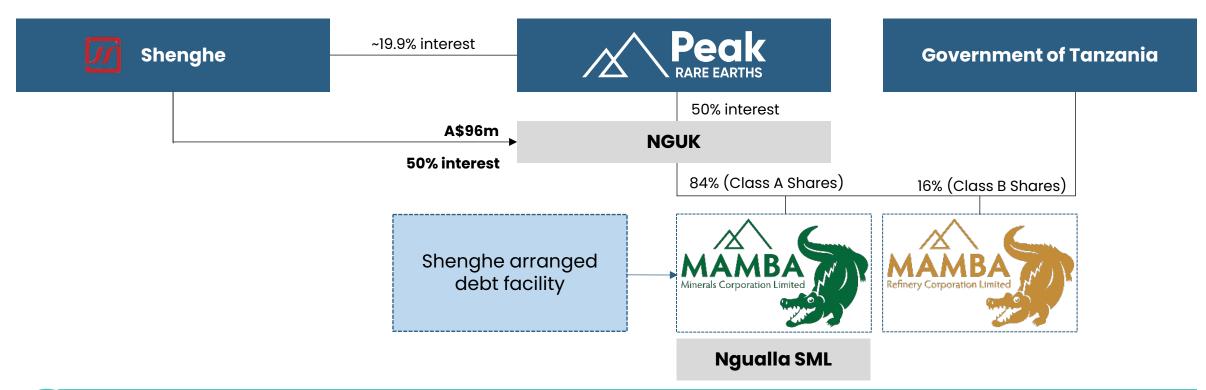




# Investment and funding structure ... a fully funded solution Shenghe to invest A\$96m to subscribe for a 50% stake in Ngualla Group UK Ltd (NGUK)<sup>1</sup>



Implied valuation of A\$0.36/share on a post-transaction basis represents a 100% premium over Peak's pre-announcement share price





Supports a technically enhanced and lower cost Ngualla Project with a fully funded solution and no requirement for Peak to contribute development equity funding



## Preparing for FID ... early and enabling works

## Advancement of Ngualla pre-development activities in preparation for FID

#### **Recently completed work**

- ✓ Expansion of Camp capacity (to 50 x pax)
- ✓ Maintenance and enhancement of Southern Access Road
- ✓ Upgrade of IT, communications and safety systems
- ✓ Development of new office building
- ✓ Geotechnical drilling, water bore testing and development
- ✓ Ore testing and variability analysis
- ✓ TANESCO power connection

#### **Work in progress**

- Extension of existing airstrip
- Development of borrow pits / quarries
- Commencement of pre-strip and early mining activities
- Geophysical survey





Connection to the TANESCO power grid and ongoing maintenance of the Southern Access Road



Songwe Regional Commissioner visit to the Ngualla Camp



## Preparing for FID ... resettlement and land compensation

## Comprehensive process substantially advanced

#### **Key objectives**

- √ Transparent and fair resettlement process
- ✓ Open and active engagement with the Ngwala community
- ✓ Adherence to Tanzanian law and best-practice international guidelines (IFC standards & Equator Principles)

#### Status update

- Process led by a highly experienced Tanzanian firm, Property Matrix
- Entailed comprehensive valuation and socio-economic survey
- Participation by all 193x Project Affected Persons
- Strong engagement with community and local and central government throughout the process
- Valuation and compensation schedules finalised
  - Government sign-off expected in early December





## 'Kazi Wajibu Utu' ... Work, Responsibility and Humanity

## Mamba continues to prioritise an active engagement process with nearby communities which underpins social development priorities

#### Social engagement planning

#### Historical and ongoing initiatives

- Construction of teachers houses and classrooms
- Reconstruction of Ngwala-Kininga Road
- Funding to community health clinic and provision of resident paramedic
- Sponsorship of the Mamba Minerals football league, Farmers Day (Nanenane) Tournament and inter-school examination competition
- First aid and snake antivenom training for community

#### New initiatives for the next 12 months

- Construction of two classrooms for the new Ngwala Secondary School
- Development of a police post
- Electrical works to support the Ngwala Maternity Clinic
- ✓ Major tree planting campaign



Annual Ngwala inter-school examination competition



First aid training held at the Ngualla Camp



## Indicative timeline ... targeting FID by the end of Q1 2025

## First concentrate scheduled for Q1 2027 - 24 months after a Final Investment Decision

Milestone	Date
Signing of non-binding Term Sheet	July 2024
Execution of binding legal agreement with Shenghe	Q4, 2024
Satisfaction of conditions precedent and financial close of Shenghe transaction	Q1, 2025
Final Investment Decision	Q1, 2025
Completion of construction	Q4, 2026
First concentrate	Q1, 2027
Completion of commissioning	Q1, 2027
Ramp-up	Q2, 2027



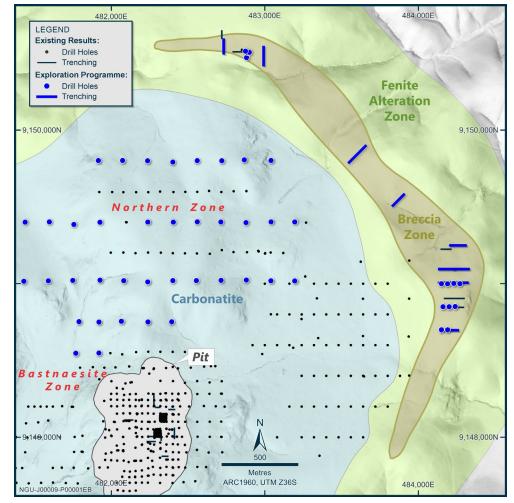
## Critical minerals exploration programme ... highly successful

Exploration activities advanced at both the Breccia Zone and Northern Zone including 4,200m of additional RC and DD drilling

#### **Progress to date**

- Development of geological model for Northern Zone (SRK)
- Assay of 344 trench samples from Breccia Zone<sup>1</sup>
  - o Confirmation of widespread fluorspar mineralisation at surface
- 57 drill holes for 4,200m completed and assayed<sup>2</sup>
  - o Widespread phosphate mineralisation across Northern Zone
  - Major high-grade fluorspar discovery within Breccia Zone
- Bioavailability analysis of phosphate from Northern Zone<sup>3</sup>
  - o Confirms potential use as direct-application fertiliser

	Northern Zone	Breccia Zone	Total
RC	44 holes / 3,104m	11 holes / 885m	55 holes / 3,989m
DD	-	2 holes / 211m	2 holes / 211m
Total	44 holes / 3,104m	13 holes / 1,096m	57 holes / 4,200m





<sup>1.</sup> See 5 February 2024 ASX Announcement 'Breccia Zone Trench Samples – Assay Results'

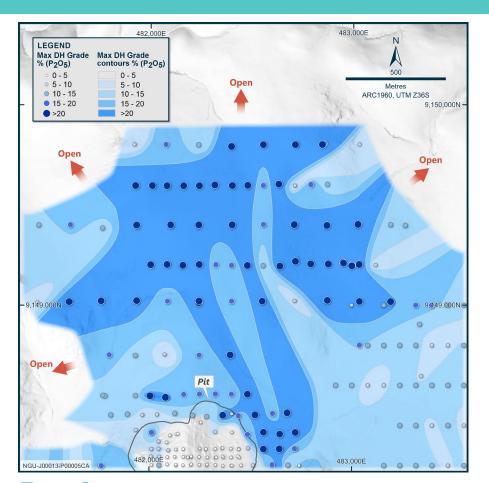
<sup>2.</sup> See 20 March 2024 ASX Announcement 'Major High-Grade Fluorspar Discovery' and 4 March 2024'Further Northern Zone Exploration Assay Results' for overview of drilling results

<sup>3.</sup> See 26 February 2024 ASX Announcement 'Phosphate Bioavailability Test Results'

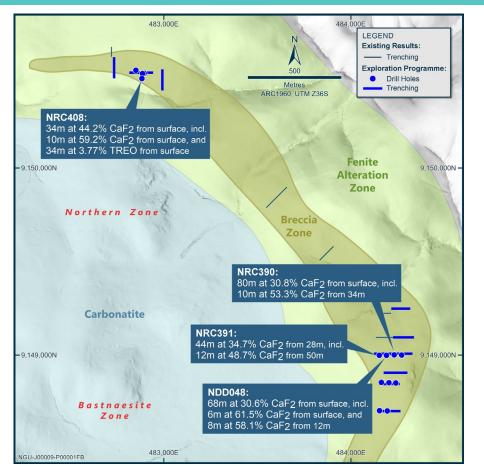
## Critical minerals exploration ... Northern and Breccia zones

Widespread and high-grade phosphate mineralisation in the Northern Zone and the potential for potential of a globally significant fluorspar deposit in the Breccia Zones<sup>1</sup>

#### **Northen Zone**



#### Breccia Zone





<sup>2.</sup> Refer to announcement 'Breccia Zone Trench Samples – Assay Results' on 5 February 2024 for overview of trenching results

<sup>3.</sup> Refer to announcement 'Major High-Grade Fluorspar Discovery' on 20 March 2024 for overview of drilling results

## Critical minerals ... a near-term phosphate opportunity

## Potential to expedite development of phosphate via collaboration with Minjingu Mines and Fertiliser<sup>1</sup>

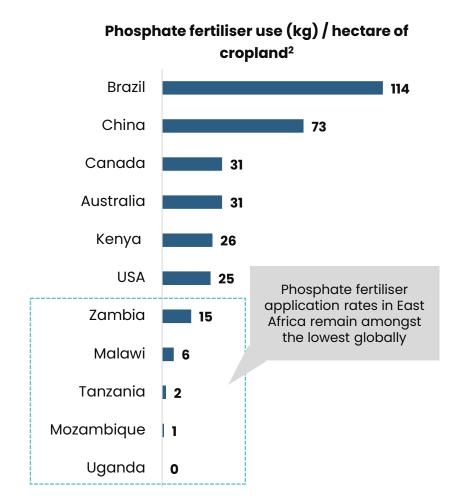
#### **Minjingu Mines & Fertiliser**



- Operates a Tanzanian phosphate mine
- Produces organic and blended fertilisers
- Distribution network into Southern and East Africa

#### MOU ... key terms

- Evaluation of collaboration across
  - Mining & beneficiation
  - Offtake & sales arrangements
  - Transport & logistics
  - Potential JV, co-investment & partnering structures
- Joint study group to expedite the development of a low-cost phosphate beneficiation flowsheet
- Initial term 12 months





## Recent capital raising ... supports key near-term activities

Proceeds will be used to progress key project workstreams and finalise Shenghe transaction ahead of a Final Investment Decision on the Ngualla Rare Earth Project



#### **Project pre-FID development costs**

- Advancement of early works
- EPCM tendering and documentation
- Finalisation of cost optimisation study
- Land relocation and compensation payments

Sources	A\$m	% of Total
Gross proceeds from Placement <sup>1</sup>	6.0	52.6%
Gross proceeds from SPP <sup>1</sup>	2.0	17.5%
Existing cash <sup>2</sup>	3.6	29.9%
Total sources	11.6	100%



#### Corporate, transaction and other costs

- General corporate overheads
- Working capital requirements
- Fees associated with finalisation of Shenghe transaction (financial advisor and legal costs)
- Offer transaction costs (Lead Manager and legal costs)

Uses <sup>1</sup>	A\$m	% of Total
Project costs*	4.5	38.8%
Equity and Shenghe transaction costs	4.1	35.3
Peak corporate costs	3.0	25.9%
Total uses	11.6	100%

<sup>\*</sup> Land compensation, early works and studies



## Teesside site ... potential for near-term liquidity

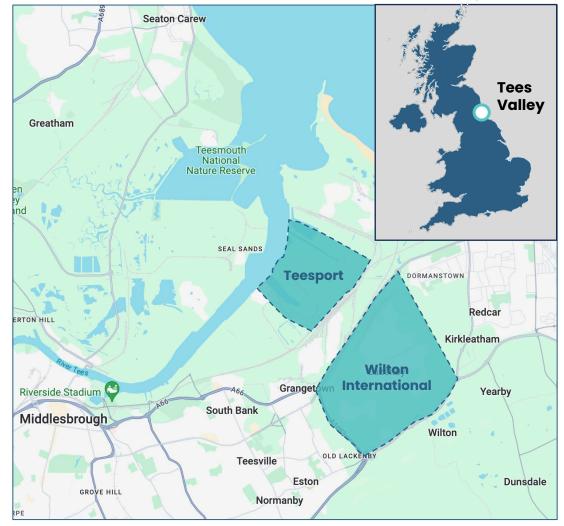
## A sales process for Teesside is underway

#### Teesside ... key attractions

- √ 19ha site sitting within Wilton International industrial zone in Tees Valley
- √ Within 3km of Teesport deepwater port 3<sup>rd</sup> largest in UK by volume
- ✓ Over-the-fence power, air supply and water treatment facilities
- √ "Freeport" status tax, planning and customs benefits

#### **Current status**

- Acquisition of freehold title in March 2024 for £125k
  - Follows the exercise of option for a 250-year lease in May 2021 for £1.9m
  - Supports higher value and greater flexibility around future development & monetisation options for the site
- No longer a core asset given medium-term strategy of developing
   Tanzanian downstream operations including MREC
- A formal sales process has been initiated following strong inbound interest





## Peak catalysts ... up to and beyond a Ngualla FID

Peak is in the strongest position in its history with a highly credentialed development partner, a pathway to a fully funded development solution and multi-commodity optionality



#### Construction

Progress of Early Works

Finalise EPC / EPCM agreement

Commencement of construction



#### Technical

Optimisation study and revised project costs

Shenghe technical collaboration

Advancement of downstream options



#### **Funding**

Sale of Teesside site

Shenghe investment and debt facility

Completion of Tranche 2 Placement and SPP



#### **Exploration**

Further exploration drilling and fieldwork

Potential maiden Resource for Northern Zone

Partnerships targeting other commodities





## Ore Reserves and Mineral Resources ... world-scale and high-grade

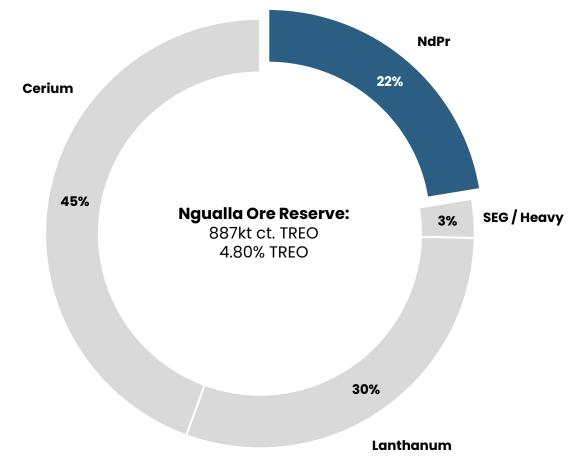
#### Initial mine life of 24 years supported by high-grade Ore Reserves, which account for less than 20% of Mineral Resources

#### Ore Reserve (October 2022)<sup>1</sup>

Classification	Ore tonnes (Mt)	TREO grade (%)	Contained TREO (kt)
Proved	17.0	4.78%	813
Probable	1.5	5.10%	74
Total	18.5	4.80%	887

#### **Mineral Resource (February 2016)**

Classification	Tonnage (Mt)	TREO grade (%)	Contained TREO (kt)
Measured	86.1	2.61%	225
Indicated	112.6	1.81%	2,040
Inferred	15.7	2.15%	340
Total	214.4	2.15%	4,620





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