



The Next Major Player in Rare Earths

Africa Down Under Conference

September 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 <https://www.peakrareearths.com/announcements/>. 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.

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

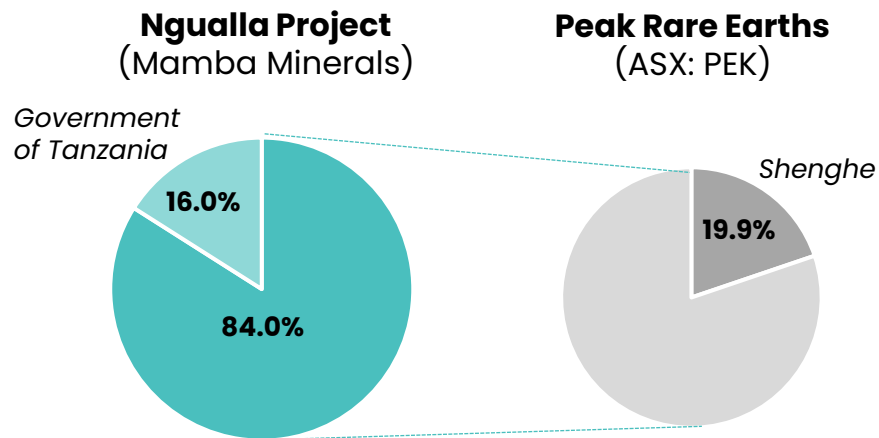
Peak Rare Earths and Mamba Minerals ... snapshot

Focused on the development of the Ngualla Rare Earth Project with the support of major shareholder, Shenghe, and the Government of Tanzania

Key assets



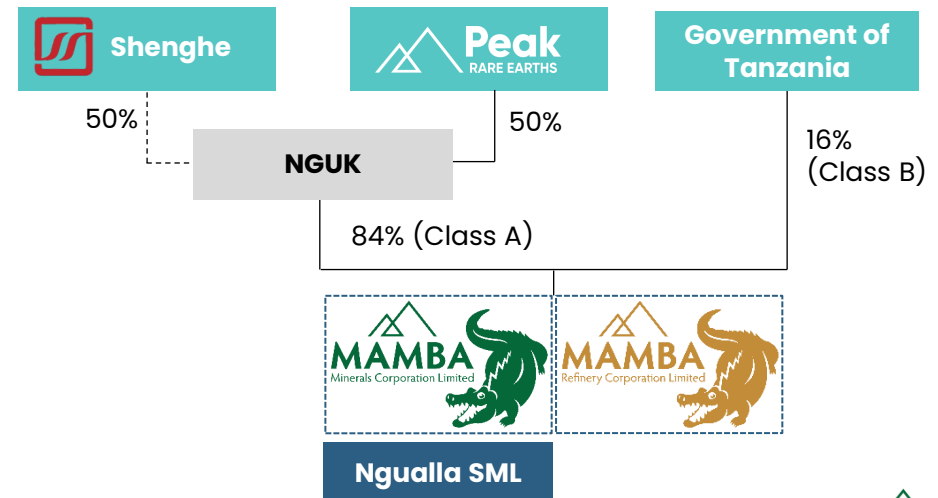
Group structure - current



Capitalisation summary

Ordinary Shares on Issue 266.4m	Share Price 3 Sept 2024 A\$0.210/sh
Market Capitalisation A\$55.9m	Net Cash 30 June 2024 A\$7.6m

Group structure - post proposed Shenghe transaction ¹



Ngualla Rare Earth Project ... a world-class project

One of the largest and highest grade undeveloped rare earth deposits in the world, with significant exploration and development upside

High-grade Ore Reserve¹

- TREO - 4.80% and NdPr - 1.02%

Multi-generational

- 214Mt Mineral Resource and initial 24 year life¹

Low radionuclides¹

- U - 15 ppm and Th - 53ppm

World scale²

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

Significant exploration upside

- Includes fluorspar, niobium and phosphate



The Ngualla Project ... the most advanced rare earth development project

Recent non-binding Term Sheet with Shenghe positions Ngualla as the only rare earth project globally with a complete offtake, development and funding solution¹



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

Tanzania ... open for business

Rising international visibility and a rapidly growing economy

Tanzania economy ... at a glance

- Economic Freedom score of 60.0 – **4th 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**

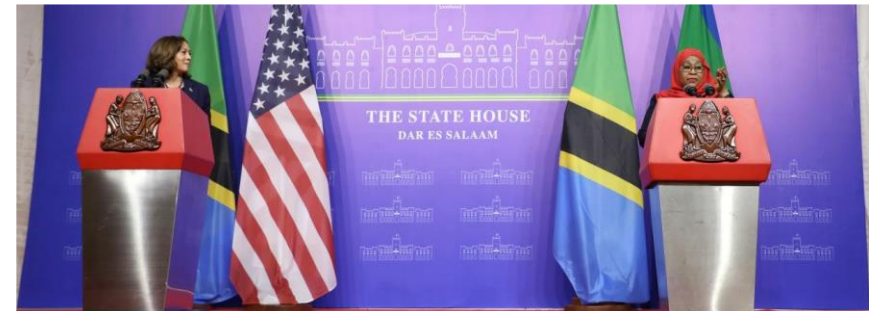
November 2023: **US\$1b contract** executed with China Civil Engineering Construction Corporation (CCECC) to upgrade part of the existing TAZARA railway



Ongoing development of national standard gauge network



Recent completion of 2GW Julius Nyerere Hydropower Station

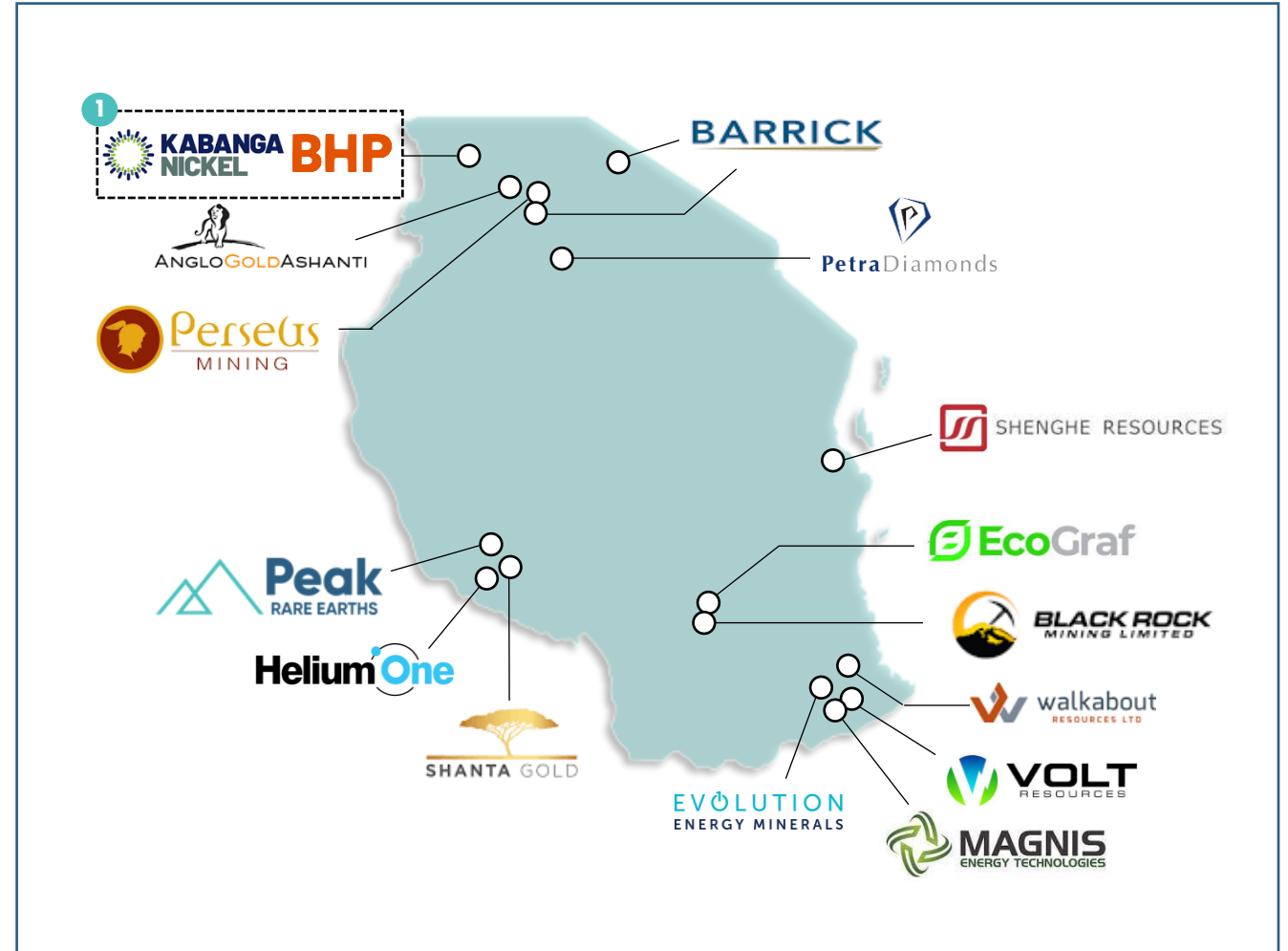


US Vice President Kamala Harris' Tanzanian visit (March 2023)

Tanzania ... a rapidly growing mining sector

Mining development continues to be prioritised under the new Tanzanian Government

Recent Special Mining Licence grants		
Project	Commodity	Date granted
Kabanga	Nickel	27 October 2021
Nyanzaga	Gold	9 December 2021
Fugoni	Mineral Sands	14 December 2021
Williamson	Diamonds	9 December 2021
Mahenge	Graphite	7 September 2022
Ngualla	Rare Earths	26 April 2023
Epanko	Graphite	18 April 2023
Chilalo	Graphite	18 April 2023



Peak Rare Earths' Framework Agreement signing (April 2023)



1. BHP has an option to earn up to 51% of the Kabanga Nickel Project. To date, BHP has invested a total of US\$90m in exchange for a 14% project interest



Peak, Mamba and Shenghe ... a transformational partnership

Offtake, investment and development agreements with Shenghe underpin an integrated development solution¹

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



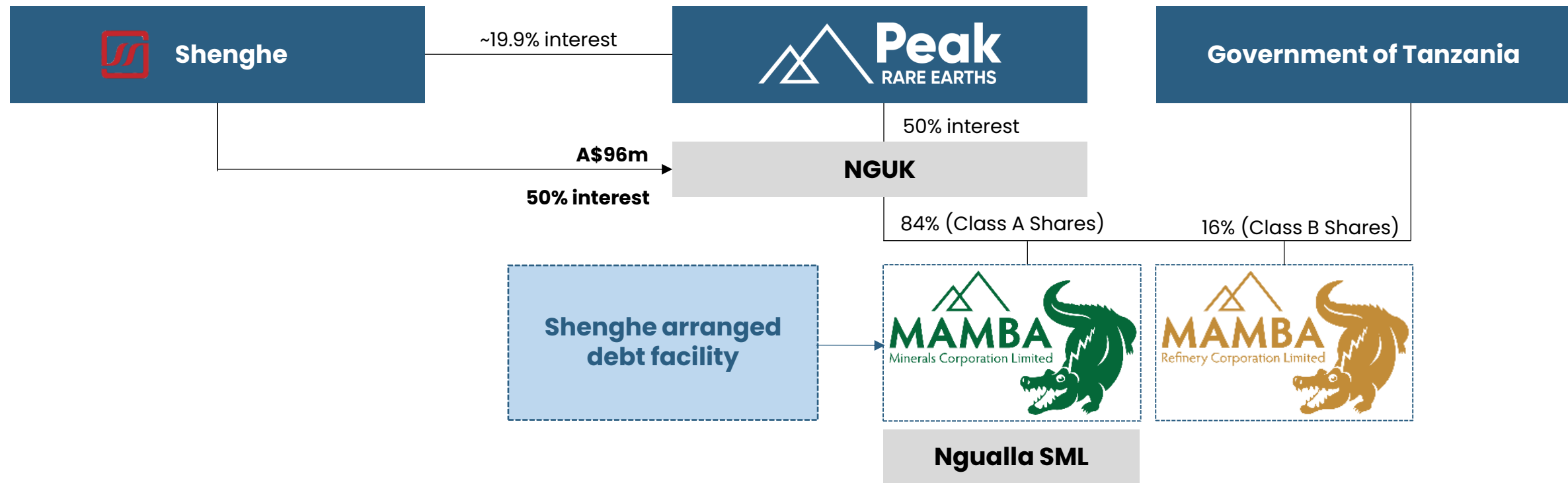
We continue to believe that the Ngualla Project is the premier undeveloped rare earth project in the world. This Term Sheet demonstrates our commitment to work with Peak and Mamba Minerals to further optimise the Ngualla Project and to expedite its development and funding

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

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)

✓ 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

Integrated solution... supported by a well credentialed partner

Shenghe is a well-capitalised and technically strong strategic partner and a key contributor to MP Materials' successful restart of the Mountain Pass Project

Shenghe overview



- ✓ Peak's **largest shareholder** with ~19.9% shareholding
- ✓ Shanghai listed non-SOE with ~**US\$1.9b** market capitalisation
- ✓ **Largest importer of rare earth concentrate** into China
- ✓ Internationally recognised expertise in mining and processing **bastnaesite mineralisation**
- ✓ Recent acquisition of Strandline Resources' **Tanzanian mineral sands project portfolio**

Shenghe overseas rare earths investments



9.2% holding



100% holding



7.7% holding



50% holding



19.9% holding



10.0% holding

Shenghe's role in MP Materials



MP Materials Overview

- NYSE listed with a market capitalisation of ~**US\$2.1b**
- Operates Mountain Pass – world's **2nd largest rare earth mine**
- Currently sells a bastnaesite mineral concentrate
 - Exporting ~**40ktpa of concentrate to Shenghe**
- Moving downstream into NdPr Oxide and magnet production
 - Recently produced first NdPr Oxide

Shenghe's contribution to MP Materials

- Founding investor in restart of mine and **7.7% shareholding**
- ~**US\$80m** in funding support (prepayment)
- Technical support for restart and ramp-up
- 100% offtaker of bastnaesite concentrate

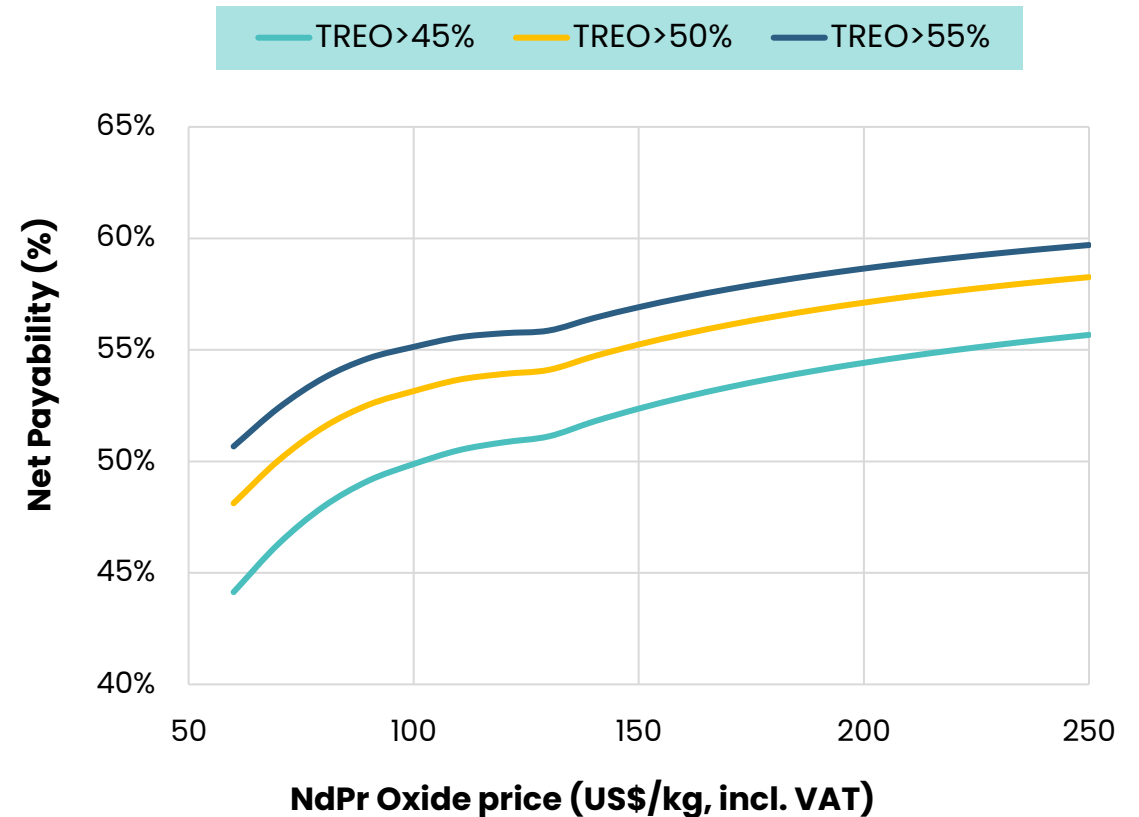
Binding offtake agreement ... 'bankable' with high payability

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

Binding offtake agreement – key terms

- ✓ 100% of rare earth concentrate
- ✓ Minimum of 50% of intermediate and final rare earth products
- ✓ Take or pay arrangements
- ✓ Initial term of 7 years

Net payability of Ngualla concentrate (%)¹

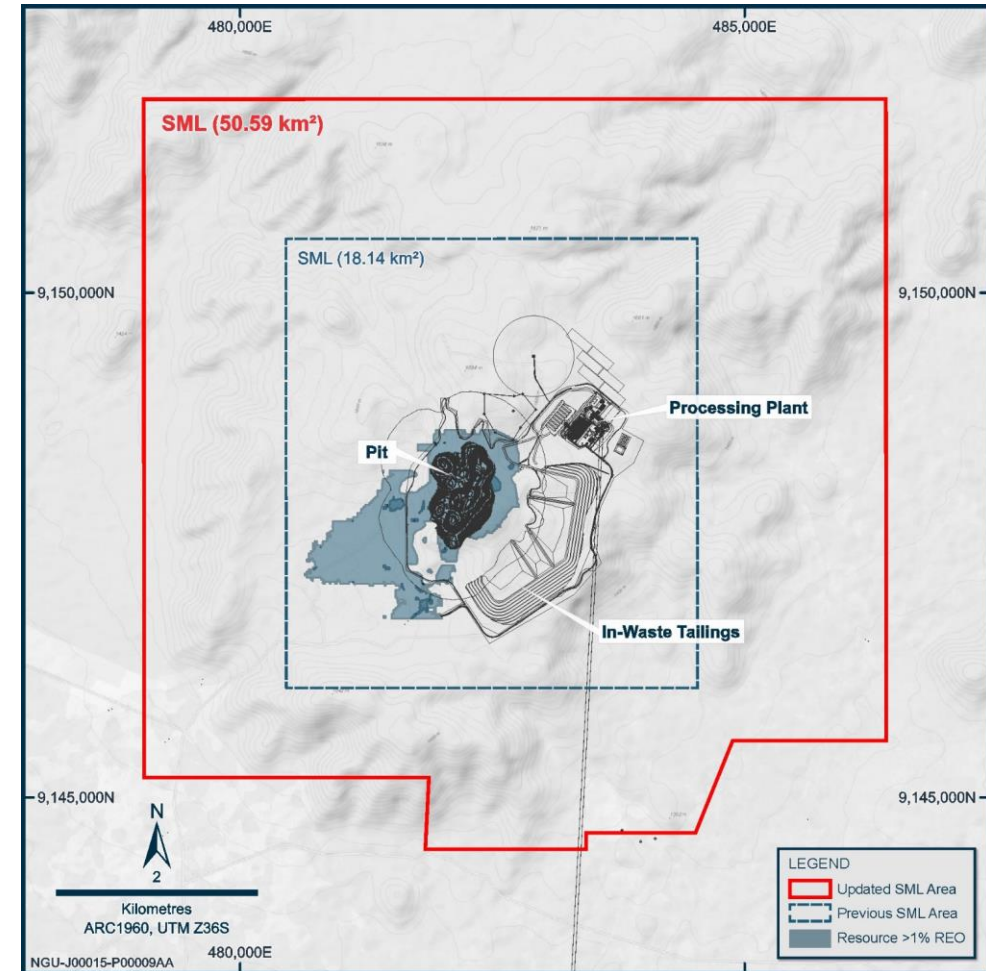


Enlargement of SML area at Ngualla

With support from the Government of Tanzania, SML area successfully expanded from ~18km² to ~51km²

Ngualla SML expansion ... key benefits

- ✓ Additional footprint for development of the Ngualla Rare Earth Project
- ✓ Supports future exploration of the broader Ngualla deposit and neighbouring area
- ✓ Offers a 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



Ngualla Project optimisation opportunities and schedule

Collaboration with Shenghe on cost and optimisation 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 being 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

Indicative timeline ... supports a Final Investment Decision of 31 December 2024

Collaboration by Peak, Mamba and Shenghe on further optimising the Ngualla Project and expediting its development

	2024						2025
	Jul	Aug	Sept	Oct	Nov	Dec	Jan
Signing of non-binding Term Sheet	✓						
Transaction documentation and execution			✓				
Shareholder meetings to approve transaction				✓			
Cost and layout optimisation				✓			
EPCM tender							
Award of EPCM contract						✓	
Early and Enabling Works							
Final Investment Decision						✓	
Commencement of construction							✓

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 at site
- ✓ Development of new office building at site
- ✓ Geotechnical drilling , water bore testing and development
- ✓ Ore testing and variability analysis
- ✓ TANESCO power connection to Camp

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

'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 local community 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
- ✓ Commencement of a tree planting campaign aimed at planting 300 trees around schools, health centres and public areas



Annual Ngwala inter-school examination competition



First aid training held at the Ngualla Camp

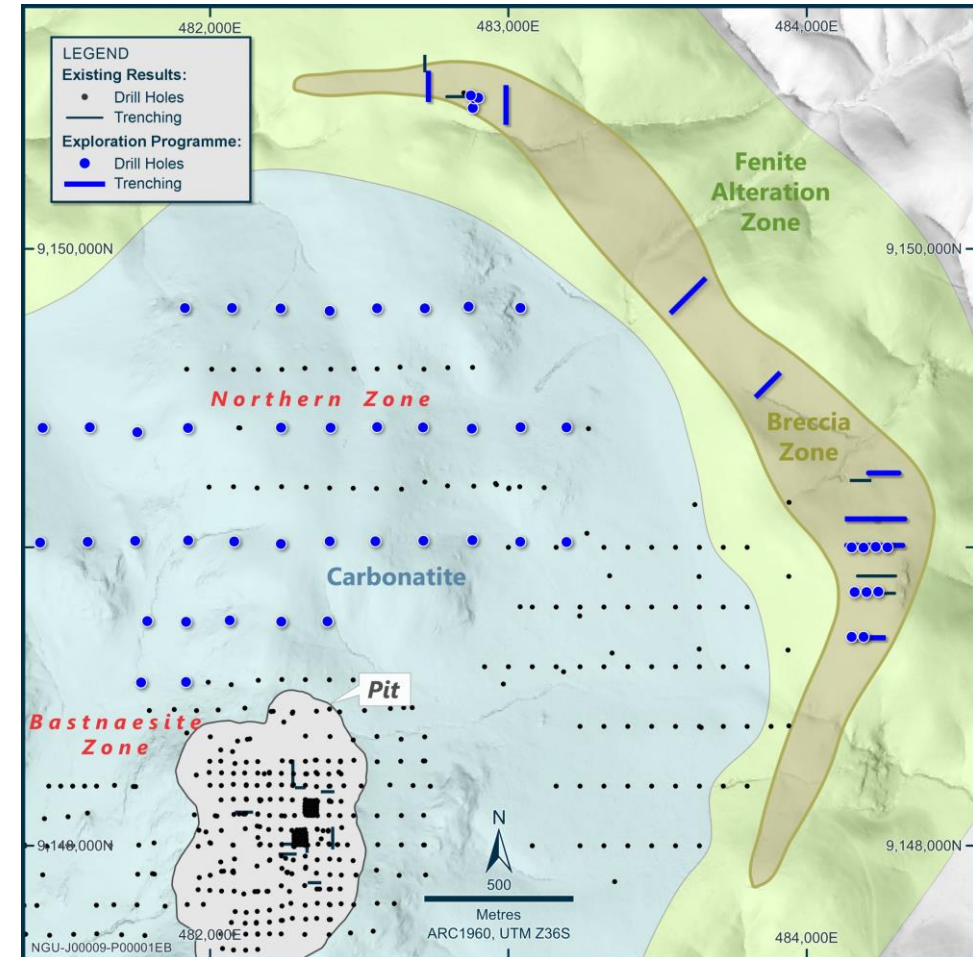
Critical minerals exploration programme ... highly successful

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
- Assay of 344 trench samples from Breccia Zone¹
 - Confirmation of widespread fluor spar mineralisation at surface
- 57 drill holes for 4,200m completed and assayed²
 - Widespread phosphate mineralisation across Northern Zone
 - Major high-grade fluor spar discovery within Breccia Zone
- Bioavailability analysis of phosphate from Northern Zone³
 - Confirms potential use as direct-application fertiliser

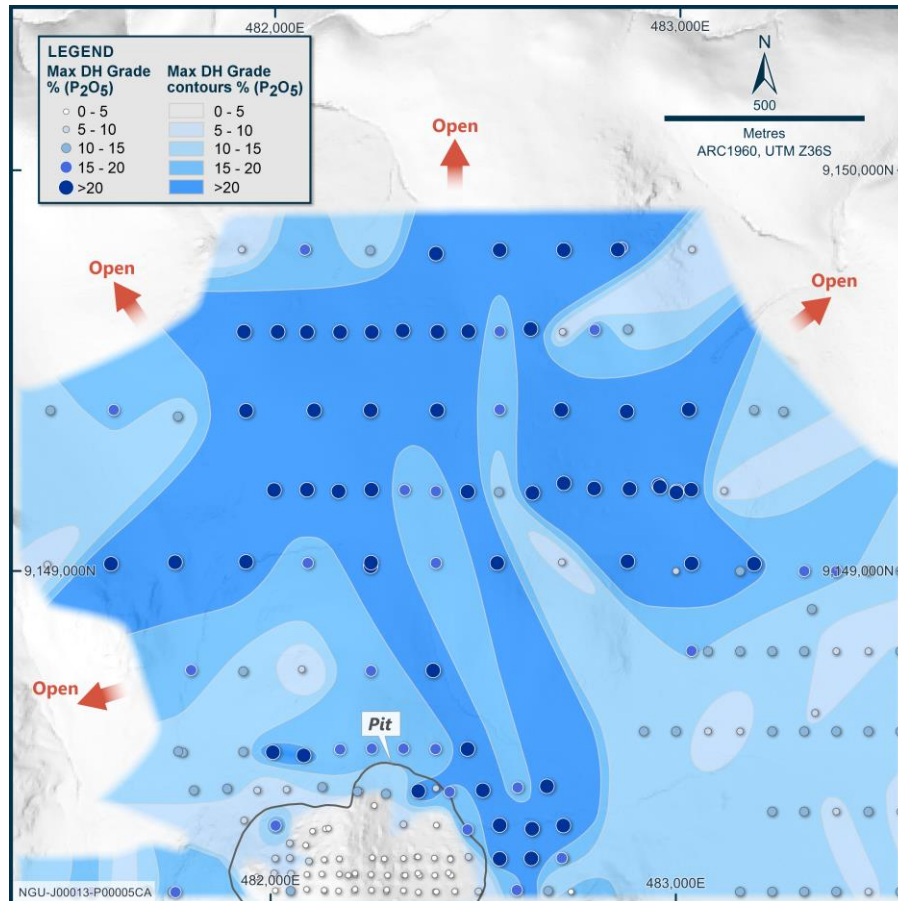
	Northern Zone	Breccia Zone	Total
RC	44 holes / 3,104m	11 holes / 885m	55 holes / 3,989m
DD	-	2 holes / 211m	2 holes / 211m
Total	44 holes / 3,104m	13 holes / 1,096m	57 holes / 4,200m



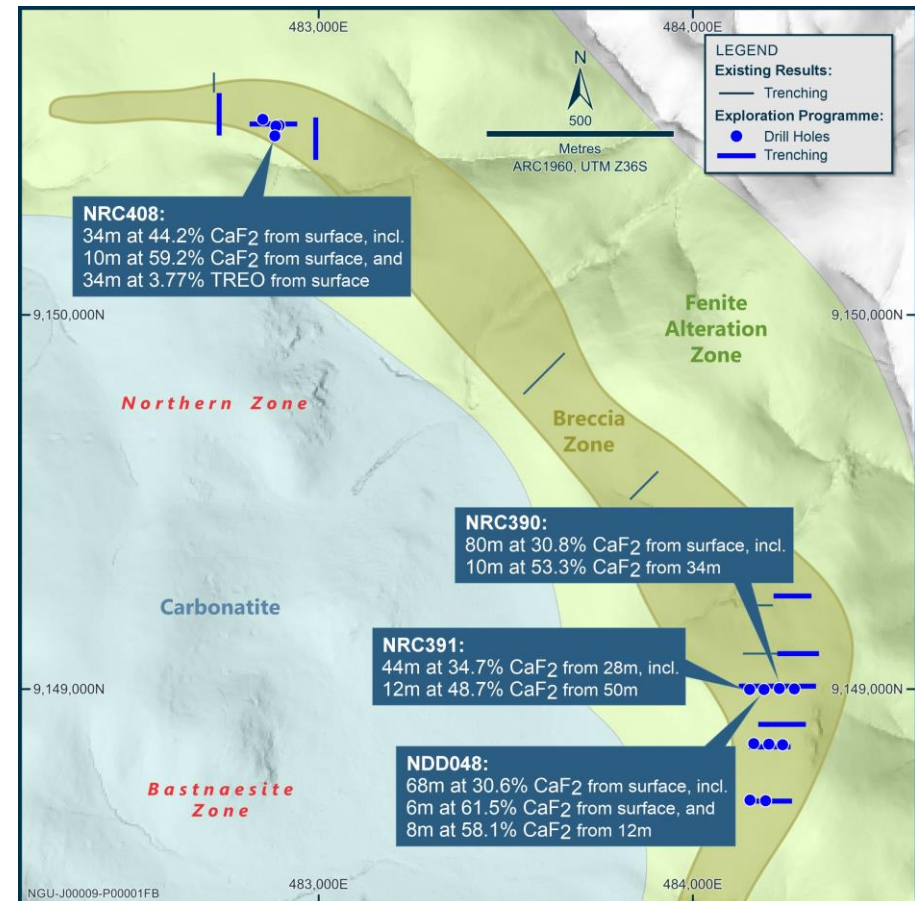
Critical minerals exploration ... Northern and Breccia zones

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^{1,2}

Northern Zone



Breccia Zone



Advancing Ngualla ... up to and beyond a Final Investment Decision

Supportive partnerships with Shenghe and the Government of Tanzania, a fully funded development solution and multi-commodity optionality



Construction

Progress of Early Works

Appointment of EPC / EPCM lead

Finalisation of construction contract



Technical

Completion of optimisation study and revised project costs

Shenghe technical collaboration

Advancement of downstream options



Funding

Sale of Teesside site

Completion of Shenghe investment and debt facility

Targeted FID and funding Financial Close



Exploration

Further exploration drilling and fieldwork

Potential maiden Resource for Northern Zone

Partnerships targeting other commodities

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