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# The next power in rare earths

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**General Meeting:**  
Shenghe offtake agreement

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**17 June 2024**



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**ASX: PEK**

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## Compliance Statement

This presentation references the ASX announcements dated 24 October 2022 “Completion of Ngualla Project BFS Update”, 30 November 2023 “Completion of Feed Study”, 5 February 2024 “Breccia Zone Trench Samples – Assay Results” and 20 March 2024 “Major High-grade Fluorspar Discovery”, which are available to view on <https://www.peakrareearths.com/announcements/>. Other than changes to the FEED Study rare earth price assumptions as set out in the December 2023 Quarterly Activities Report and in the Review of Operations in the December 2023 Half-Year Financial Report, the Company confirms at this time it is not aware of any other new information or data that materially affects the information included in announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant announcements continue to apply and have not materially changed. The Company further confirms that at this time the form and context in which the Competent Person’s findings presented in the announcements have not materially changed from the original announcements.

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

# The Ngualla Project ... the most advanced rare earth project globally

Binding agreement with Shenghe positions Peak as one of the only rare earth developers to have a complete offtake solution for its project



## KEY LICENCES IN PLACE

- Special Mining Licence granted and Framework Agreement executed with the Government of Tanzania
- Environmental Certificate in place supported by comprehensive ESIA



## TECHNICALLY DE-RISKED

- Bankable Feasibility Study Update and FEED Study recently completed
- Further cost optimisation initiatives underway



## PROJECT FUNDING SIGNIFICANTLY PROGRESSED

- Indicative debt funding appetite of US\$177m from a range of reputable African development and commercial banks
- Discussions around project-level investment significantly advanced



## BINDING OFFTAKE SOLUTION<sup>1</sup>

- Take-or-pay agreement for 100% of concentrate and 50% of future downstream products from Ngualla
- Initial seven-year term supports project financing arrangements

# Ngualla Rare Earth Project ... a world class 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<sup>1</sup>

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

- U - 15 ppm and Th - 53ppm

## Compelling project economics<sup>2</sup>

- NPV<sub>8%</sub> of US\$809m and IRR of 30.8%

## Significant exploration upside

- Includes fluorspar, niobium and phosphate



# Recent milestones

A pathway to a fully funded Ngualla Project with multi-commodity optionality and potential near-term liquidity from a sale of Teesside

- 1. Rapid transformation of the Tanzanian economy and mining sector**
- 2. Progressing co-operation with Shenghe on offtake and a potential project investment**
- 3. Indicative debt funding appetite ~US\$177m**
- 4. Enlargement of SML area**
- 5. Ngualla Project optimisation exercise is underway**
- 6. Opportunity to monetise the Teesside site**
- 7. Critical minerals exploration success**

# Tanzania ... open for business

## Rising international visibility and a rapidly growing economy

### 1 Tanzania ... at a glance

- Economic Freedom score of 60.0 – **4<sup>th</sup> highest in Africa**
- Politically stable – **40+ years** as a multi-party democracy
- Average GDP growth over last ten years of **6.1% (one of the fastest growing economies in Africa)**
- 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 both China and the Middle East
- Member of the Commonwealth



2GW Julius Nyerere Hydropower Station under construction

### 2 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 US export financing**

**October 2023:** Agreement with Dubai state-owned ports operator DP World to **operate four berths at Dar es Salaam Port** for 30 years

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



U.S. Vice President Kamala Harris's visit to Tanzania (March 2023)

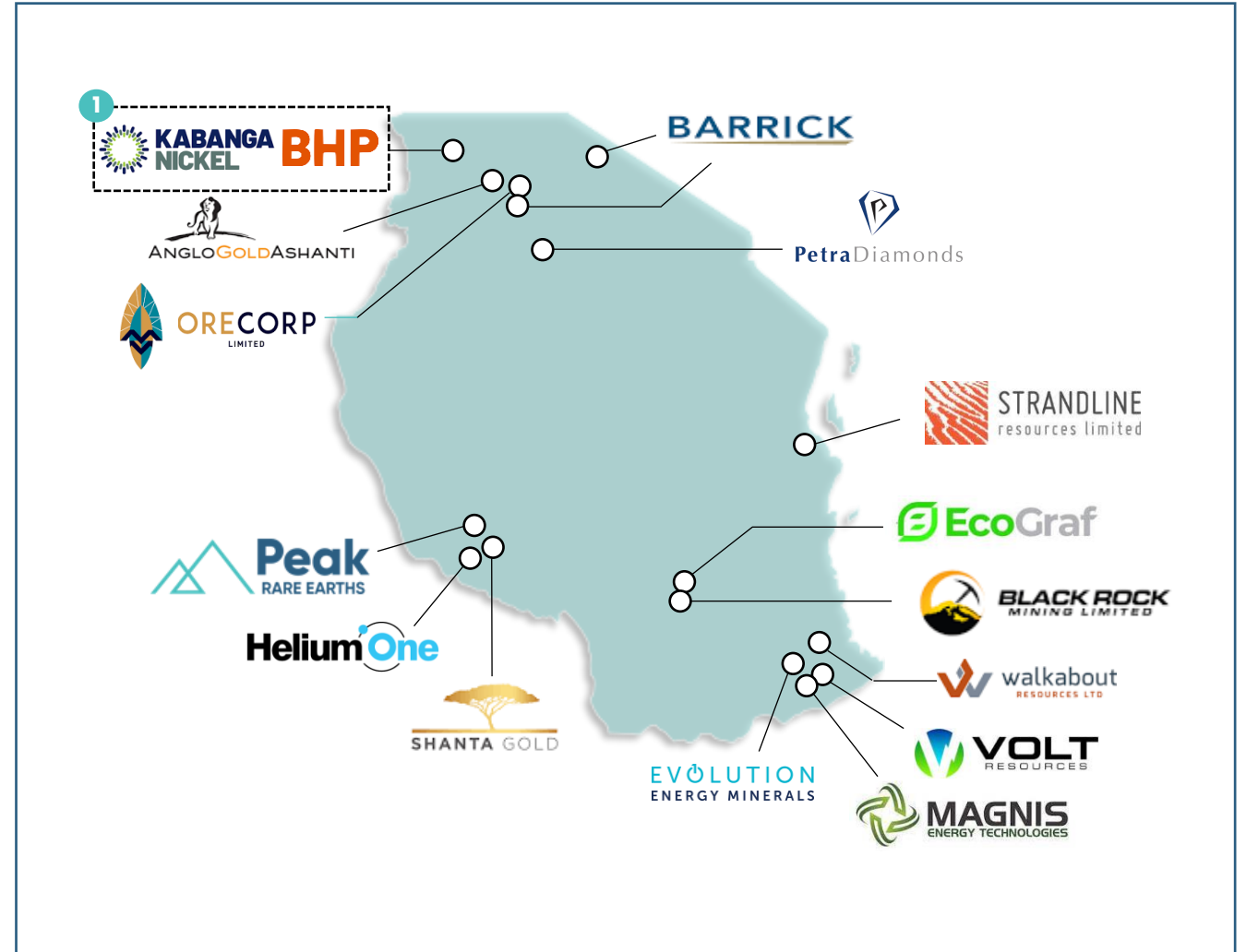
# Tanzania ... a rapidly growing mining and resources sector

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     |
| <b>Ngualla</b>                       | <b>Rare Earths</b> | <b>26 April 2023</b> |
| Epanko                               | Graphite           | 18 April 2023        |
| Chilalo                              | Graphite           | 18 April 2023        |



Peak Rare Earths' Framework Agreement signing (April 2023)



# Shenghe agreement ... delivers a full offtake solution for the project

## Binding offtake agreement is now subject to only 2x remaining CPs

### 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 (%)<sup>1</sup>

| NdPr Oxide price<br>(US\$/kg, incl VAT) | Concentrate Grade (%TREO) |       |       |
|---|---------------------------|-------|-------|
|   | >45%                      | >50%  | >55%  |
| 80                                      | 48.0%                     | 51.5% | 53.7% |
| 140                                     | 51.8%                     | 54.7% | 56.4% |
| 200                                     | 54.4%                     | 57.1% | 58.6% |

### Conditions Precedent ... satisfied or waived

- Approval by the boards of Mamba Minerals and Mamba Refinery
- Novation of the agreement from Peak to Mamba Minerals and Mamba Refining
- Parent company guarantee by Shenghe
- Approval by the board and/or shareholders of Shenghe
- Financial close within 6 months of FEED
- Approval by Peak shareholders (*Shareholders' Meeting – 17 June*)
- Approval by the Tanzanian Mining Commission

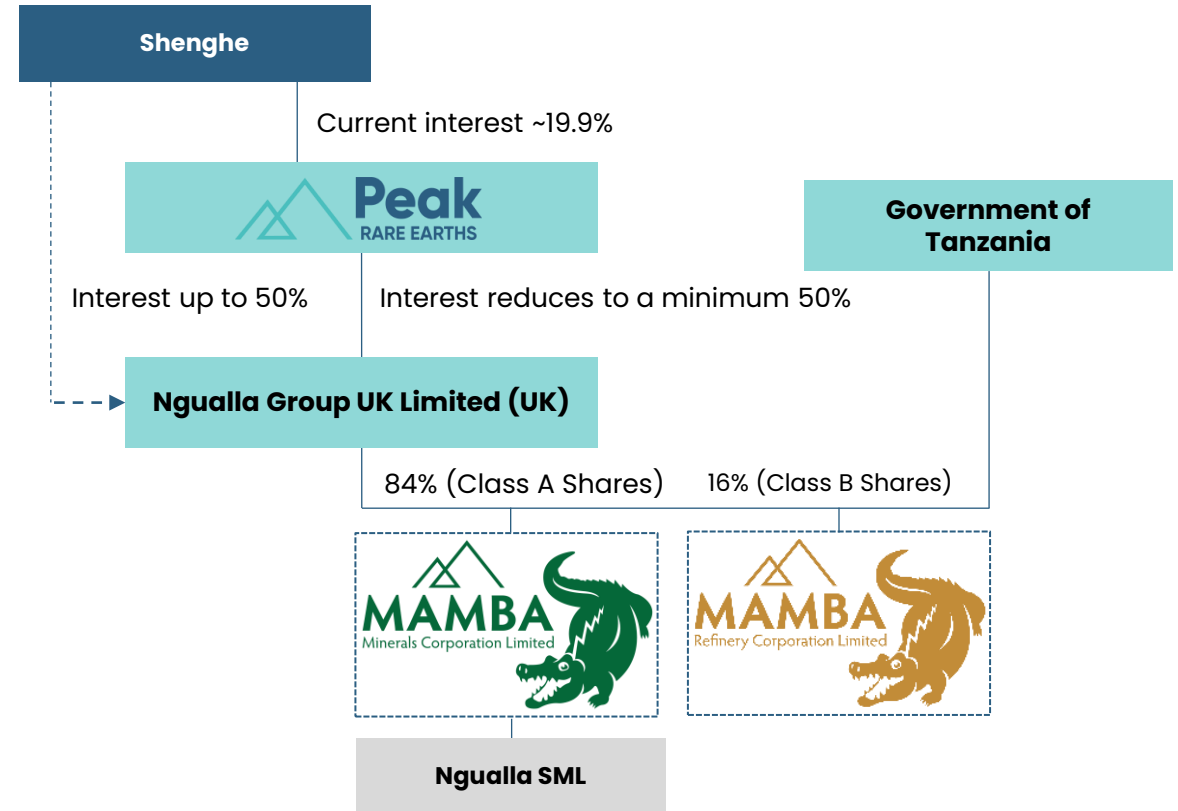


# Co-operation with Shenghe ... Ngualla Project development and funding

Whilst negotiations are continuing, broad co-operation and transaction principles have been agreed

## Agreed co-operation and transaction principles

- Shenghe to subscribe for an interest of up to 50% in Ngualla Group UK Limited (NGUK)
- Continued collaboration on further capital and operational cost savings
- Shenghe to tender a proposal to provide an EPC, EPS or EPCM solution
- Peak and Shenghe to finalise negotiations on an agreed value for Shenghe's interest in NGUK
- Both parties to work together towards a Final Investment Decision by 31 Dec 2024



**A key objective is for a Ngualla Project investment to be at a materially higher valuation than implied by Peak's current share price**

# Advancement of project debt financing

## Indicative debt funding appetite for the Ngualla Project to date of ~US\$177m

### Project financing ... status update

- Strong appetite from lenders across
  - African Development Finance Institutions
  - Export Credit Agencies
  - Commercial banks
- Non-binding expressions of interest for funding of **~US\$177m**
- Discussions continuing with other commercial and development banks
- In addition to CRDB, several other Tanzanian banks have expressed interest in arranging a significant local tranche
- Targeting a fully formed funding consortium and signed term sheet by early **July 2024**

### Indicative proposals received to date

#### ECA cover



**Indicative provision of political and commercial risk cover**

#### Senior lenders



**Indicative funding of US\$65m**

Unnamed South  
African  
Development Bank

**Indicative funding of US\$53m**



**Indicative funding of US\$50m**

Unnamed East  
African Commercial  
Bank

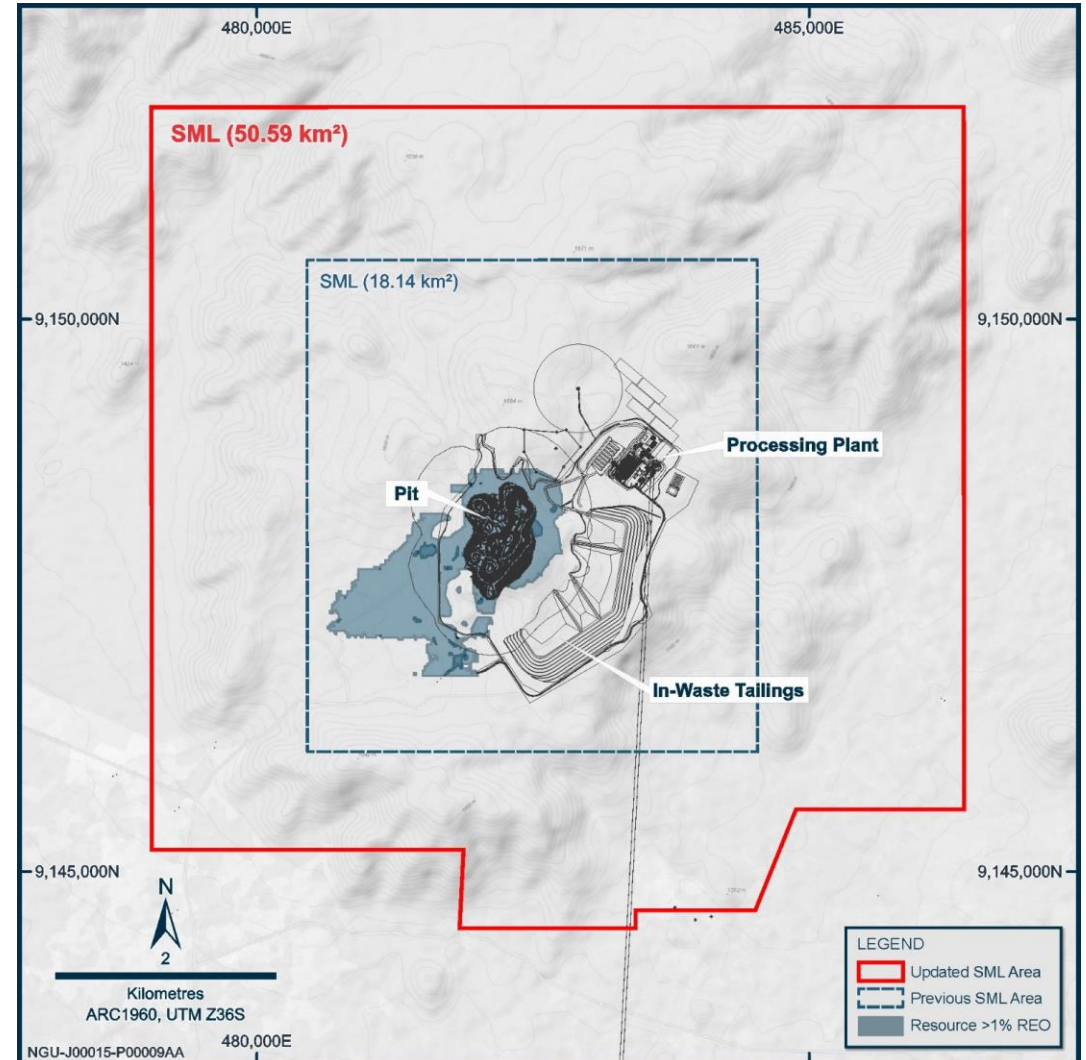
**Indicative funding of US\$9m**

# Enlargement of SML area at Ngualla

SML area successfully expanded from ~18km<sup>2</sup> to ~51km<sup>2</sup>

## 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

Wood engaged to deliver revised “bankable” cost and production estimates ahead of targeted Final Investment Decision in December 2024

## Optimisation opportunities

### 1. Building relocation and layout optimisation

- Relocation of buildings, plant and storage facilities from Ngualla Hill to flatter areas
- Reduce bulk-earthworks and required capital expenditure on Plant Access Road

### 2. Optimisation of contract packages

- Reduction in unit rates via combining earth works, civils, quarry and mining

### 3. Deferral of new airstrip

- Remediate existing airstrip

### 4. Increased plant availability

- Revised plant availability from 80% to 88% based on peer benchmarking exercise

### 5. Re-scope buildings and storage facility

- Utilise lower cost local construction solutions
- Remove unnecessary coverings and reduce storage capacity

### 6. More competitive tendering solutions

- Reductions in logistics and power costs

## Revised FID provides time to:

- Progress optimisation opportunities
- Finalise additional sterilisation drilling
- Further advancement of critical minerals exploration and development programme
- Complete land valuation and RAP
- Develop an integrated project and community water solution
- Align with Shenghe investment and project financing process

# Teesside site ... a potential sale is being evaluated

## Opportunity to monetise Teesside in the near-term to support project related activities

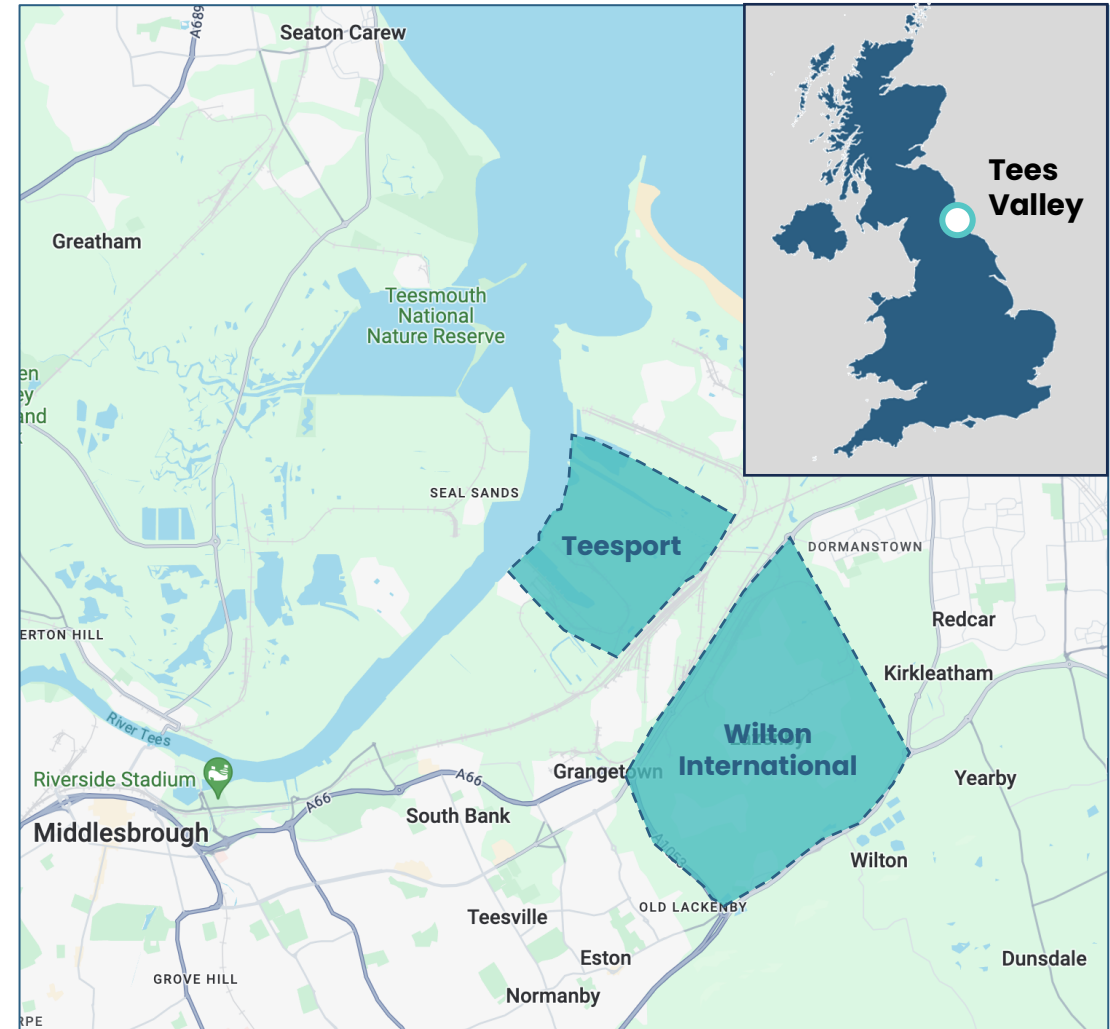
### Teesside ... key attractions

- ✓ 19ha site sitting within Wilton International industrial zone in Tees Valley
- ✓ Within 3km of Teesport deepwater port – UK's third largest site 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
- Site no longer a core asset given longer-term intention of developing Tanzanian downstream operations including MREC

**Following unsolicited interest in the site, Peak has initiated a sales process**



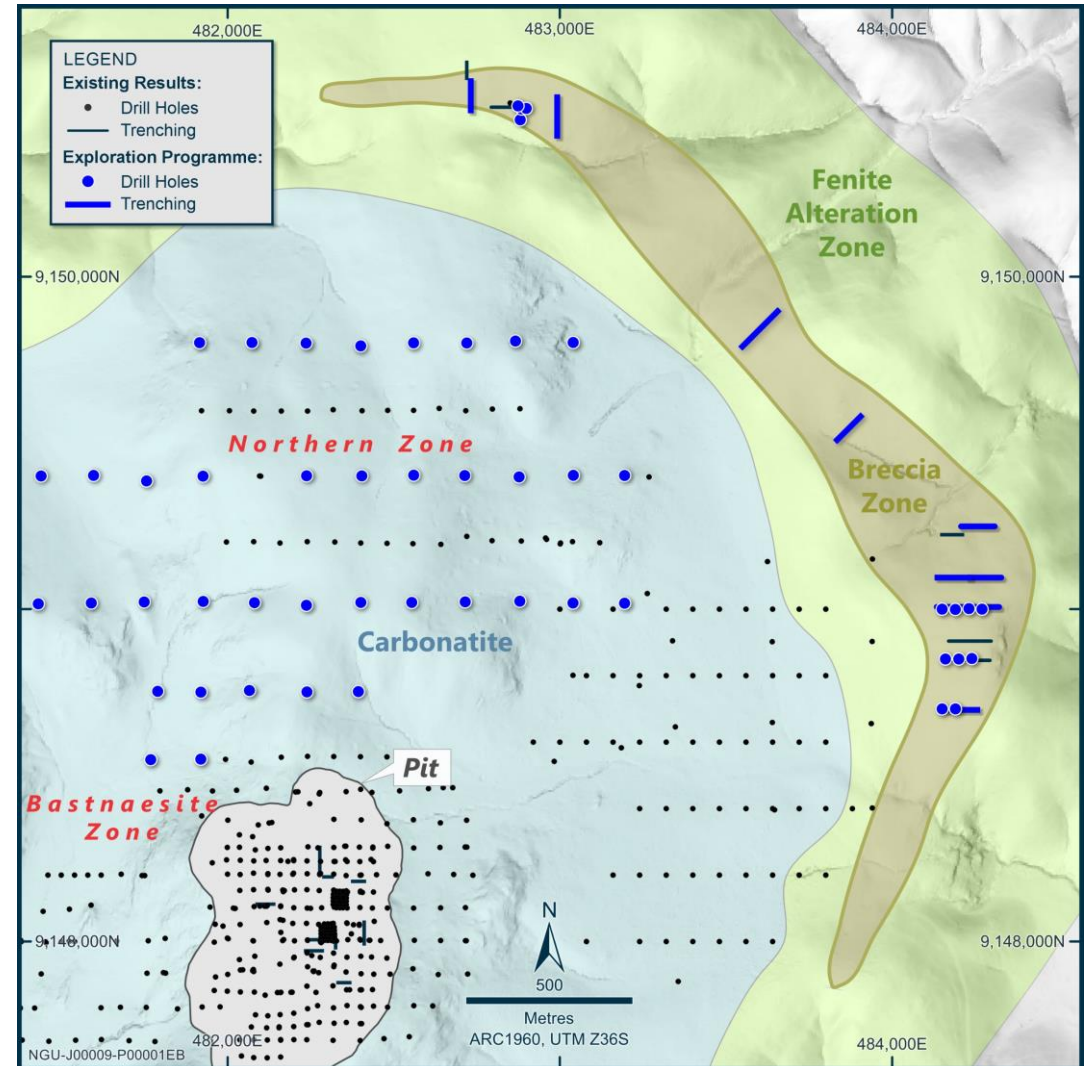
# Critical minerals exploration programme ... highly successful

## 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
  - Confirmation of widespread fluor spar mineralisation at surface
- 57 drill holes for 4,200m completed and assayed<sup>1</sup>
  - Widespread phosphate mineralisation across Northern Zone
  - Major high-grade fluor spar discovery within Breccia Zone
- Bioavailability analysis of phosphate from Northern Zone
  - Confirms potential use as direct-application fertiliser

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



# Critical minerals exploration ... Northern Zone

## Widespread and high-grade phosphate mineralisation<sup>1</sup>

### Overview

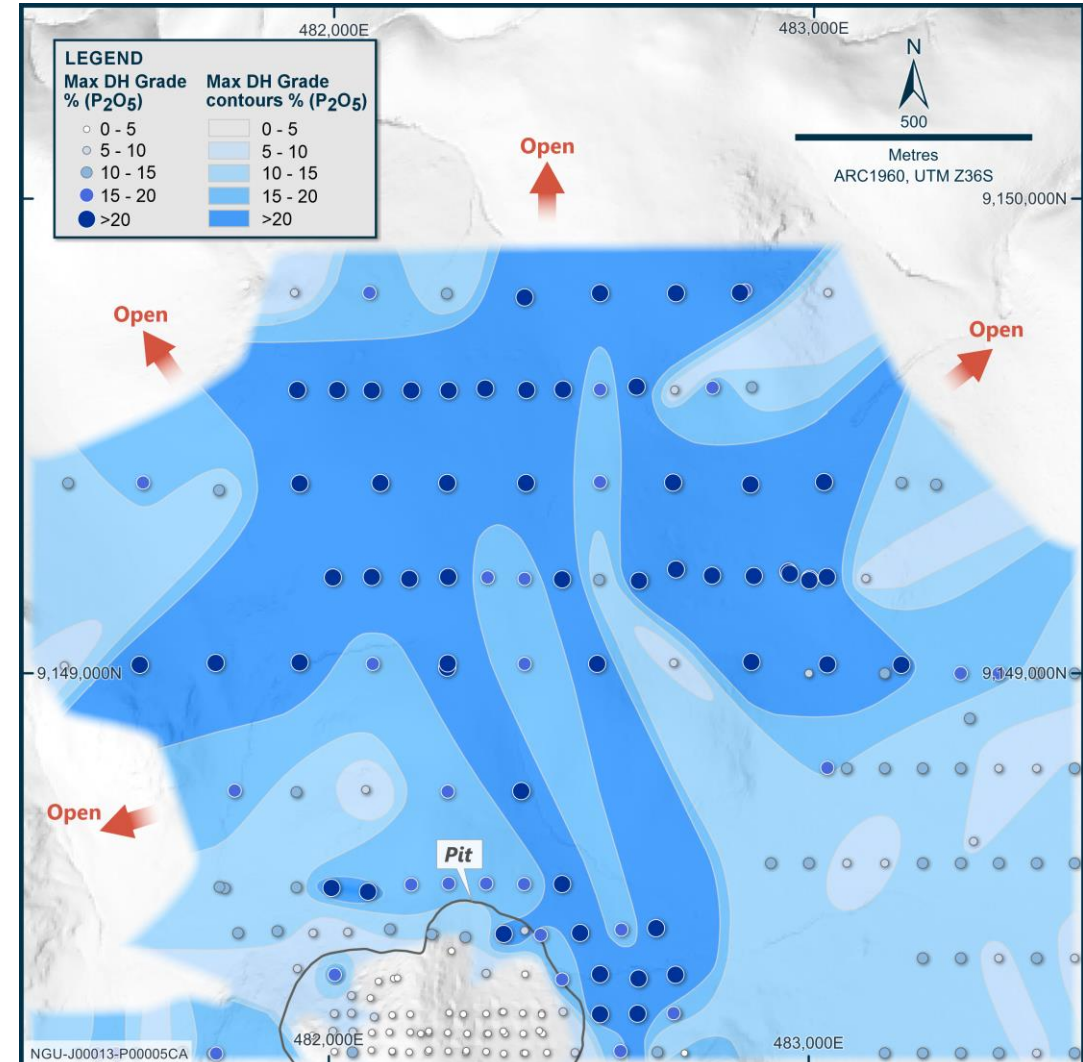
- ~0.7km<sup>2</sup> area, located 2km North of the Bastnaesite Zone
- Mineralisation currently open in northern and eastern directions
- Widespread, high-grade phosphate mineralisation at surface
- 'High' bioavailability - supports use in fertiliser applications
- Extensive rare earth and niobium mineralisation
  - Elevated levels of higher-value heavy rare earths (terbium and dysprosium)

### Prospective commodities



### Drilling summary (to date)

| RC:                | DD:            | Total              |
|--------------------|----------------|--------------------|
| 75 holes / 5,584 m | 2 holes / 190m | 77 holes / 5,774 m |



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

## Potential to expedite development of phosphate via collaboration with Minjingu Mines and Fertiliser

### Minjingu Mines & Fertiliser

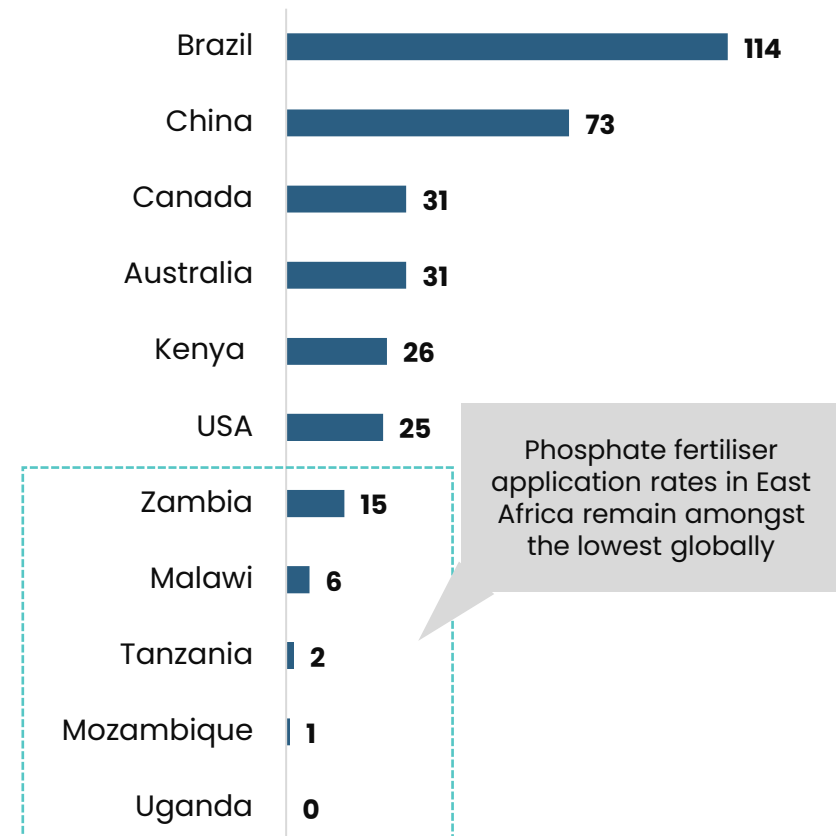


- Operates a Tanzanian phosphate mine
- Produces organic and blended fertilisers
- Distribution network into Southern and East Africa

### 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

### Phosphate fertiliser use (kg) / hectare of cropland<sup>1</sup>





# Ngualla's multi-commodity potential ... Breccia Zone

## Recent drilling supports potential of a globally significant fluorspar deposit

### Overview

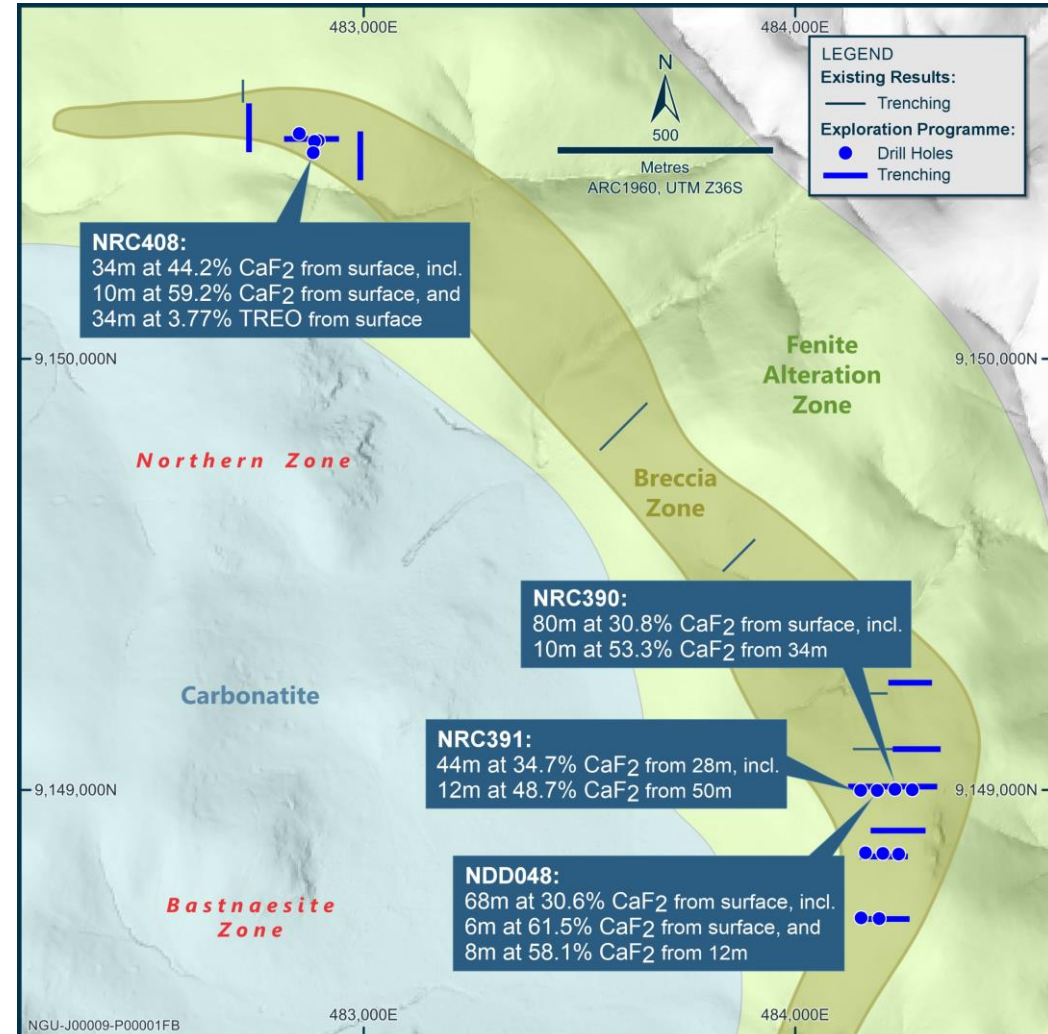
- ~0.4km<sup>2</sup> area, located 2km North-East of the Bastnaesite Zone
- 3.7km extent, with mineralisation currently open in all directions
- Trenching has confirmed widespread mineralisation at surface<sup>1</sup>
- Recent drilling assays have confirmed thick, high-grade intercepts of fluorspar in southern and northern Breccia Zone<sup>2</sup>
  - Central Breccia Zone remains only lightly tested
- Rare earth / niobium mineralisation associated with fluorspar in the northern Breccia Zone

### Prospective commodities



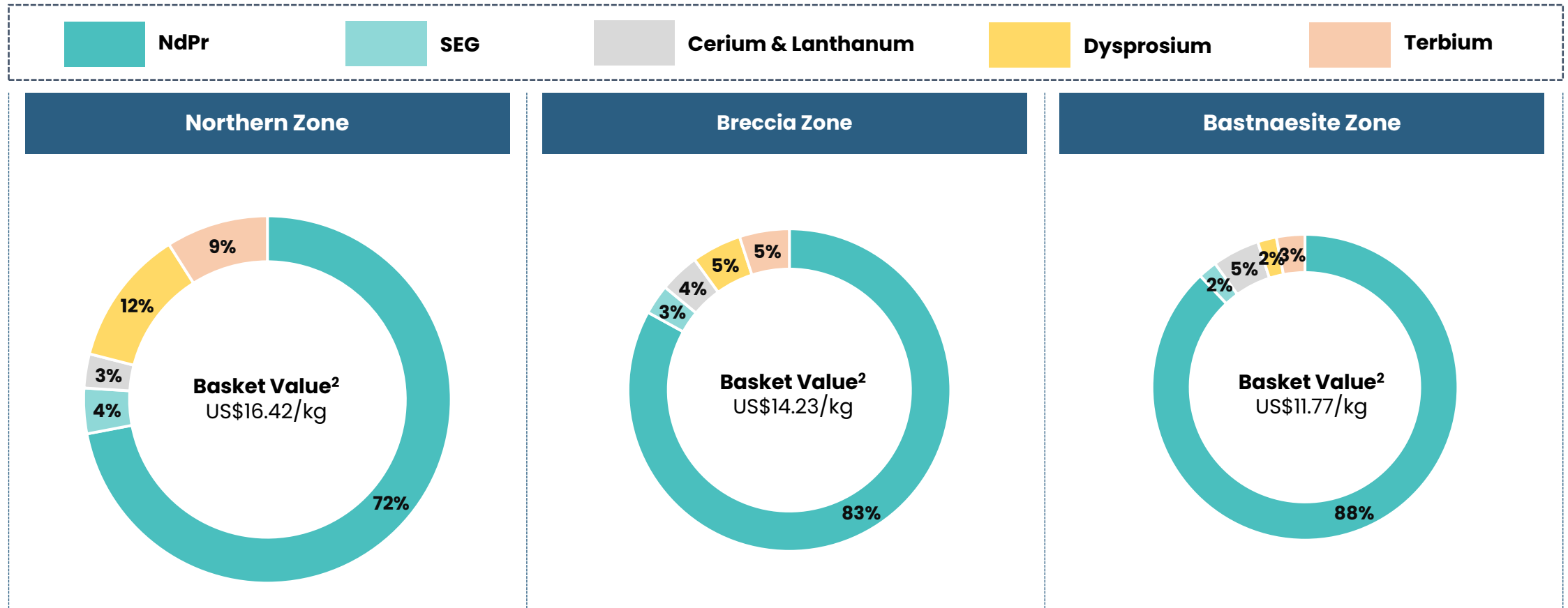
### Drilling summary (to date)

| RC:              | DD:             | Total              |
|------------------|-----------------|--------------------|
| 11 holes / 885 m | 2 holes / 211 m | 13 holes / 1,096 m |



# Critical minerals exploration ... Ngualla's broader rare earth potential

Attractive rare earth assemblages within Northern Zone and Breccia Zone with a higher representation of higher-value heavy rare earths (Dysprosium & Terbium)<sup>1</sup>



<sup>1</sup>Refer to announcement 'Major High-Grade Fluorspar Discovery' on 20 March 2024 for overview of rare earth assemblage results  
<sup>2</sup>Based on spot prices as at 15 March 2024 (Asian Market) – Neodymium US\$48.7/kg, Praseodymium US\$48.7/kg, Lanthanum – US\$0.5/kg, Cerium – US\$0.5/kg, Samarium – US\$1.9/kg, Europium – US\$24.8/kg, Gadolinium – US\$22.5/kg, Terbium – US\$750.7/kg and Dysprosium – US\$254.4/kg

# Critical minerals programme ... next steps

## Prioritisation of phosphate and fluorspar opportunities in the short term

### Northern Zone (Phosphate)

- Update of geological model
  - Identification of high-grade mineralisation zones and preferential areas for development
  - Generation of additional drill targets
- Preliminary flowsheet development and metallurgical work
- Additional bioavailability testwork including evaluation of different areas of Northern Zone
- Further drilling and potential Maiden Resource estimate
- **Advancement of strategic discussions around offtake, beneficiation and low capex development options**

### Breccia Zone (Fluorspar)

- Additional fieldwork and mapping
  - Extension of trenches
  - Soil sampling programme across Breccia Zone extent
- Mineralogical analysis of diamond drill core
- Preliminary flowsheet development and metallurgical work
- Further drilling and potential Exploration Target
- **Advancement of strategic discussions around offtake, beneficiation and low capex development options**

# Ngualla ... up to and beyond FID

Peak is in the strongest position in its history with a de-risked Ngualla Project and pathway to a fully funded development solution with multi-commodity optionality



## Construction

Progress of Early Works

Appointment of EPC / EPCM lead

Finalisation of construction contract



## Technical

Further project optimisation initiatives

Shenghe technical collaboration

Advancement of downstream options



## Funding

Sale of Teesside site

Completion of Shenghe investment and project financing

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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