



# 30% world's critical minerals

## Africa's Role in a Just and Inclusive Energy Transition

Seizing Opportunities, Building  
Infrastructure, and Shaping the Future



## Disclaimer

- ▶ **Presenter's Role:**
  - ▶ A private investor with no formal affiliation to the Longonjo project or related entities.
- ▶ **Nature of Content:**
  - ▶ Reflects personal opinions based on publicly available research.
- ▶ **Purpose:**
  - ▶ To provide insights into Africa's role in the energy transition—not financial advice or project endorsement.

# Learning from History

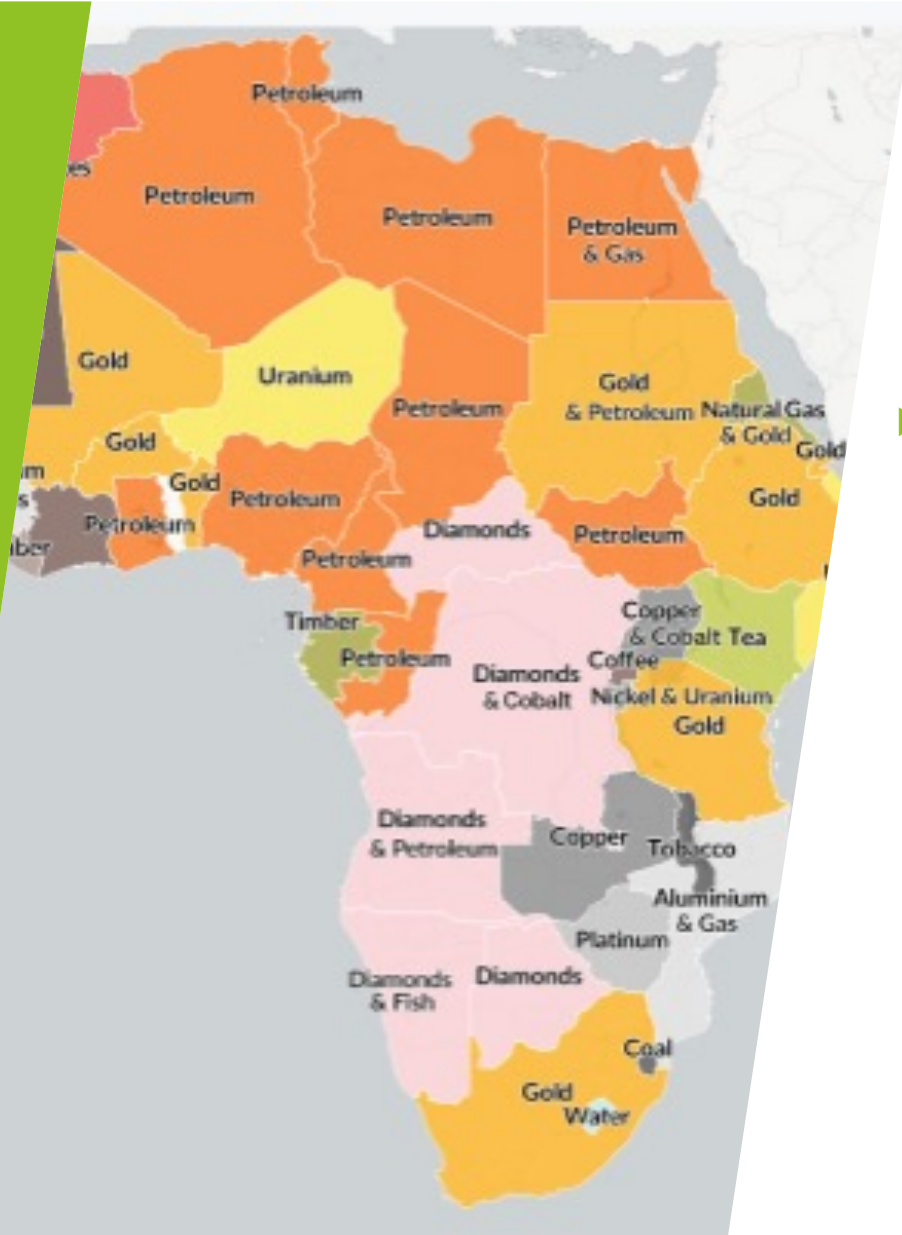
## ▶ Breaking the Cycle of Exploitation

### ▶ Historical Exploitation:

- ▶ Africa's resources were historically extracted and exported as raw materials.
- ▶ The economic benefits of value addition were captured overseas, leaving African nations underdeveloped.

### ▶ Risk of Repeating History:

- ▶ China's focus on resource extraction risks repeating the same patterns as previous exploitative models.

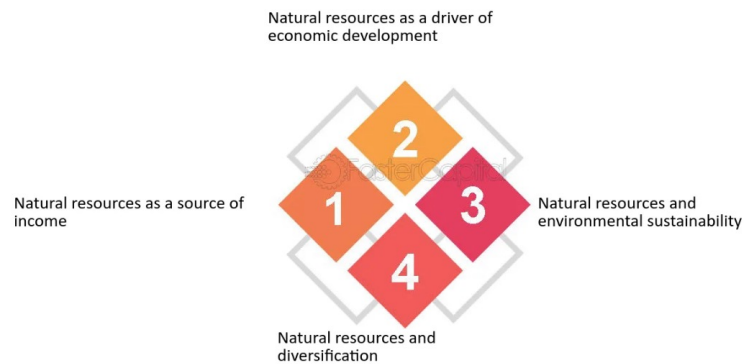




# The Energy Transition: A Unique Opportunity

- ▶ **Building From Scratch: A Level Playing Field**
    - ▶ **Minimal Processing Capacity:**
      - ▶ The energy transition lacks established infrastructure for processing critical materials like rare earths.
      - ▶ Unlike oil refining, all processing plants must be built from scratch, creating a level playing field\*\*.
    - ▶ **Why This Matters for Africa:**
      - ▶ Africa's resource wealth and renewable energy potential give it an opportunity to lead in developing new supply chains.
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## The Role of Natural Resources in Economic Growth

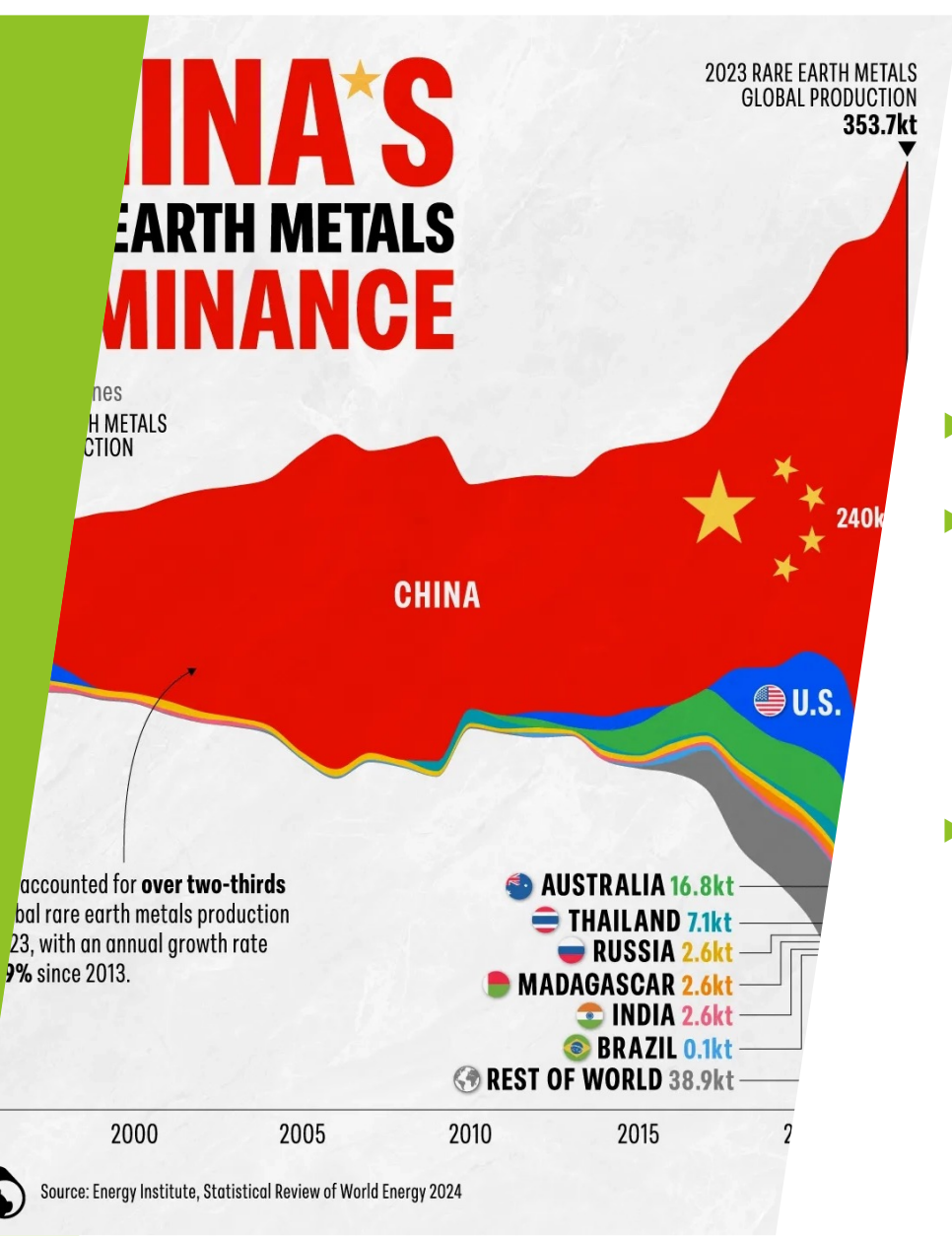


# The Risk of Inaction

- ▶ The Cost of Inaction
- ▶ Without local processing capacity, Africa risks remaining a raw material exporter.
  - ▶ The economic benefits of value addition will flow overseas, leaving African nations behind, **AGAIN.**
- ▶ China's Dominance:
  - ▶ With 85% of global rare earth processing, China's position risks sidelining Africa's economic growth.

# CHINA'S RARE EARTH METALS DOMINANCE

2023 RARE EARTH METALS GLOBAL PRODUCTION  
353.7kt



China accounted for **over two-thirds** of global rare earth metals production in 2023, with an annual growth rate of 9% since 2013.

Source: Energy Institute, Statistical Review of World Energy 2024

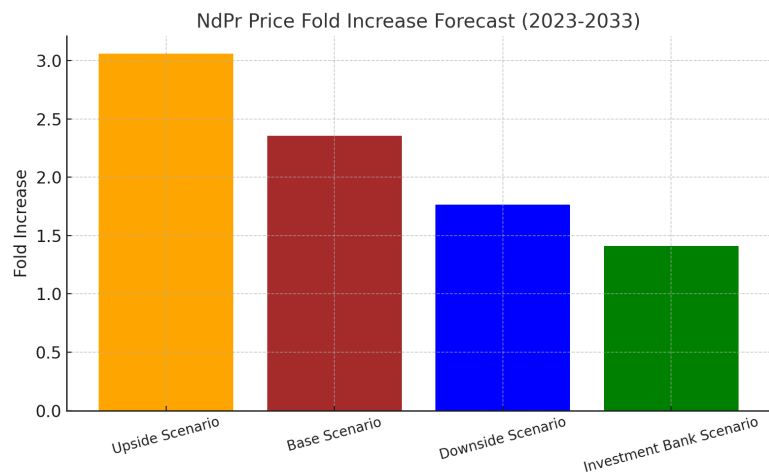
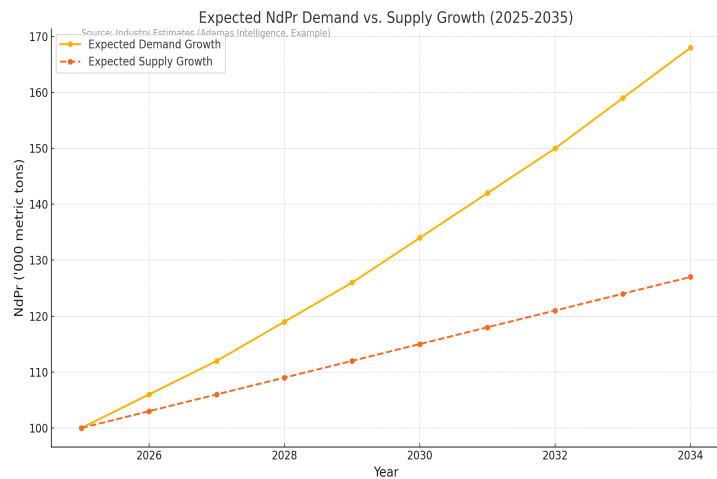
## China's Dominance A Strategic Threat?

- ▶ China's Near-Monopoly on Rare Earths
- ▶ China's Current Position
  - ▶ Controls 85% of global rare earth processing dominating clean energy supply chains.
  - ▶ Rare earths are essential for EVs, wind turbines, and other clean technologies.
- ▶ China's Message: Deng Xiaoping 1992
  - ▶ "The Middle East has oil; China has rare earths." He further highlighted their significance, noting, "China's rare earth deposits account for 80 percent of identified global reserves... it is of extremely important strategic significance; we must be sure to handle the rare earth issue properly and make the fullest use of our country's advantage in rare earth resources"



# Neodymium Praseodymium A Crucial Critical Mineral

- ▶ Why NdPr is Critical:
  - ▶ Key Role in Clean Energy:
    - ▶ NdPr is essential for neodymium-iron-boron (NdFeB) magnets, the strongest permanent magnets available.
    - ▶ Found in electric vehicles (EVs), wind turbines, and robotics, enabling greater efficiency and reduced energy consumption.
  - ▶ Driving Global Decarbonization:
    - ▶ NdPr magnets are integral to technologies that reduce CO<sub>2</sub> emissions by powering EV motors and generating renewable energy.



# Neodymium Praseodymium A Crucial Critical Mineral

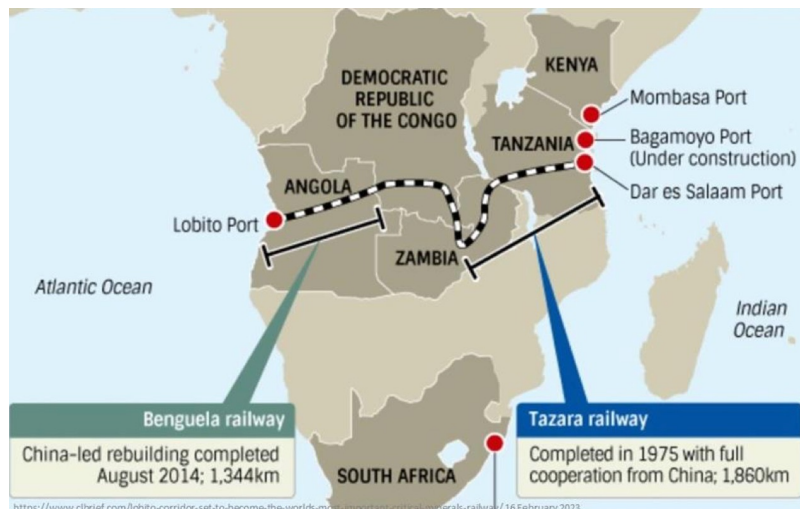
- ▶ Why NdPr is Critical:
- ▶ Dependence on Rare Earths:
  - ▶ As global demand for EVs and renewables grows, so does the reliance on NdPr.
- ▶ Demand Outlook:
  - ▶ Projected Demand Surge:
  - ▶ By 2035, NdPr demand is expected to grow by 6–7% CAGR, outpacing current supply capabilities.
- ▶ Strategic Importance:
  - ▶ NdPr is classified as a critical mineral by major economies like the US, EU, and China due to its role in clean energy technologies



LOCATION	TREO RESOURCE (TONS)	TREO GRADE (%)	NDPR CONTENT (% OF TREO)	NDPR (TONS)
<b>Longonjo (Angola)</b>	30,100,000	2.55%	22%	166,000
<b>Mkango (Malawi)</b>	18,147,000	1.16%	33%	69,045
<b>Rainbow (Burundi)</b>	604,500	5.44%	19%	6,248
Rainbow (Phalaborwa gypsum stacks)	38,000,000	0.43%	29%	47,549.40
<b>Steenkampsraal (South Africa)</b>	665,000	14.5%	25%	20,089.00
<b>Ngualla (Tanzania)*</b> Now controlled by China's Shengue company	18,500,000	4.8%	23%	204,240

## Rare Earth Deposits in Africa and Resource Sizes

Africa's Rare Earth Wealth: Key Deposits and Resources:



# Longonjo, Angola: An African Opportunity being realised

## ► A Critical Juncture:

The energy transition offers Africa an unprecedented opportunity to build processing capacity from scratch.

This opportunity can only be realized if financing and political will align to support local projects.

## ► Why Longonjo is a Blueprint:

- Finance structure in place by Pan-African institutions, the Longonjo project demonstrates that Africa has the capability to fund and lead its own development.
- It sets the stage for more resource-rich African nations to take ownership of their energy transition role.

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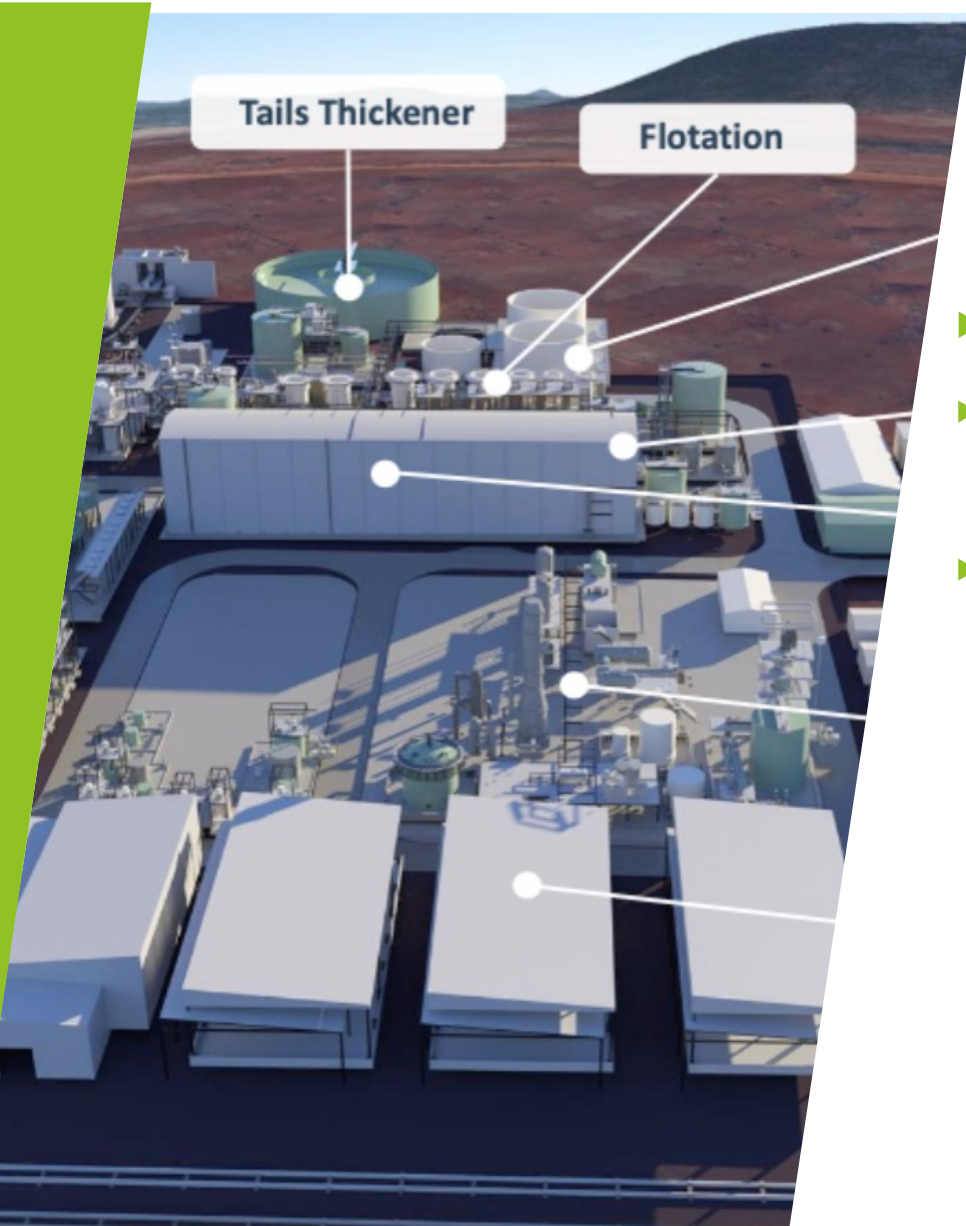
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### ► The Importance of Collaboration:

- Success requires a Pan-African approach, combining resources, expertise, and infrastructure across borders.



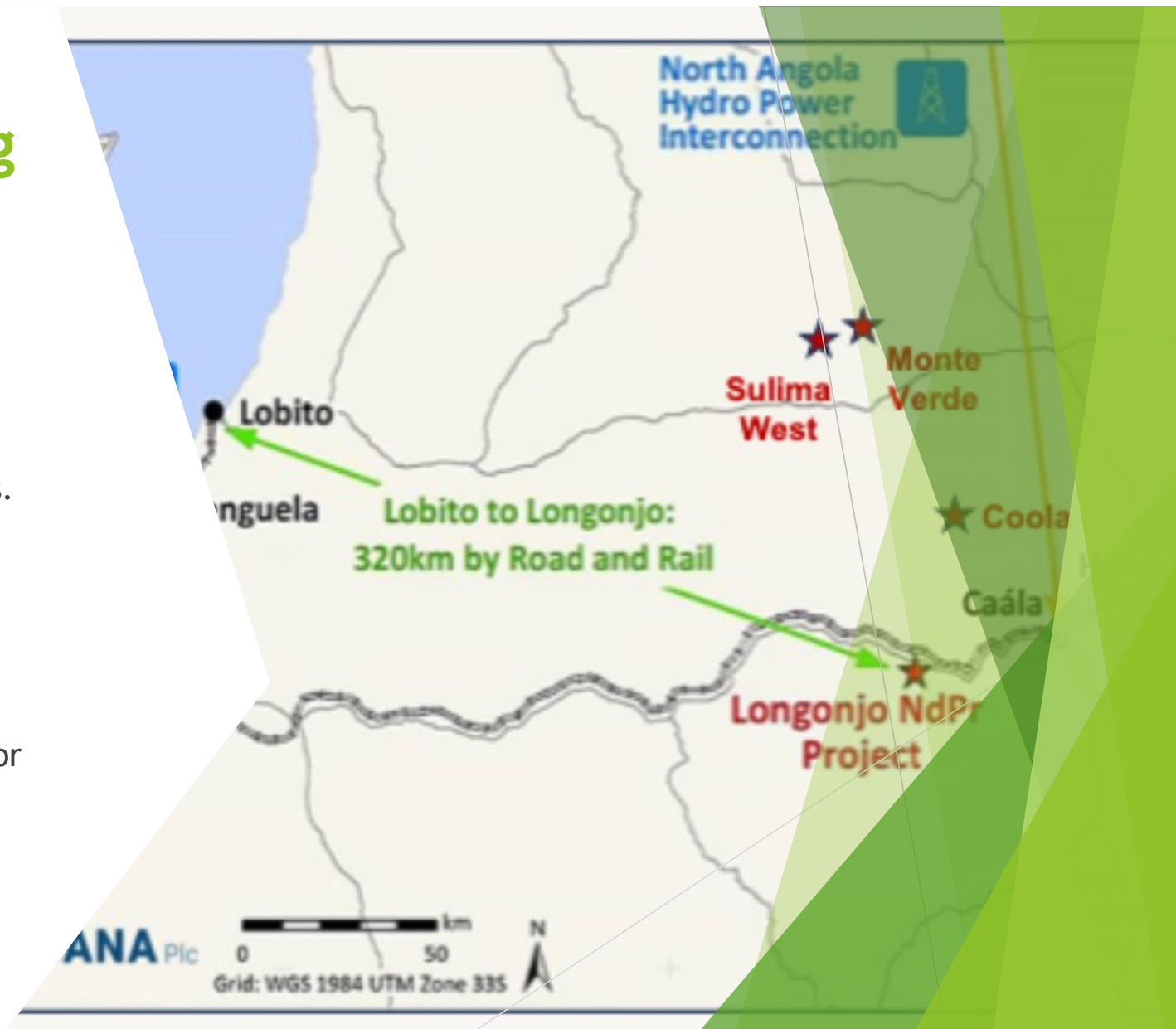


## Longonjo Financing: African Collaboration

- ▶ Pan-African Financing for an Angolan Project:
- ▶ **CAPEX** \$ 260 million
  - ▶ Debt: \$160 million
  - ▶ Equity: \$100 million
- ▶ **Pan-African Effort :**
  - ▶ FSDEA: (Angola sovereign wealth fund):
    - ▶ 25% stake in Pensana PLC
    - ▶ Direct equity stake in Longonjo project.
  - ▶ ABSA Bank: (South Africa)
    - ▶ Leading the \$160M syndicated loan.
  - ▶ Pan-African Development Bank:
    - ▶ Funds 50% of the loan and takes a direct equity stake in project.

# Longonjo: Leading by Example

- ▶ A Case Study for Africa's Role: Ozango Ltd, Longonjo
- ▶ One of the largest undeveloped Rare earth deposits globally
- ▶ Stage one to produce 20,000 MTs. (increasing to 40,000 MTs) of Mixed rare earth carbonate annually, with 12,500 MTs. Rare Earth Oxides, (including 4,500 MTs. NdPr oxide).
  - ▶ Located adjacent to the Lobito corridor / Benguela Railway and Port of Lobito for efficient logistics.
  - ▶ Fully African-financed.



# Ensuring a Just and Inclusive Transition

- ▶ Africa's Call to Action
- ▶ Build Local Capacity:
  - ▶ Establish processing plants to retain value locally.
- ▶ Invest in Renewables:
  - ▶ Use Africa's renewable energy potential to power industries.
    - ▶ Solar, Hydro-electric etc
- ▶ Strengthen Policies:
  - ▶ Ensure local beneficiation and shared resource benefits.



## A New Era for Africa

- ▶ **A Vision for Leadership**
- ▶ Africa can lead by building a **sustainable, inclusive, and fair energy future:**
- ▶ Avoid repeating past mistakes and **shape global supply chains.**
- ▶ This is Africa's opportunity to **redefine its role and lead in sustainability**