



# Building the Cabinda Phosphate Fertilizer Project

Corporate Presentation  
December 2024

ASX:MNB



# Delivering the Cabinda Phosphate Plant

## — Investment Highlights

DECEMBER 2024:

### MINBOS LANDS US\$22M IN DEBT & EQUITY FUNDING & COMMENCES CONSTRUCTION

- US\$10 million equity investment from Angolan Sovereign Wealth Fund<sup>1</sup>
- US\$12 million term sheet signed with Banco Bai<sup>2</sup>
- Construction contract signed<sup>3</sup>
- Construction works commenced at Fertilizer plant
- US\$8 million Fertilizer plant already in Cabinda, ready for assembly

<sup>1</sup>ASX Announcement - US\$10M Subscription Agreement signed with FSDEA (14 Nov 2024)

<sup>2</sup>ASX Announcement - Banco BAI Term Sheet Signed (06 Dec 2024)

<sup>3</sup>ASX Announcement - Civil Construction Contract Signed (5<sup>th</sup> Dec 2024)





# Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Minbos operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Minbos' control.

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## Compliance Statement

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

## Competent Person Statement

The Competent Person with responsibility for the total Mineral Resources of this report is Mrs Kathleen Body, Pr. Sci. Nat, who is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions ("SACNASP"). She is an Associate Resource Geologist with SRK Consulting (UK) Limited and the Director and a Principal Consultant of Red Bush Analytics. Mrs Body was a fulltime employee of Coffey Mining at the time the original Mineral Resource estimation was completed in 2013. Mrs Body has 27 years' experience in the mining industry and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves. Kathleen Body consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Information in this announcement relating to Mineral Resources is extracted from the ASX release dated 21 November 2021. Minbos Resources Limited confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed. Minbos Resources Limited confirms that the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement.

The scientific and technical information in this announcement that relates to Ore Reserves estimates for the Project is based on information compiled by Mr Ross Cheyne, a Principal Consultant of Orelogy Consulting Pty Ltd. Mr Cheyne is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Cheyne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cheyne consents to the inclusion in the announcement of the matters related to the Ore Reserve estimate in the form and context in which it appears.

Information in this announcement relating to Ore Reserves is extracted from the ASX release dated 17 October 2022. Minbos Resources Limited confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed. Minbos Resources Limited confirms that the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement.

## Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Minbos Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.





# Company Overview



## Capital Structure

912M

Shares on Issue

\$A89M

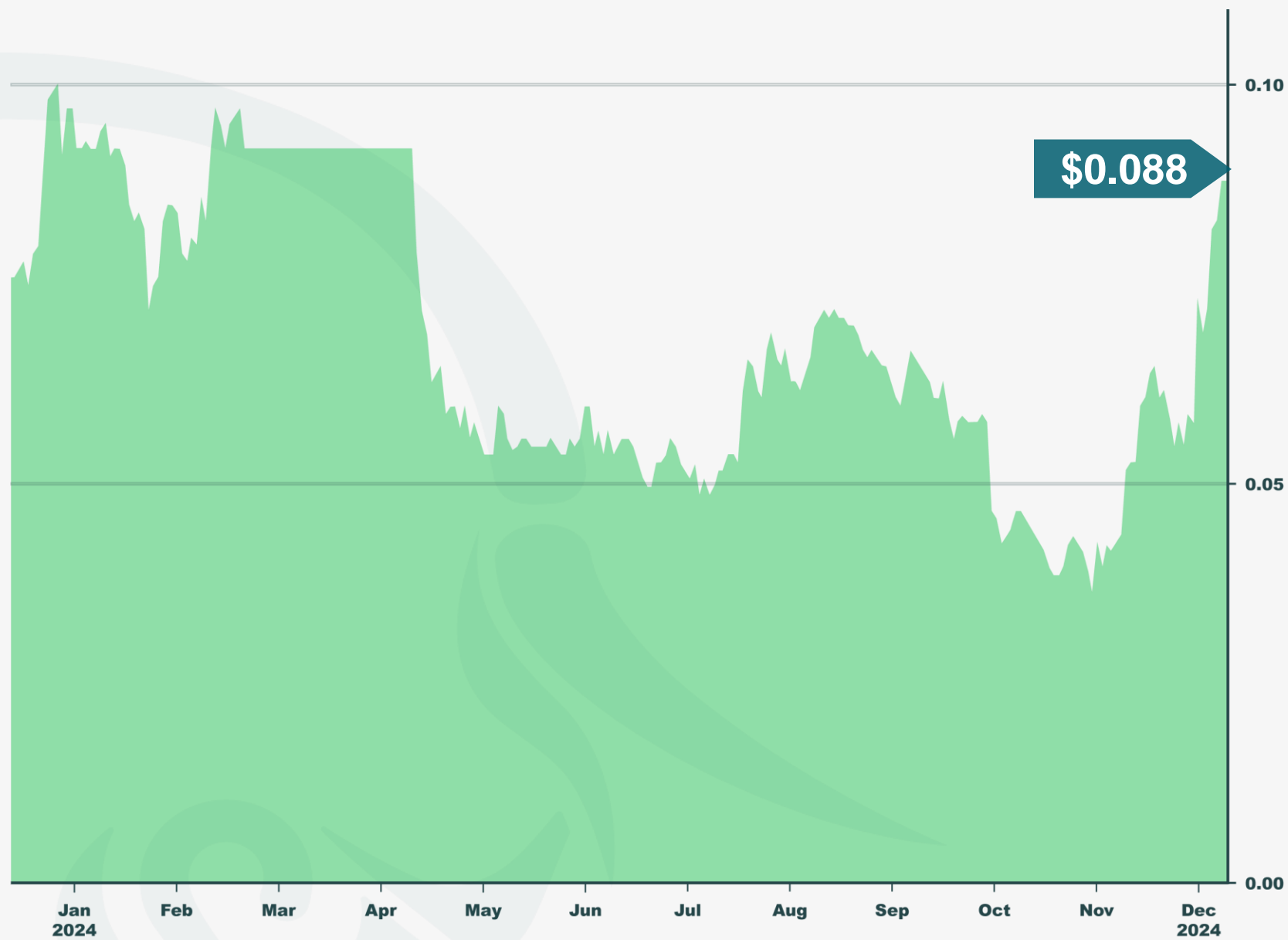
Dil. MCap\*

\$A8M

Cash\*

\$A81M

Enterprise Value



\*December 2024

SECURITIES	Number (M)	Price	Expiry
FPO	912,192,469		
LISTED OPTIONS			
MNBOB:	102,241,430	7c	3 Jul 2026
UNLISTED OPTIONS			
MNBOPT3	12,000,000	10c	30 Apr 2025
MNBOPT5	20,000,000	10c	1 Jul 2025
MNBOPT6	2,000,000	15c	21 Dec 2024
MNBOPT8	6,250,000	17c	1 Sep 2025

# All the conditions for Angola to be the breadbasket of Africa

— Millions of acres of arable land, fast growing and hungry populations...and no fertilizer

**36M**

Population

**57M ha**

Arable Land

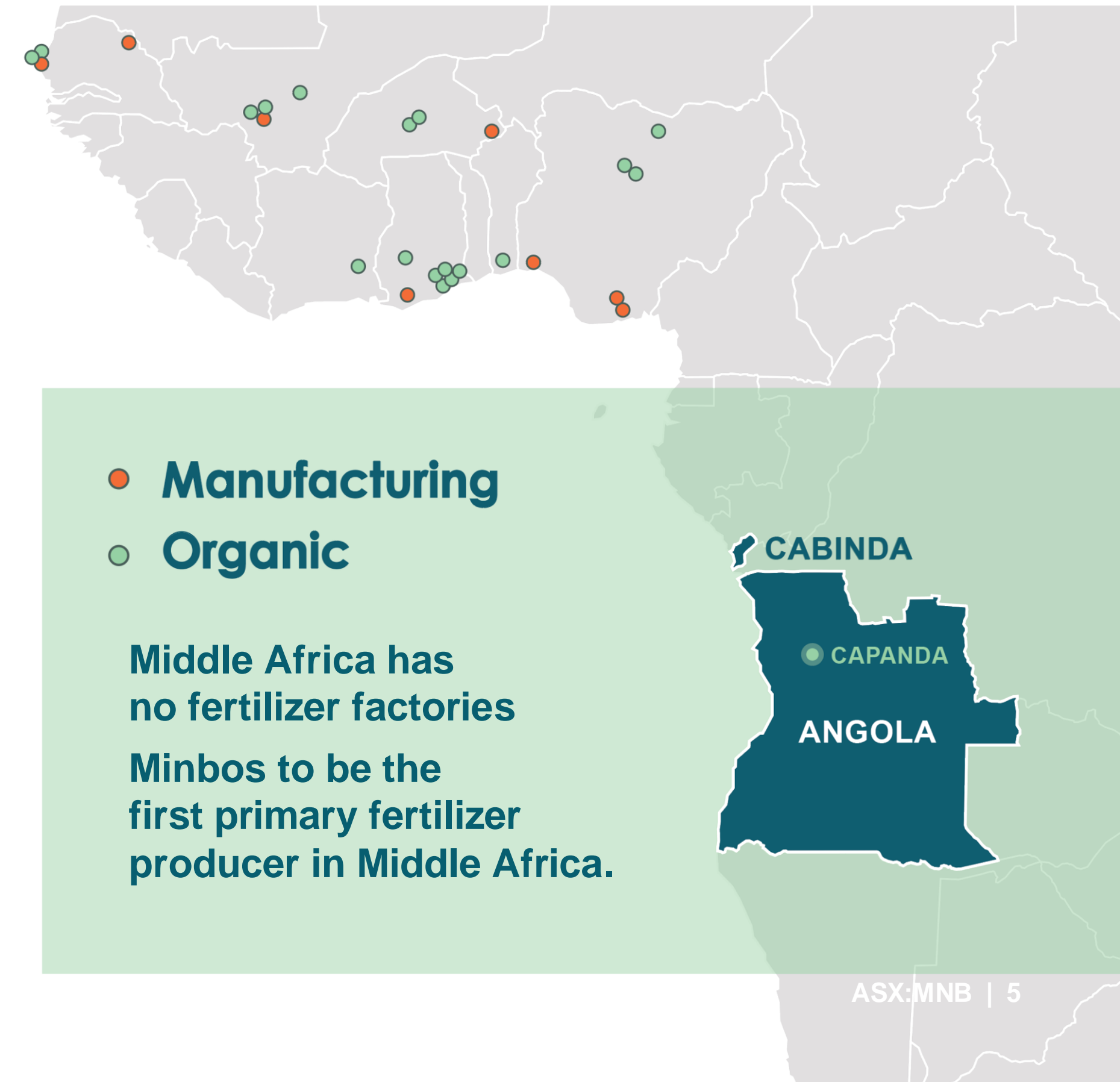
**5M ha**

Cultivated Land

## Angola has been a global agriculture powerhouse

- World's fourth largest coffee producer
- Exporter of sisal, sugarcane, banana, cotton
- Self-sufficient in all food crops except wheat
- 1000 to 1500mm of rain per year
- Smallholder farmers are 90% of the land
- 50% of food imported
- 100% of fertilizers is imported

Sources: World Bank Group, Country private sector diagnostic, Creating Markets in Angola (May 2021)

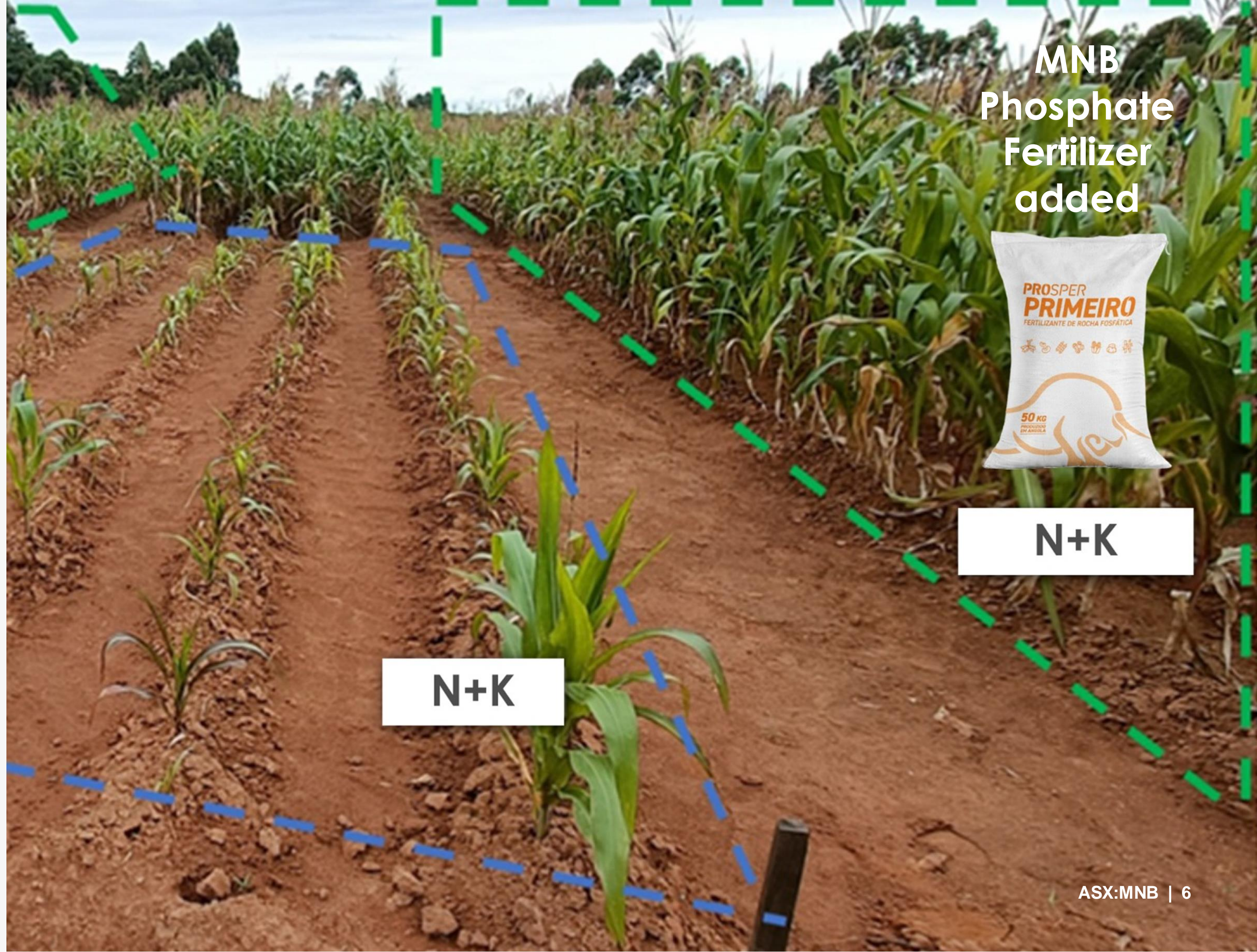






# Cabinda Phosphate Fertilizer Project

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MNB  
Phosphate  
Fertilizer  
added



N+K

N+K





# Watch it Grow

Angola's  
largest farm

Minbos Field Trial



# Cabinda Phosphate

— Soft Organic Simplicity

**High**

Phosphate grade 30.1%  $P_2O_5$ <sup>1</sup>

**High**

Reactivity 8.7 to 9.5%  $P_2O_5$ <sup>2</sup>

**Longlife**

Project 25-year mine life<sup>3</sup>

**Easy**

Mining free digging

**Easy**

Beneficiation organic product



<sup>1</sup>Proven and Probable Ore Reserve grade – refer to Minbos ASX release dated 17 October 2022 for further information

<sup>2</sup>Cabinda phosphate rock contains ~31% total  $P_2O_5$  and 8.7 to 9.5%  $P_2O_5$  soluble in 2% citric acid – refer to Minbos ASX release dated 1st December 2022 for further information

<sup>3</sup>Based on 2022 DFS results – refer Minbos ASX release dated 17 October 2022 for further information





# Cabinda Project

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## Cabinda Phosphate Project

— High-grade Phosphate rock fertilizer mined and processed in Cabinda

Subantando Capacity:

- 187,500 tpa (Stage 1)
- 400,000 tpa (Stage 2)

Cabinda Port for Stage 1 Local

Porto do Caio for Stage 2 Export  
Scheduled opening 2025



<sup>1</sup>ASX Announcement – DFS delivers compelling economics for Cabinda Phosphate Project (17 Oct 2022)

<sup>2</sup>ASX Announcement - Resource Update for High-Grade Cabinda Phosphate Project (23 Nov 2021)









# 2022 DFS Financials - Cabinda Phosphate Project (Stage 1 & 2)

— Compelling DFS<sup>1</sup> including Stage 2 expansion in year 7



## Definitive Feasibility Study

Scenario	Base Price Case (85%)		
Discount Rate	NPV \$USM	IRR	PAYBACK
 (REAL) <b>10%</b>	 (POST TAX) <b>203.2</b>	 (POST TAX) <b>39%</b>	 <b>4.8yrs</b>

PHYSICALS	UNIT	RESULT
Mine Life (Base-case)	Years	20
Plant Capacity (One Plant Capacity)	ktpa	150
Average head grade	P205	30.1%
Base-case fertilizer production	ktpa	236
Base-case average annual EBITDA	US\$M	55

<sup>1</sup>ASX Announcement - DFS delivers compelling economics for Cabinda Phosphate Project (17 Oct 2022)

<sup>2</sup>ASX Announcement - Simplified flowsheet delivers significant capex reduction for phosphate fertilizer plant (23 February 2023)



# Significant improvements post DFS

— Simple flowsheet, CAPEX savings, reduced haulage, sales bought forward

## Key updates since DFS<sup>1</sup>

### 1) Stage 1 CAPEX savings<sup>2</sup>

- Simplified flowsheet has identified capital savings of ~ \$US10 million over the DFS<sup>2</sup>
- Fertilizer Plant fabricated and currently onsite in Angola
- US\$25 million left to spend to get into production

### 2) Stage-2 CAPEX savings

- CAPEX for Stage-2 expansion to double capacity on revised flow sheet has been estimated \$US1.7-3.3M (previously \$US28M in the DFS)<sup>3</sup>

### 3) New Plant, Subantando, offers significant transport savings

- Distance from mine to plant reduced from 76km to 36km
- Distance from plant to port reduced from 28km to 16km
- Reduced costs to hold and maintain site<sup>4</sup>

<sup>1</sup>ASX Announcement - DFS delivers compelling economics for Cabinda Phosphate Project (17 Oct 2022)

<sup>2</sup>ASX Announcement - Simplified flowsheet delivers significant capex reduction for phosphate fertilizer plant (23 February 2023)

<sup>3</sup>ASX Announcement - Minbos to Pursue Yellow Phosphorus Potential in Stage 2 (13 April 2023 and Amendment 17 April 2023)

<sup>4</sup>ASX Announcement - Minbos secures site for Cabinda Phosphate Plant (10<sup>th</sup> November 2022)





# Financing Arrangements

## Cabinda Phosphate Project Funding

— Compelling Stage-1 with only US\$25 million to spend to get into Production

### Funding Available

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#### US\$10M Equity from FSDEA

Angolan Sovereign Fund to invest US\$10M. US\$6.4M has been received in December and the balance is due in early 2025.

#### US\$12M Facility from Banco Bai

Final term sheet agreed, for a 7-year facility at 7.5% interest. Repayment holidays of 12 months on interest and 24 months on principal. FGC expected to provide an 80% guarantee for an additional 2%. Details being finalised.

#### US\$14M Facility from IDC

Facility agreement signed with the Industrial Development Corporation of South Africa<sup>1</sup>. Key CP's include, raising \$10M equity, securing a working capital funding and entering into an offtake agreement. Conditions precedent currently being completed.

### Funding Required

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#### Stage-1 Civils US\$6.7M

US\$6.7M contract signed with Arliz to complete construction to ground level, foundations, civils, roads, drainage<sup>2</sup>.

#### Stage-1 Balance of Works est. US\$18M

Mechanical, Structural, Process Control and Electrical works.

#### Stage-1 Working Capital est. US\$10M

Funding required to fill the mining, processing, port, shipping and distribution warehouses work in progress and finished goods stocks.

#### Stage-2 Expansion est. US\$4M

Engineering design and estimate completed to double capacity by expanding the crushing circuit and onsite storage.

<sup>1</sup>ASX Announcement - US\$14m Loan Facility Approved & Firm Bids for Placement (14 Oct 2024)

<sup>2</sup>ASX Announcement - Civil Construction Contract Signed (05 Dec 2024)





# Export Plans

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# Phosphate Export Plans - Porto do Caio 2026

— IDC controlled entity interested in 200,000tpa for South African business

## Key Considerations

- 8.4Mt total Mineral Resource (Measured + Indicated + Inferred)<sup>1</sup>
- Dry beneficiation of a bulk sample in 2017 upgraded Cacata ore from 30.5% to 33-34% with a mass recovery of 81-88% and P<sub>2</sub>O<sub>5</sub> recovery of 86-91%<sup>3</sup>
- Porto do Caio deepwater port is scheduled for operation in 2025 and is designed to accept Panamax size vessels
- Doubling capacity will reduce unit production costs significantly due to high fixed cost of operation

With reference to the above statements, Minbos notes the following:

- The 2021 Cácata Mineral Resources have been classified and reported at a 19% P<sub>2</sub>O<sub>5</sub> cut-off grade on the basis of using Cácata Phosphate Rock for the production of phosphate fertilizer
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied
- Minbos has yet to undertake any test work or economic evaluation to determine the viability of Cácata Phosphate Rock in the production of P<sub>4</sub>
- Resource Update for High-Grade Cabinda Phosphate Project – ASX Announcement dated 23 November 2021

## Mineral Resource Statement Cácata Phosphate Project as of 31 October 2021

Resource Update for High-Grade Cabinda Phosphate Project – ASX Announcement dated 23 November 2021

Classification	Cut-Off Grade (P <sub>2</sub> O <sub>5</sub> )	Tonnes (Mt)	P <sub>2</sub> O <sub>5</sub> (%)	Contained P <sub>2</sub> O <sub>5</sub> (%)	Density	Ca:P <sub>2</sub> O <sub>5</sub> ratio
Measured	19.0	2.20	29.9	0.66	1.83	1.48
Indicated	19.0	4.76	29.7	1.41	1.84	1.46
Measured + Indicated	19.0	6.96	29.7	2.07	1.84	1.47
Inferred	19.0	1.45	29.5	0.43	1.58	1.46

## Cácata Phosphate Mine Ore Reserve Statement as at September 2022

DFS Delivers Compelling Economics for Cabinda Phosphate Project- ASX announcement dated 17th October 2022

Classification	Tonnes (Mt)	P <sub>2</sub> O <sub>5</sub> (%)
Proven	1.17	30.5
Probable	3.54	30.0
Total (Proven + Probable)	4.71	30.1

<sup>1</sup>Minbos ASX release dated 23 November 2021 for further information

<sup>2</sup>Minbos ASX release dated 17 October 2022 for further information

<sup>3</sup>Minbos ASX released dated 6 February 2017 for further information





# Capanda Green Ammonia Project

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# Minbos Signs Cooperation Agreement with Talus Renewables<sup>1</sup>

— Talus' modular ammonia technology to produce lower-cost, carbon-free ammonia at Capanda



## Minbos has:

- Lowest cost renewable power feedstock in the world (USD1.1c/kWhr) from the Capanda Hydroelectric Dam<sup>2</sup>
- Capanda located 300km closer to agricultural markets and 1000km closer to mining markets, a ~UA\$200/t inland premium

## Talus brings:

- Modular and scalable Ammonia production facilities on a Build Own Operate (BOO) basis
- Cheap aqueous ammonia produced from zero-carbon hydropower as a standalone product



<sup>1</sup>MNB ASX Announcement: Minbos Enters Agreement with Talus for Modular Green Ammonia (26<sup>th</sup> June 2024)

<sup>2</sup>MNB Announcement: RNT-EP affirms support for Green Hydrogen & Ammonia Project (10<sup>th</sup> May 2022)



# 200MW Of The Cheapest, Greenest Power Globally

— The only green Ammonia Project that makes sense

## Minbos 20-year green power concession

MOU with Angolan power authority (RNT-EP) secured 200MW of Zero- Carbon hydroelectrical power:

- Initial 100MW at US \$0.4c/kWhr for 5 years, US \$0.8c/kWhr for 20 years and subsequent 100MW at US \$1.5c/kWhr for 25 years
- Electricity price of US \$1.0c/kwh megawatt-hour makes Green Ammonia competitive with \$2.50GJ gas -based ammonia

Power concession delivers one of the most compelling green projects globally, with other advantages including:

- Long-term power security (25-year offtake) & No upfront capital costs saving billions in CAPEX and a decade of feasibility studies

## Angola's hydropower potential among the highest in Africa\*

- Top 10 Globally for new installed hydro capacity
- 2nd highest producer of hydropower in Africa

Source: The International Hydropower Association, 2021 Hydropower Status Report (June 2021)



## Success Parameters

- ✓ Availability of electricity
- ✓ Electricity price
- ✓ Local cost of fertilizer
- ✓ Proximity to market
- ✓ Economies of scale

**“One of the most promising green ammonia projects globally” Stamicarbon**



# Africa Inland Premium

— Our US\$200/t local for local advantage

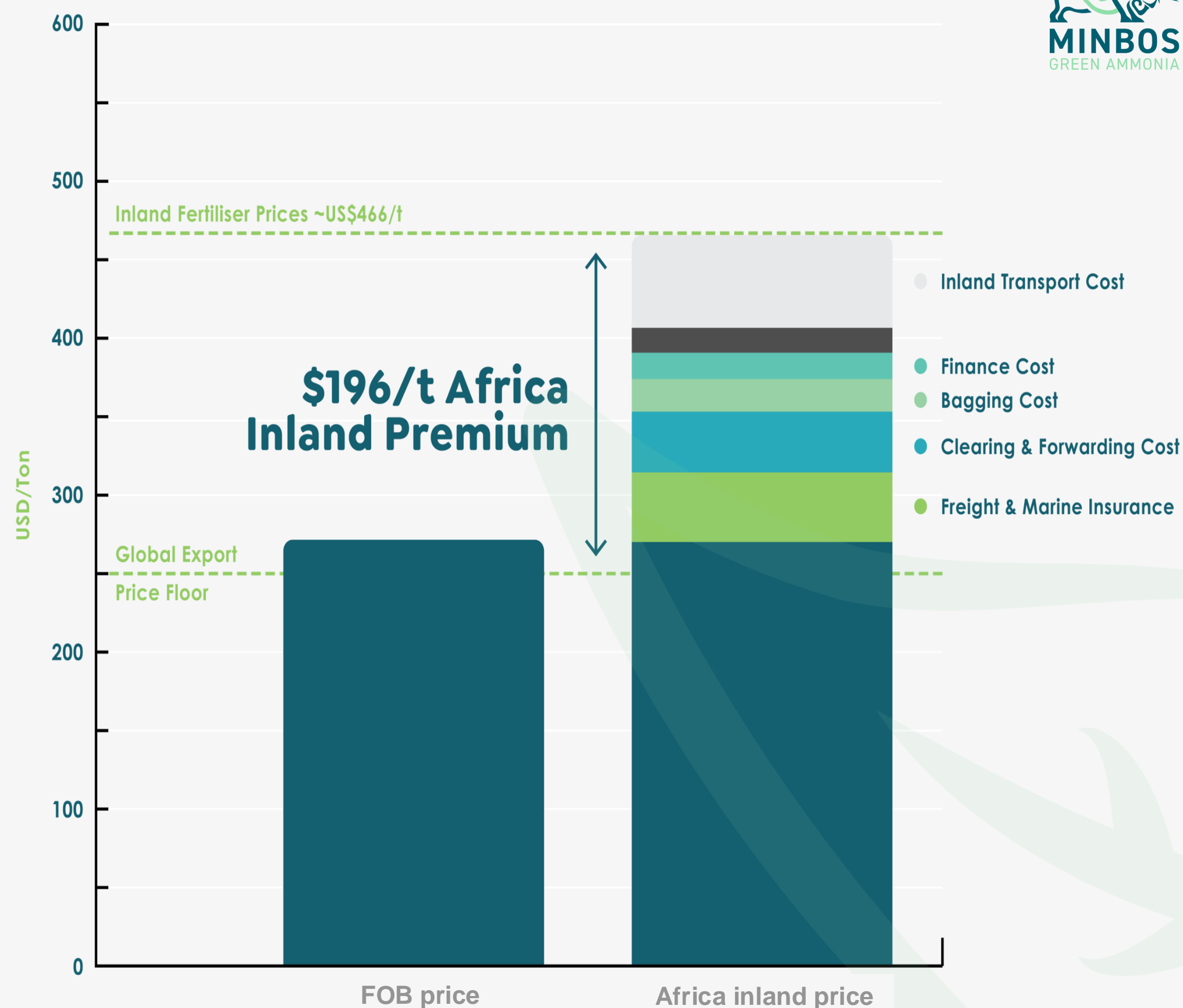
## What makes our Project Competitive

- Cheap Electricity
- High quality water
- Markets at the Factory Gate

## Africa Inland Premium\*

- Producing Ammonia and its derivative products proximal to inland markets eliminates significant delivery costs
- Capanda is located 300km closer to agricultural markets and 1000km closer to mining markets than the entry ports for competing products

Source: Stamicarbon CAN analysis derived from AFAP/IFDC





# Why invest

- Build Cabinda, grow green ammonia, look to the future



## 2025 we build it

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- Construct the Cabinda Fertilizer Plant
- Commence Mining
- First Sales

## Green Ammonia

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- Feasibility
- Partnerships
- Talus BOO funding and execution model

## Export Markets

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- Utilise rail and ports for value added export market





**MINBOS**

**ANGOLA HAS LAND, WATER,  
RENEWABLE ENERGY & YOUTH**

**GROWING AN AFRICAN NUTRIENT BUSINESS**



# Risk Factors



## Risks with Operating in Angola

The Company operates out in Angola, a country that has been the subject to civil unrest in the recent past. The Company believes that although tensions have eased considerably, civil and political unrest and an outbreak of hostilities remains a risk in jurisdictions like Angola.

Historically, there has also been a relatively high level of corruption in Angola, especially in the extractive industries. This corruption often influences the awarding of contracts or the granting of licenses. Furthermore, Angola does not have laws that specifically address corruption, bribery and conflict of interest.

Other possible sovereign risks include, without limitation: changes in the terms of the relevant mining statutes and regulations; changes to royalty arrangements; changes to taxation rates and concessions; changes in the ability to enforce legal rights; and expropriation of property rights.

Any of these factors may, in the future, adversely affect the financial performance of the Company and the market price of its shares.

No assurance can be given regarding the future stability in these or any other country in which the Company may have an interest.

## The Legal Environment in Angola

The Company's projects are located in Angola. Angola is considered to be a developing country and is subject to emerging legal and political systems as compared with the system in place in Australia. This could result in the following risks: political difficulties in obtaining effective legal redress in the courts whether in respect of a breach of law or regulation or in an ownership dispute; a higher degree of discretion held by various government officials or agencies; the lack of political or administrative guidance on implementing applicable rules and regulations, particularly in relation to taxation and property rights; inconsistencies or conflicts between and within various laws, regulations, decrees, orders and resolutions; or relative inexperience of the judiciary and court in matters affecting the Company.

## Changes in Government Policy

Adverse changes in government policies or legislation in Angola and other jurisdictions in which the Company may operate from time to time affecting foreign ownership of mineral interests, taxation, profit repatriation, royalties, land access, labour relations, and mining and exploration activities may affect the operations of the Company. It is possible that the current system of exploration and mine permitting in Angola may change, resulting in impairment of rights and possibly expropriation of the Company's properties without adequate compensation. In addition, there is a possibility that the Company's agreements with governments or joint venture partners may be unenforceable against such parties.

## Lack of Specific Infrastructure

The Company's projects are located in areas of Angola that generally lack some specific infrastructure. The lack of availability of this infrastructure may impact the Company's future operations and feasibility of its projects.

The Company also needs to locate required adequate supplies and obtain necessary approvals from national, provincial and regional governments, none of which can be assured.

## Workforce and labour risks

The skill base of the local labour force in Angola is extremely limited. There is a severe shortage of workers with good managerial or technical skills.

HIV/AIDS, malaria and other diseases represent a serious threat to maintaining a skilled workforce in the mining industry throughout Africa. HIV/AIDS, malaria and other diseases are a major healthcare challenge faced by the Company's operations in Angola. There can be no assurance that the Company will not lose members of its workforce, workforce man hours or incur increased medical costs which may have a material adverse effect on the Company's operations.

Also given the current high level of activity in the global mining industry, Minbos may be unable to source personnel and equipment to meet its objectives.

## Operating Risks

The operations of the Company may be affected by various factors, including failure to locate or identify mineral deposits, failure to achieve predicted grades in exploration and mining, operational and technical difficulties encountered in mining, difficulties in commissioning and operating plant and

equipment, mechanical failure or plant breakdown, unanticipated metallurgical problems which may affect extraction costs, adverse weather conditions, industrial and environmental accidents, industrial disputes and unexpected shortages or increases in the costs of consumables, spare parts, plant and equipment.

## Commodity Price Volatility and Exchange Rate Risks

If the Company achieves success leading to mineral production, the revenue it will derive through the sale of phosphate rock and potential later sales of other fertilizer products, exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for fertilizer inputs, technological advancements, forward selling activities and other macro-economic factors.

## Environmental Risks

The operations and proposed activities of the Company are subject to the laws and regulations of Angola concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment, particularly if advanced exploration or mine development proceeds. It is the Company's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.

## Construction Costs

In August 2020, the Company released a Scoping Study for the Cabinda Phosphate Project, which included an estimate for the construction of a Granulation Plant. The Company is currently completing a Definitive Feasibility Study that will revise this estimate. There are risks with all construction projects that material costs will rise. Additionally, it is likely that the COVID-19 (Coronavirus) pandemic will generate new and/or increased costs, such as its impact on global supply chains and on workforce, that will result in higher costs of construction.

## Green Ammonia and other new projects

The Company's proposed green ammonia project is at an early stage of development and consideration by the Company. The ability to commercialise this project (and other new ventures) is subject to the Company's completing feasibility studies, securing finance and obtaining binding agreements/approvals with local companies and government authorities in Angola. There is no guarantee that the Company will be able to adequately execute on these endeavours and, as early stage projects, they carry a considerable amount of risk.

## Additional Requirements for Capital

The Company's capital requirements depend on numerous factors. Depending on the Company's ability to generate income, the Company will require further financing. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities.

If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its development programmes as the case may be. There is no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company.

## General Risk Factors

In addition to the above, the Company is also exposed to general risk factors that apply to nearly all ASX listed entities including share market volatility and other economics factors that are outside the Company's control.

## Speculative Investment

Potential investors should consider that the investment in the Company is speculative and should consult their professional advisers before deciding whether to invest.

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Company's shares.