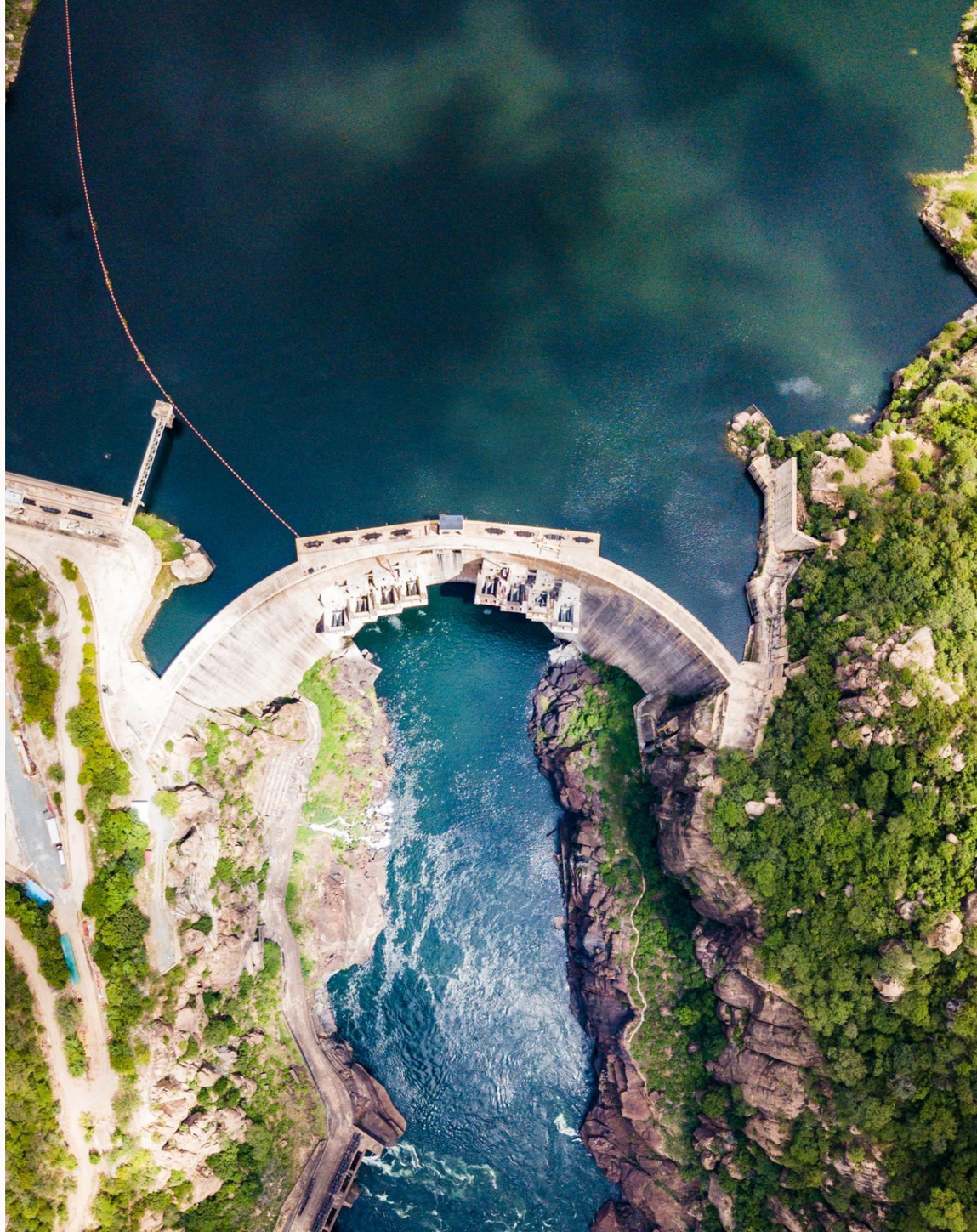
HIDROELÉCTRICA DE CAHORA BASSA
O Orgulho de Moçambique

Powering Mozambique and the Region with Green Energy

Hidroeléctrica de Cahora Bassa — Strategic Forum Presentation

Maputo, 06 March 2026



HCB's Profile

Who We Are

Hidroeléctrica de Cahora Bassa (HCB) is Mozambique's largest hydroelectric producer and a cornerstone of regional energy supply in Southern Africa. Operational since 1976, HCB commands an installed capacity of 2,075 MW, positioned along the Zambezi River at Songo, Tete Province.

Shareholding Structure

85%
Mozambican State

7.5%
REN (Portugal)

4%
Mozambican Citizens

3.5%
HCB

Corporate Profile

Incorporation

Public Limited Company incorporated on 23 June 1975

Location

Songo, Cahora Bassa, Tete Province, Mozambique

Corporate Purpose

Production, transmission, and commercialisation of electricity under a concession regime — including import and export — valid until 2047, extendable by 10 years.

Transmission Reach

Zimbabwe Transmission · EDM Transmission · South Africa

Our Hydroelectric Project

The Cahora Bassa complex is one of Africa's most formidable energy infrastructure assets — a fully integrated system spanning reservoir, dam, powerhouse, substation, and long-distance HVDC transmission.

Cahora Bassa Reservoir

- Length: 270 km
- Maximum width: 30 km
- Capacity: 63,000 million m^3

Cahora Bassa Dam

- Double-curvature arch design
- Height: 170 m | Crest: 303 m
- 8 radial + 1 surface spillway
- Discharge capacity: 14,000 m^3/s

South Bank Powerhouse

- Underground facility, south bank
- 5 generating units × 415 MW
- Total capacity: 2,075 MW

Songo Substation

- 2 poles, 8 converter bridges
- Capacity per bridge: 240 MW
- Total installed: 1,920 MW
- HVAC: 220 kV + 400 kV outgoing panels

HVDC Transmission Lines

- 2 lines: Songo (MZ) → Apollo (SA)
- Nominal voltage: ±533 kV
- Length in national territory: 900 km
- Towers: Line 1 — 2,113 | Line 2 — 2,093

STRATEGIC VISION

Outlook Until 2058

A long-term investment strategy anchored in green energy, regional integration, and infrastructure modernisation — positioning HCB as the engine of Southern Africa's energy transition.

Regional Outlook

Southern Africa faces a structural and deepening energy crisis. The region has grappled with a significant electricity deficit for over a decade — and the data confirms this challenge will not resolve itself in the near term.

Persistent Energy Deficit

For more than a decade, the region has been confronting a severe electricity shortfall. Demand consistently outpaces supply, with no structural relief in sight — and HCB alone has received requests exceeding 6,000 MW from regional buyers.

Fossil Fuel Dependence

The region relies heavily on fossil-based and highly polluting generation. South Africa — responsible for over 50% of total regional consumption — generates approximately 90% of its electricity from coal, most of which operates beyond its intended lifespan.

Worsening Supply Gap

Three converging forces are compounding the deficit: the low short-term supply elasticity of renewables (requiring massive capital deployment), the accelerating obsolescence of fossil-fuel infrastructure, and rapidly growing energy demand across all economies in the region.

Misalignment with Global Goals

The current energy mix runs directly counter to global commitments around climate, sustainability, and the just energy transition — creating both a moral imperative and a commercial opportunity for credible green alternatives like HCB.

HCB's Strategic Response

Against this backdrop, HCB has designed a three-pillar response — addressing infrastructure resilience, capacity expansion, and diversification — with a combined investment footprint exceeding USD 3.1 billion.

CAPEX —USD 1.2 Billion

Rehabilitation & Modernisation of South Bank & Transmission

- Risk: Generation and transmission equipment now over 50 years old — outdated and approaching obsolescence
- Risk: Concession runs to 2058; the South Bank cannot operate through that horizon without significant reinvestment
- Solution: Comprehensive rehabilitation and modernisation of generators and the full transmission network

1,245 MW North Bank — USD 1.5 Billion

New Hydroelectric Powerhouse on the North Bank

- Existing concession covers both the current South Bank and the potential North Bank mid-merit facility
- Market signals indicate appetite well beyond the projected capacity
- Existing transmission lines have sufficient spare capacity to evacuate additional generation
- Solution: 1,245 MW Cahora Bassa North Bank Powerhouse

400 MW PV Plant —USD +400 Million

Solar Diversification and Revenue Protection

- During CAPEX, one 415 MW generating unit will be offline for approximately 5 years, creating a supply gap
- Hydrology-dependent business model introduces revenue risk during low-water periods
- The North Bank will operate 12–14 hours/day, functioning as a natural battery for solar storage
- Solution: 400 MW PV plant providing revenue coverage, North Bank boosting, and incremental revenue

EXPANSION PROJECT

Cahora Bassa North Bank Power House Project

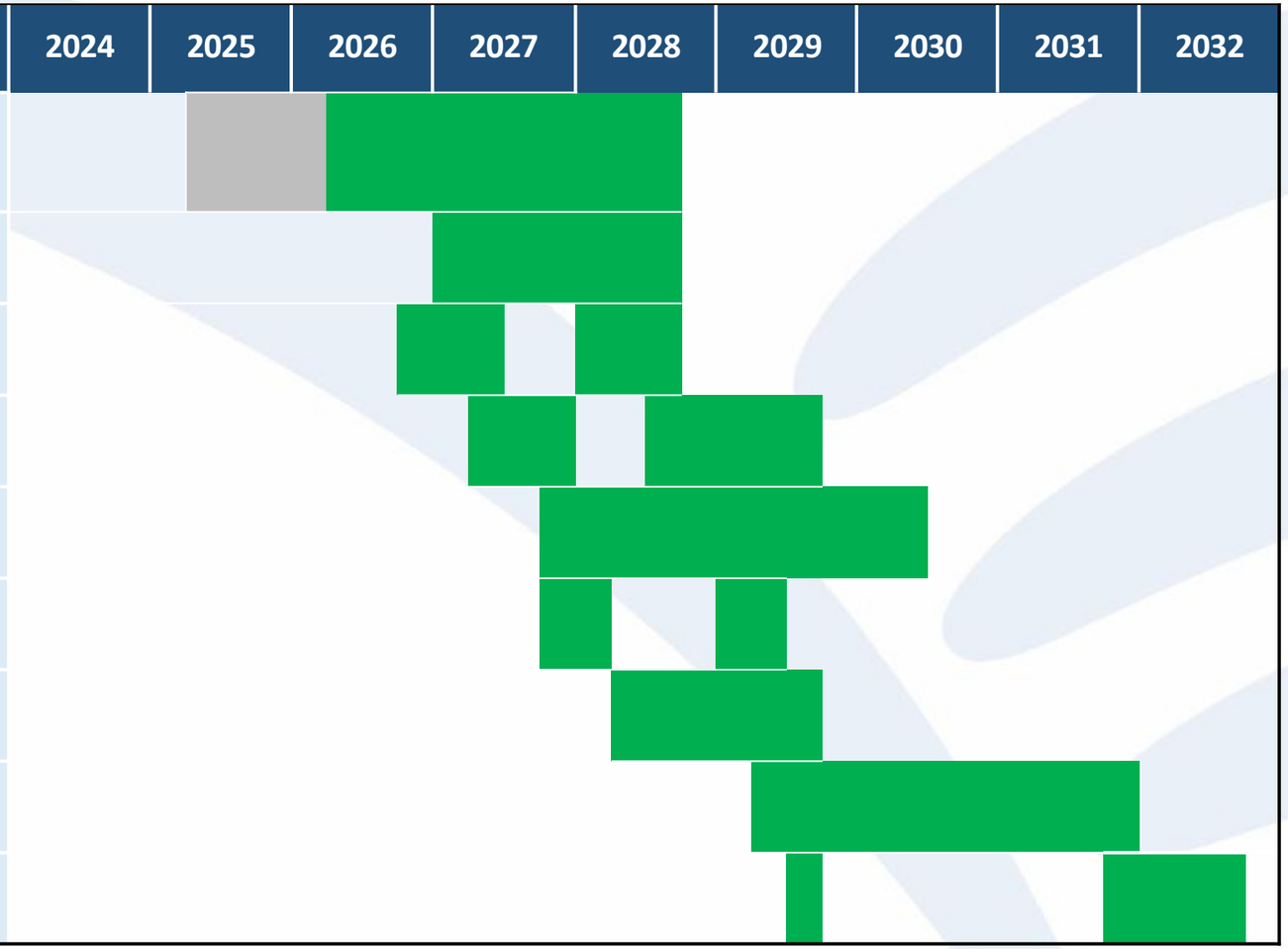
A new 1,245 MW underground powerhouse on the north bank of the Cahora Bassa Dam — set to become one of the most significant green energy infrastructure investments on the African continent.

North Bank Power House Project – General Description

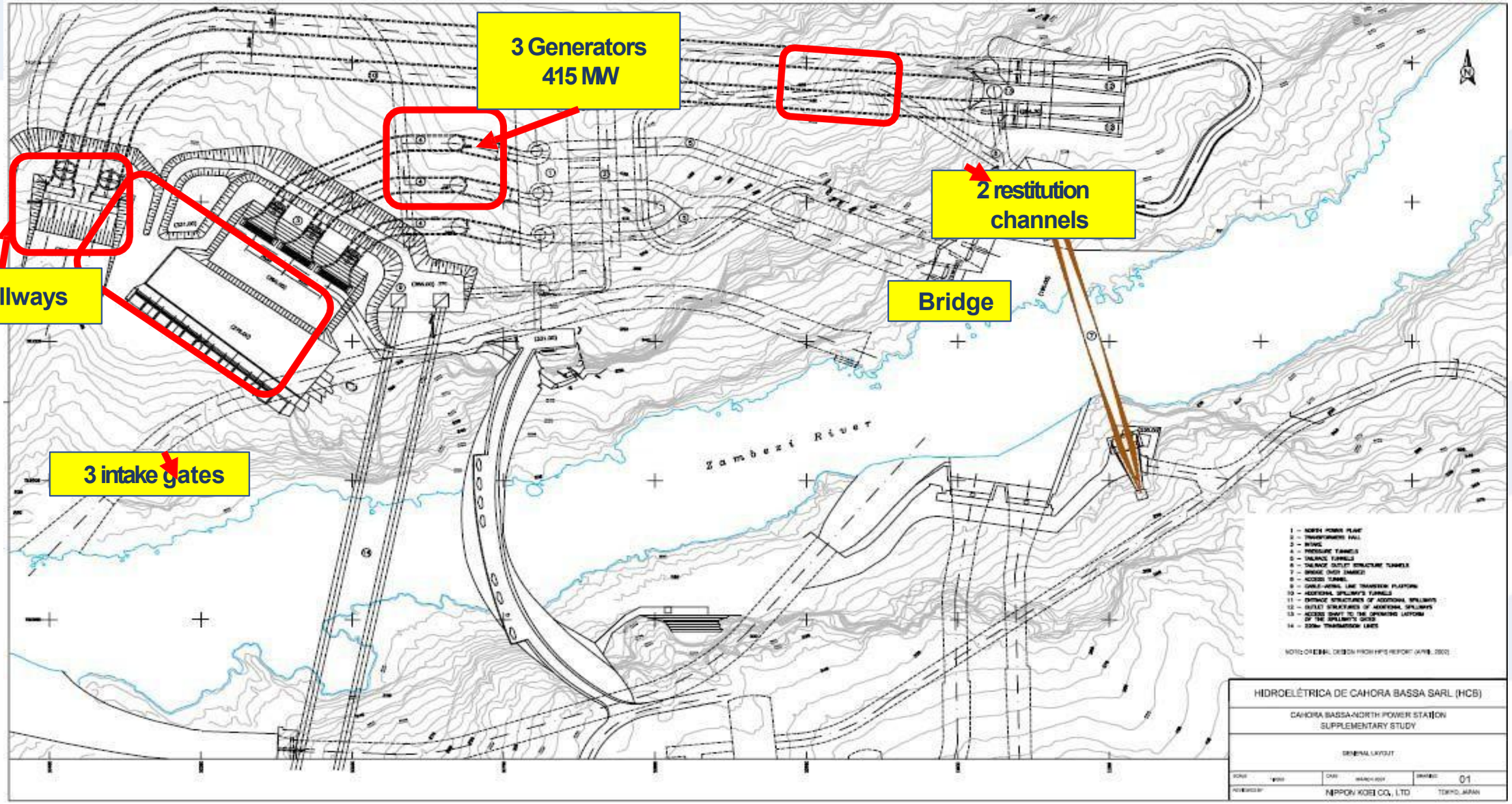
Location	Songo Village, North Bank of the Cahora Bassa Dam – Tete Province
Objective	▪ Expand generation capacity to meet present and future demand of energy, nationally and regionally ▪ Increase 1245 MW of green energy contributing to the strategic goal of 4000 MW of capacity by 2032 ▪ Mitigate reduction of production and revenues during Capex for the current plant (-415MW for 5 yrs) ▪ Contribute to global energy transition
Main Phases	i) Project Feasibility Studies ii) EPC Contracting - Bridge iii) Funding negotiations and financial close iv) Mobilization - Bridge v) EPC Contracting – Power House vi) Mobilization – Power House i) Procurement of materials and equipments ii) Construction of Power Houseção infrastructures iii) Construction of Transmission infrastructures iv) Start of commercial operation
Project Phase	Feasibility studies : i) In progress *Owner's Engineer* contracting process. This consultant will also do the feasibility studies and transaction advisory for the Project.
Next Steps	i) Execution of Project Feasibility Studies ii) Obtaining Concession iii) Funding negotiation and financial close
Start/Conclusion	2024/2030

North Bank Project —Implementation Timeline

Main Milestones	Start	End
Development phase - OE, technical studies	04.2025	09.2028
Financing agreement, off-take agreement, other agreements, financial close	01.2027	09.2028
EPC Procurement process	12.2026	09.2028
Construction - Project Engineering	06.2027	07.2029
Procurement of Materials and Equipments	11.2027	07.2030
Construction - Mobilization	11.2027	06.2029
Construction - Construction of bridge	01.2028	08.2029
Construction - Construction of power house	06.2029	12.2031
Construction - Tests and Comissioning	12.2031	07.2032



Cahora Bassa North Bank Power House Project - Design



SOLAR EXPANSION

400 MW Solar Plant

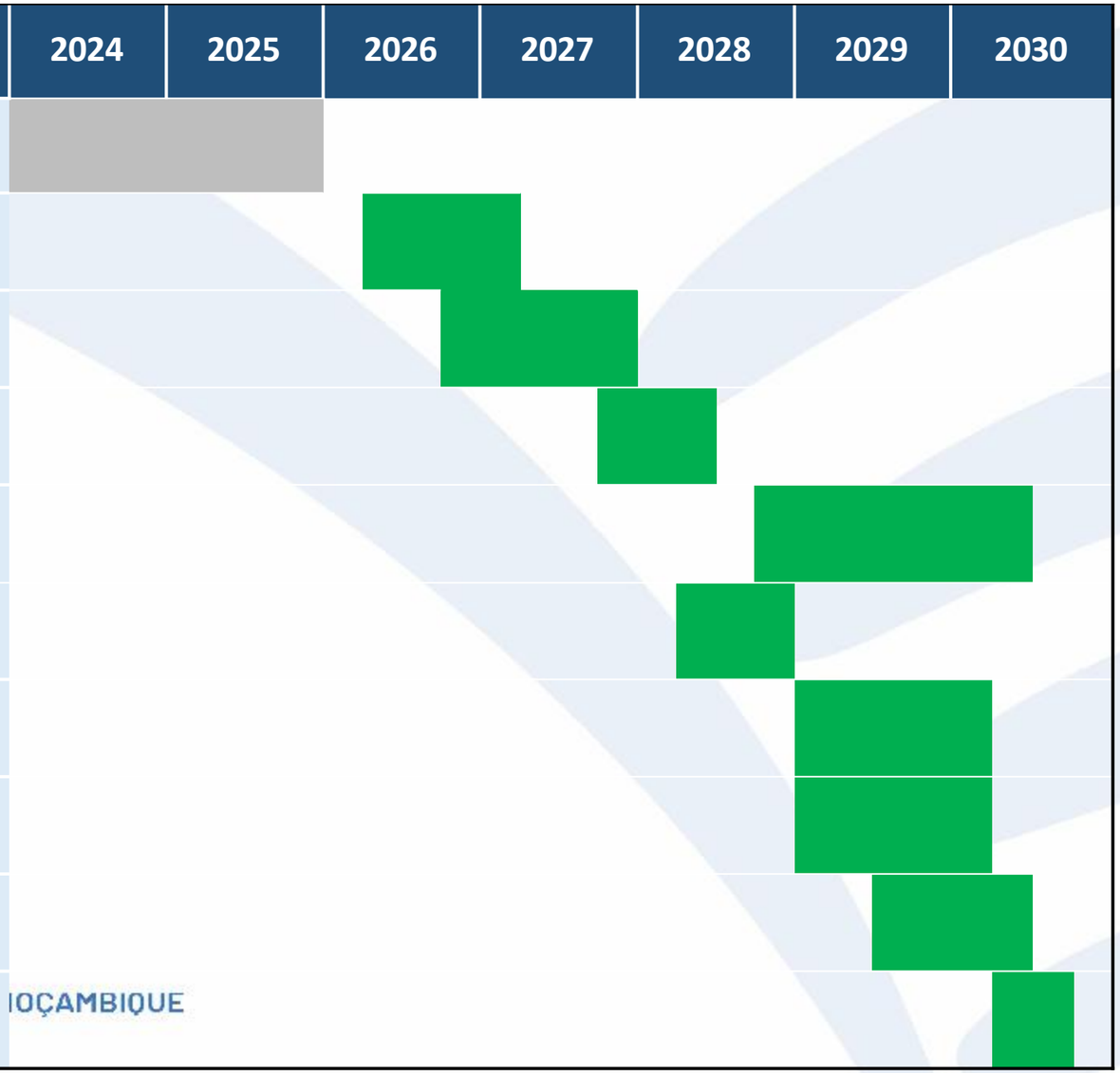
Diversifying HCB's generation mix — blending the reliability of hydro with the abundance of Mozambique's solar resource to create a resilient, all-weather clean energy platform.

400 MW Solar Power Plant —Project Overview

Location	Still to be identified. Consultant already working on this.
Objective	▪ Diversify the sources of generation by mixing hydro and solar thus complementing each other ▪ Boost production by utilizing the 1245MW north bank as a natural battery for the solar plant ▪ Increase installed capacity and offer response by 400 MW/Miti, contributing to the goal of 4000 MW by 2032 ▪ Mitigate reduction of production and revenues during Capex for the current plant (-415MW for 5 yrs) ▪ Contribute to global energy transition
Main Phases	i) Project site location and Feasibility Studies ii) Obtaining Government Concession iii) Funding negotiations and financial close iv) EPC Contracting v) Mobilization vi) Procurement of materials and equipments vii) Construction of Power House infrastructures viii) Construction of Transmission infrastructures ix) Start of commercial operation
Project Phase	Feasibility studies : i) In progress *Owner's Engineer* contracting process. This consultant will also do the feasibility studies and transaction advisory for the Project.
Next Steps	i) Execution of Project Feasibility Studies ii) Obtaining Concession iii) Funding negotiation and financial close
Start/Conclusion	2024/2030

400 MW Solar Project —Implementation Timeline

Main Stages	Start	End
Pre-feasibility Studies	01.2024	12.2025
Feasibility Studies	04.2026	03.2027
Financial Agreement, Off-take Agreement, Financial Close	09.2026	11.2027
EPC Contracting	09.2027	05.2028
Construction - Procurement of Materials and Equipments	10.2028	05.2030
Construction - Mobilization	04.2028	10.2028
Construction - Construction of Power House Infrastructures	01.2029	03.2030
Construction - Construction of Transmission infrastructures	01.2029	03.2030
Construction - Equipment Instalation	06.2029	06.2030
Construction - Tests and Comissioning	06.2030	09.2030



IOÇAMBIQUE

Business Opportunities: Suppliers, Investors & Financiers

1245 MW Hydro Expansion – $1.5 billion

- Attractive investment in large-scale, low-risk, green & renewable energy
- EPC, equipment supply, and financing opportunities
- Regional offtake potential (SAPP) or industry boosting capacity

400 MW Solar PV Plant - +/-$400 million

- Open to technology providers, EPCs, and green finance
- Partnerships for project co-development, equity, and climate finance

CAPEX on the current 2075 MW- $1.2 billion

- Modernization and upgrade contracts for turbines, generators, HVDC/HVAC
- Financing for asset life extension, reliability, and grid stability
- Consulting, O&M, and digital solutions

Conclusion & Next Steps

Our Commitment

- HCB is committed to modern, reliable, and green energy for Mozambique and the region.
- For further engagement and updating on the CAPEX, North Bank and Solar Projects. Be in touch:

Contact Us

Please reach out to our dedicated expansion team:

Expansion Team: expansion@hcb.co.mz

What to Expect

→ **You will be added to our list of potential suppliers, financiers, and investors.**

→ You will receive **invitations** and communications related to tenders for CAPEX, the 1,245 MW North Bank, and the 400 MW Solar project.

Thank You

SCAN ME

O ORGULHO DE MOÇAMBIQUE