TSATE HPP &

MAVUZI II HPP

Revue River Manica Province

Background

EDM, reaffirms its commitment to the sustainable development of the country, aligning its actions with the National Development Strategy (ENDE) 2025–2044, Energy Transion Strategy and the Government's Five-Year Program (PQG) 2025–2029. ENDE constitutes the main reference instrument for national planning and is operationalized during the current five-year period through the PQG , which aims to accelerate inclusive and sustainable economic growth, with a focus on infrastructure modernization and structural economic transformation. In this context, the Minerals, Hydrocarbons and Energy sector is defined as one of the priority areas, supported by resilient infrastructure and the dynamization of development corridors.

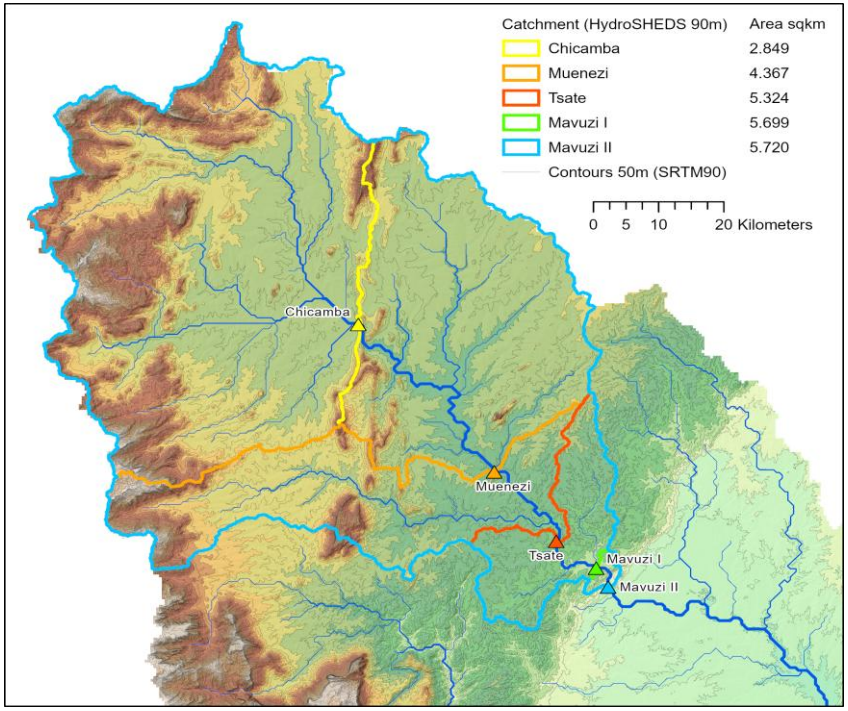
It is within this national strategic framework that The project Tsate and Mavuzi II HPP are planned for implementation in Manica Province, Mozambique, in the three administrative areas of Sussundenga and Macate Districts, and Chimoio Town. The main objective of the projects is to construct an additional hydropower plants on the Revué River, adding 50 MW for TSATE and 18 MW for MAVUZI II to support the national ambition of universal access to electricity by 2030, as well as strengthening the electricity grid in the Beira corridor.

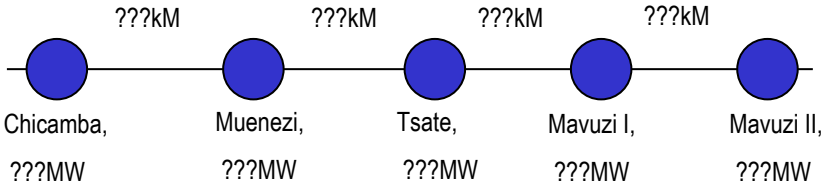
Technical and strategic approach to strategic partnerships with financial institutions and investors interested in the initiatives. EDM, and the Government of Mozambique, are open to constructive dialogue to materialize Tsate and Mavuzi II HPP.

TSATE HPP

Tsate, has a catchment area of approximately 5 300 km^2. Just over half of this area is controlled by the Chicamba dam – 38km upstream with its very large reservoir. The average flow at the Tsate site was calculated as 35.3 m^3/s in the technical study.

The Tsate HPP will have rockfill dam with a clay core, which will create a reservoir of 7 km^2. The reservoir is designed to use both existing river regulation in the upstream Chicamba reservoir and its own storage reservoir for regulating the flow and facilitate electricity generation. A partial protection zone, mandated by the national law, will be established around the reservoir. The buffer zone extends 250 metres away from the reservoir shoreline and will cover an area of 12 km^2. The dam will be approximately 34 metres high and 700 metres wide across the Revué River. The capacity of the power plant is planned 50 MW, 257 GWh/year.





TSATE HPP

Project	Study Developed		Financial approach
TSATE HPP	Feasibility Study – 2015 updated in 2026 Environmental and Social Impact Assessment - 2024	Installed capacity: 50MW Estimated implementation time: 4 years Project Cost: MEUR 328 Expected tariff : €c/kWh 19	Loan or Grant Public-Private Partnership

MAVUZI II HPP

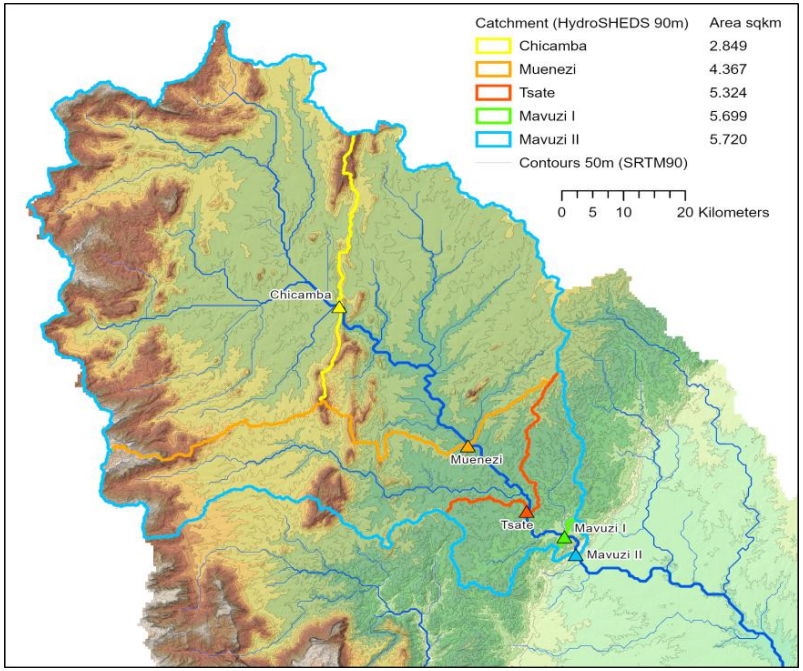
Mavuzi II with the estimated capacity of 18MW will be located approximately 2.4 km downstream of Mavuzi I and 14,5 km from TSATE HPP.

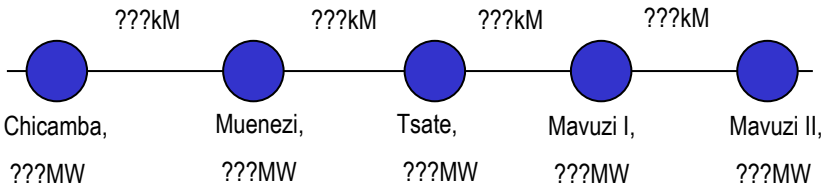
The total volume and the net reservoir storage (i.e., the volume between FSL and MOL) provided is 144,000 m^3 and 17,500 m^3 respectively. The area of the reservoir at FSL is 35,000 m^2.

Mavuzi II is planned to be operated on a baseload scheme **a baseload regime of 18 MW with a turbine discharge of 43 m^3/s for 24 hours per day** and the annual production with this operating regime is 110 GWh/year

The proposed Mavuzi II is along Revue river in Manica Province in the Central Region of Mozambqiue. The installed capacity of Mavuzi II HPP is 18MW (3x5.9 MW)

The closest connection point is at Mavuzi I, about 4 km.





MAVUZI II HPP

Project	Study Developed		Financial approach
MAVUZI II HPP	Feasibility Study – 2024 Environmental and Social Impact Assessment - 2024	Installed capacity: 18MW Estimated implementation time: 3 years Project Cost: MUSD 102 Expected tariff : USDc/kWh 9	Loan or Grant Public-Private Partnership

Interested are encouraged to scan the QR code below …

Thank You!

Tsate and Mavuzi II HPP, Revue river – Manica Province

National Control Center Project (NCC)

Matalane – CTM – Chibata - Nampula

Background

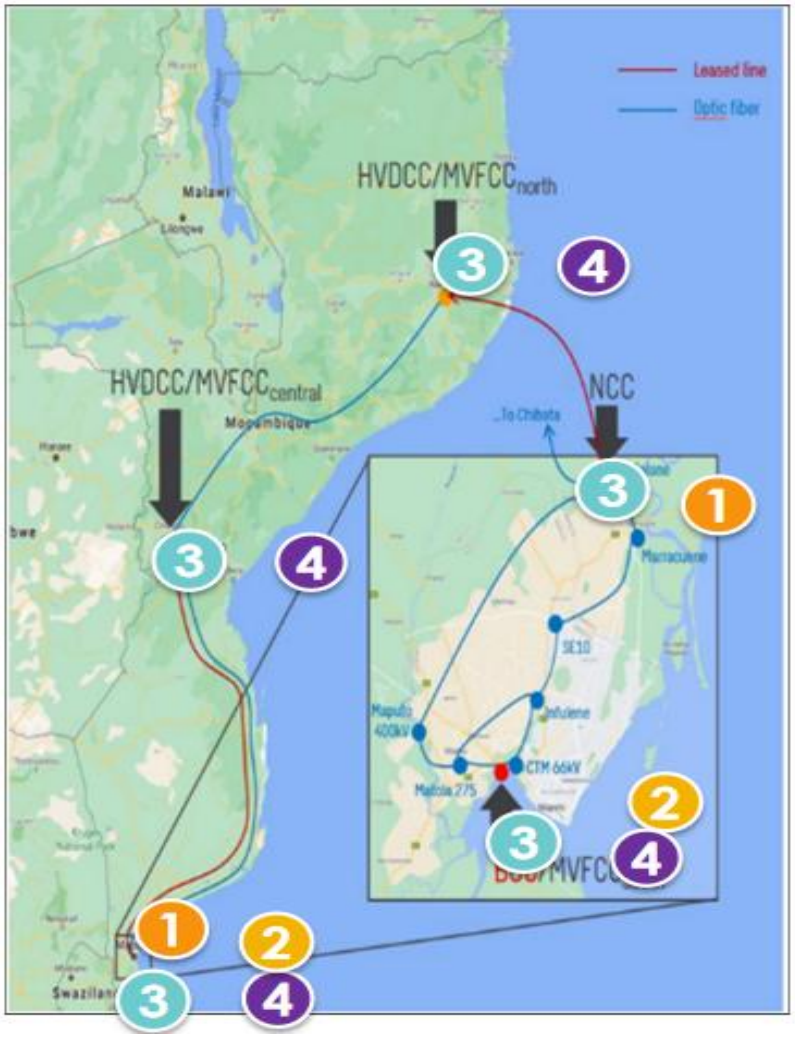
The GoM has secured grant funds from the Swedish Government 170.000.000,00 SEK, AfDB 12.200.000,00 UA, the German Government through KFW 15.000.000,00 EUR and the EU 16.618.000,00 EUR.

An extensive development of electricity demand, generation and interconnection is foreseen in Mozambique for the coming years. In order to meet this growing development and have a manageable, secure, and efficient operation of the electrical grid, a key prerequisite is to be able to monitor and control the full network.

Mozambique's power supply network is currently comprised of two separate and isolated transmission systems:

- Central Northern system – This system consists of the central, central - north and north areas. This system is fed by Cahora Bassa HPP (2,075 MW), as well as by other smaller plants such as Chicamba and Mavuzi HPPs (38MW and 52MW, respectively) and a PV, 30MW in Mocuba.
- Southern system – this system is strongly interconnected and fed by the South Africa grid via 110 kV and 275 kV lines from Komatipoort and through a 400 kV line from Camden and Marathon through Maputo substation. The grid is also fed by a 16 MW hydropower plant at Corumana, the new Maputo Combined Cycle Thermal Power Plant (CTM, 106 MW), inaugurated in 2018, Ressano Garcia (270 MW) and Kuvaninga (40MW) in Gaza Province.These two systems are currently synchronized by a continuous AC link through Zimbabwe and South Africa.

The National Control Centre (NCC)



1

CENTRO NACIONAL DE DESPACHO
NCC
MATALANE

2

CENTRO NACIONAL DE DESPACHO
BACKUP - BCC
CTM

3

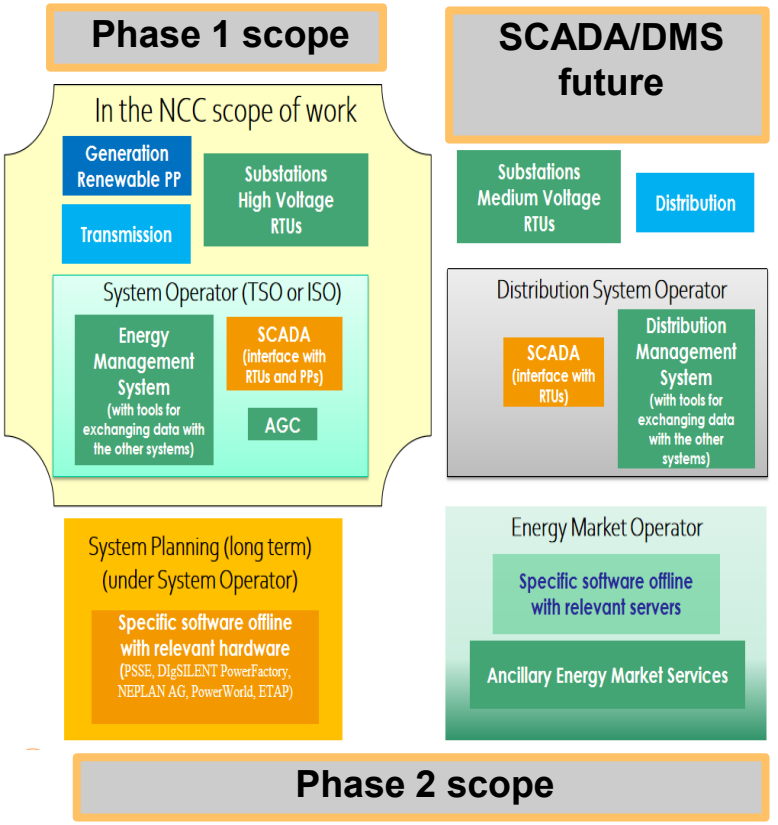
CENTROS REGIONAIS
HVCC
CTM, CHIBATA and NAMPULA

4

CENTRO REGIONAIS
MVCC
CTM, CHIBATA and NAMPULA

The National Control Centre (NCC)

- **The National Control Centre (NCC)** in Maputo - Matalane, fitted with a data center, in a new building.
- **The Backup Control Centre (BCC)** in Maputo - CTM fitted with a data center that shall function as a Backup to the NCC as well as **the Southern Regional Control Center** with a Medium Voltage Feeder Control Centre for the south area.
- **The Central Regional Control Center** in Chibata with Medium Voltage Feeders Control Centre (MVFCC) for the Central region, combined with High Voltage Data Collection Centre (HVDCC).
- **The Northern Regional Control Center** with Medium Voltage Feeders Control Centre (MVFCC) for the Northern region, combined with High Voltage Data Collection Centre (HVDCC).



Systems:

SCADA/EMS platform, Telecommunications infrastructure and Integration of existing substations.

The National Control Centre : Phase 1 - System Operator

Mozambique Power Sector Context

- Rapid growth in electricity demand
- Integration of renewable energy sources
- Participation in Southern African Power Pool (SAPP)
- Implementation of Electricity Law No. 12/2022
- Need for modern system operation infrastructure

Regulatory Framework, Electricity Law No.12/2022 (Article 7):

- System Operator
- Market Operator
- System Planning Function
- Must operate as independent functions supported by a modern dispatch center.

National Control Center Project

The objective is to establish a modern and resilient dispatch infrastructure capable of:

- Real-time monitoring and control
- Renewable energy integration
- Regional power trading
- Reliable system operation

The National Control Centre : Phase 1 - System Operator

Project Components

- National Control Center – Matalane
- Regional Control Center - South & Backup Control Center – CTM
- Regional Control Center - Central – Chibata
- Regional Control Center - North – Nampula

Systems:

- SCADA/EMS platform, Telecommunications infrastructure and Integration of existing substations.

Current Financing (Grant) – Phase 1

The current Financing Partners are:

- KfW
- European Union
- SIDA
- African Development Bank

Implementation Status

Project under procurement stage: launched the key lots:

Lot 1 - Construction of buildings at Matalane, CTM, Chibata and Nampula.

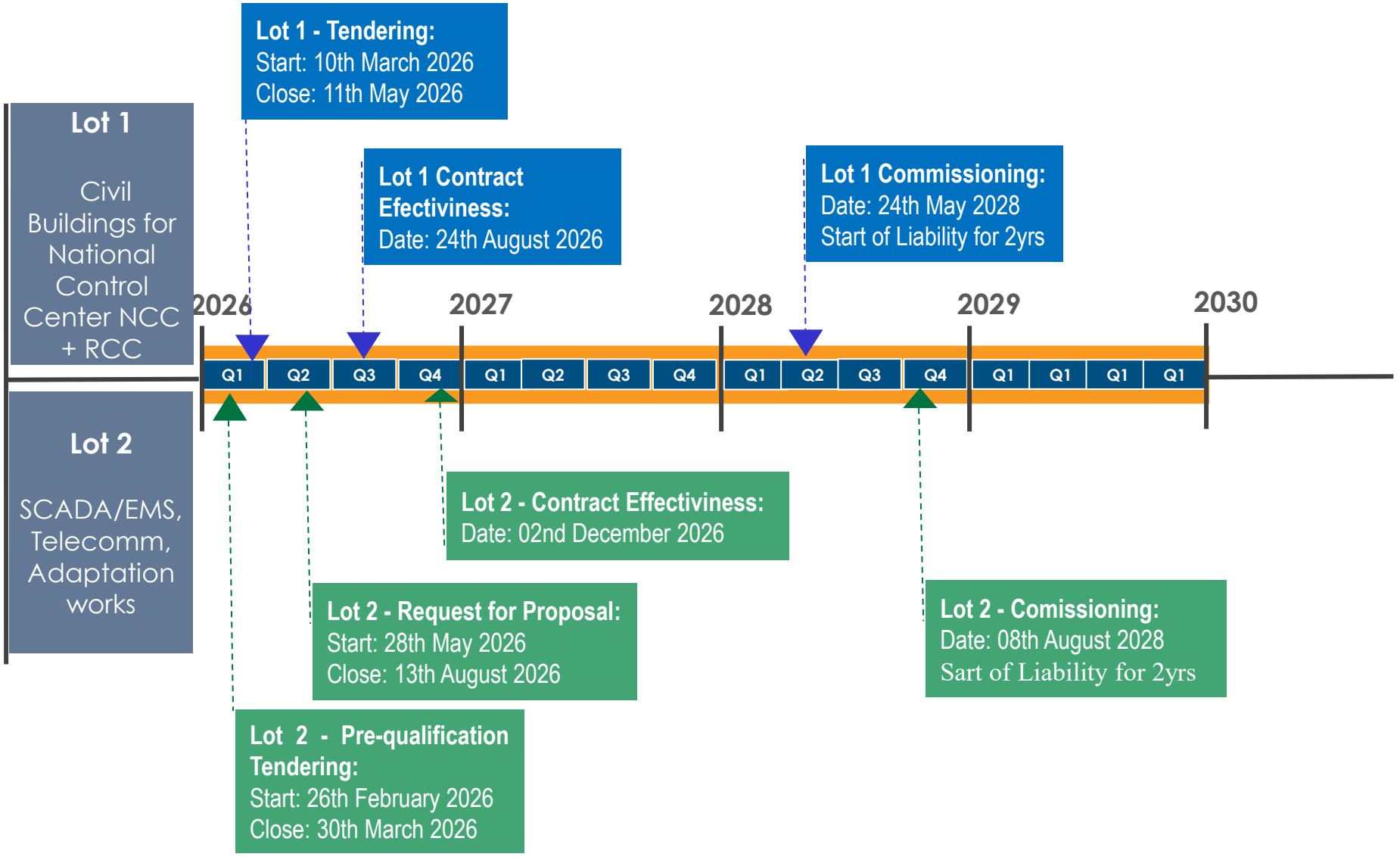
Lot 2 - SCADA/EMS systems, Telecommunications infrastructure and Substation adaptation works

Construction schedule:

Start: Q3 - 2026

Commissioning: Q4 - 2028

The National Control Centre : Phase 1 - System Operator - implementation timeline



The National Control Centre : Phase 2 – Grid Code Compliance (Market Operator & System Planning)

Funding Gap for Phase 2

Due to limited financing, some strategic components were postponed:

- *Market Operator facilities*
- *System Planning facilities*

Why Phase 2 is Critical

The implementation of Phase 2 will enable:

- Independent electricity market operation
- Improved system planning capability
- Improved Integration of renewable generation
- Stronger regional power trading (SAPP)

Strategic Impact

- Strengthen national grid reliability
- Enable transparent electricity market
- Support renewable energy integration
- Facilitate regional electricity trade

Investment Opportunity

Key investments required the following:

- Construction of Market Operator facilities
- Construction of System Planning facilities
- Market management software
- Planning and forecasting tools
- Capacity building on ISO system

The National Control Centre : Phase 2 – Grid Code Compliance (Market Operator & System Planning)

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CALL FOR PARTNERSHIP

Electricidade de Moçambique, E.P. invites development partners to support **Phase 2 of the National Dispatch Center project.**

This investment will support Mozambique's energy sector reform and strengthen regional energy integration.

The implementation of the phase 2 of the National Control Center project has an estimation of 12 MUSD.

Interested are encouraged to scan the QR code below for the tender documents

Lot 1

Lot 2 PQ

Thank You!

Matalane – CTM – Chibata - Nampula

National Control Center Project

Mozambique Off-Grid Energy Investment Pipeline

Partnering with Europe to Accelerate Mozambique's Energy Transition

About Us

Who We Are

The **Energy Fund (FUNAE)** is Mozambique's national public institution responsible for expanding access to modern energy in rural and off-grid areas.

Established in **1997**, FUNAE operates with administrative and financial autonomy under the **Ministry of Mineral Resources and Energy (MIREME)** giving it the mandate and flexibility to drive impactful, on-the-ground change.

Energy Fund (FUNAE)

Our Mandate

Universal Access

- Promoting universal access to modern, affordable, and sustainable energy services.

Off-Grid Solutions

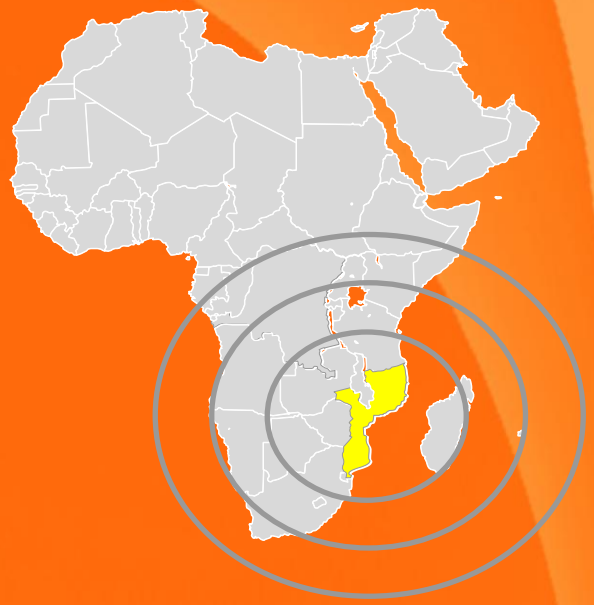
- Develop and deploy decentralised electrification solutions — mini-grids, solar home systems, and stand-alone units.

Productive Use

- Promote energy as a driver of local economic activity, supporting agriculture, health, education, and enterprises.

Finance Mobilisation

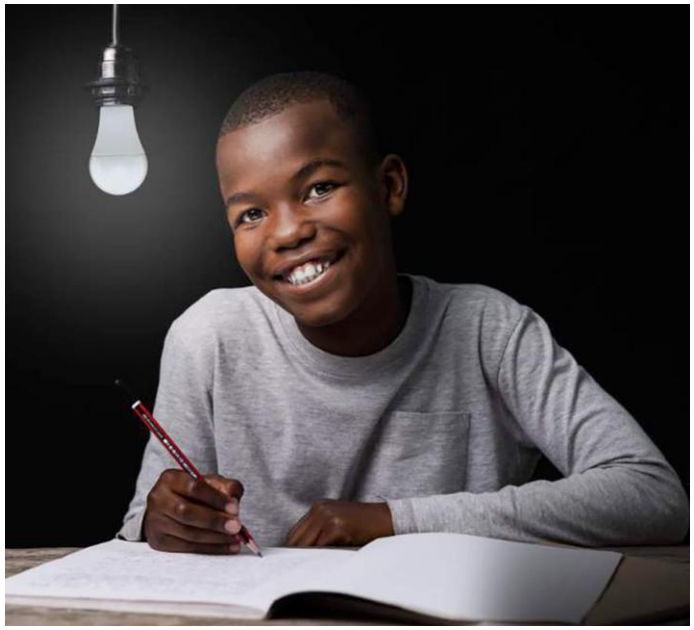
- Mobilise and manage financing for decentralised renewable energy projects across the country.



Mozambique

Energy Access Context

Current Off-Grid Energy Context



Population

- **32.4 million people**
  - **34.7 % Urban areas**
  - **65.3 % Rural areas**

30% of 2030 access expected from off-grid solutions.

	2013	2019	2023	2025	2030
Electrification Rate	24%	35%	52%	64%	100%
Off Grid Access Rate	1%	3%	7%	11%	30%

Current Off-Grid Energy Context

Country Profile

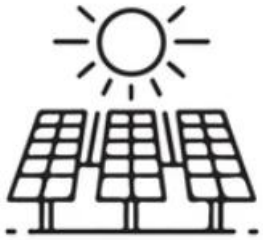
- Regulatory Framework
- 100+ existing FUNAE mini-grids
- Growing number of private operators
- Private developed and owned mini-grid approved
- and in operation since 2025
- On-going RFQ for mini-grids in Nampula province

Mozambique OFF-GRID – *Market Opportunity*

Integrated Energy Access Plan Based on Least Cost Electrification Approach

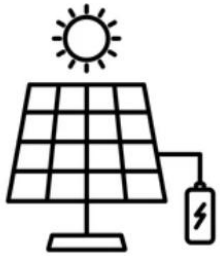
~ 363 News Mini Grids

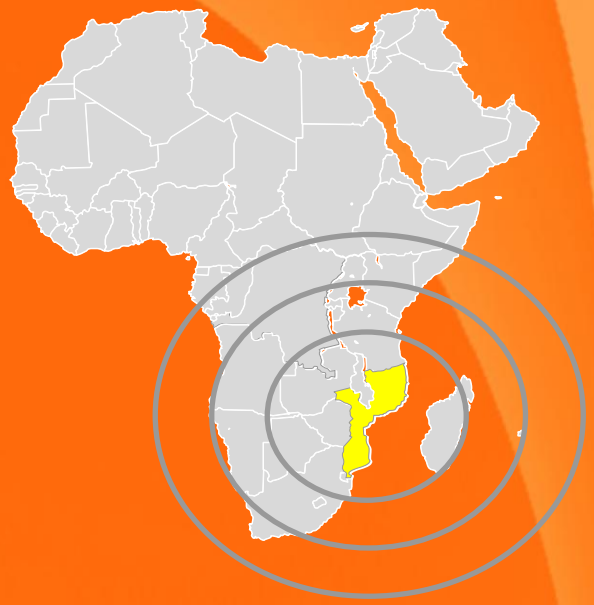
- Capacity: 16.7 MW
- **Investment: > US$100 Million**



2.403.718 SHS

- Capacity: 102.8 MW
- **Investment: US$869 Million**



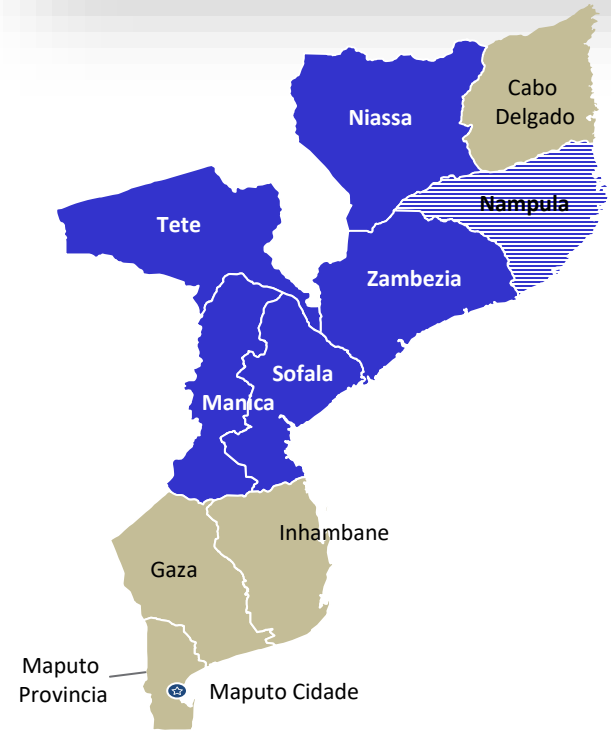


National Mini-Grid Government

Investment Program

ELECTRICIDADE DE MOÇAMBIQUE, E.P.

Mini Grid Investment *Snapshot*



Selected sites for Mini-grids projects

Promote participation of the private sector in the electrification process and accelerate universal access

Pre-selected sites for *mini-grids clusters* in **Tete, Zambezia, Nampula, Niassa, Manica e Sofala.**

Main characteristics:

- **Low electrification rate**
- **High Population density**
- **Productive use approach**

Accelerating Private Sector Participation

100+

Solar Mini-Grids

Concession Model – BUILD – OWN- OPERATE -TRANSFER

Design & Build & Own

Private sector Led

Financial Incentives

Government and Partners backed support included

Technical Support

Project Preparation Support

Coordinated Under Mozambique's Country Platform

Site Selection Methodology

Sites are being identified per province based on:

Distance from the Grid

At least **30 km away** from existing or planned grid infrastructure

Demographic and Demand Data

Analysis of **population distribution** and **energy demand** across provinces

Economic and Social Activities

Presence of **economic and social activities** within the settlement

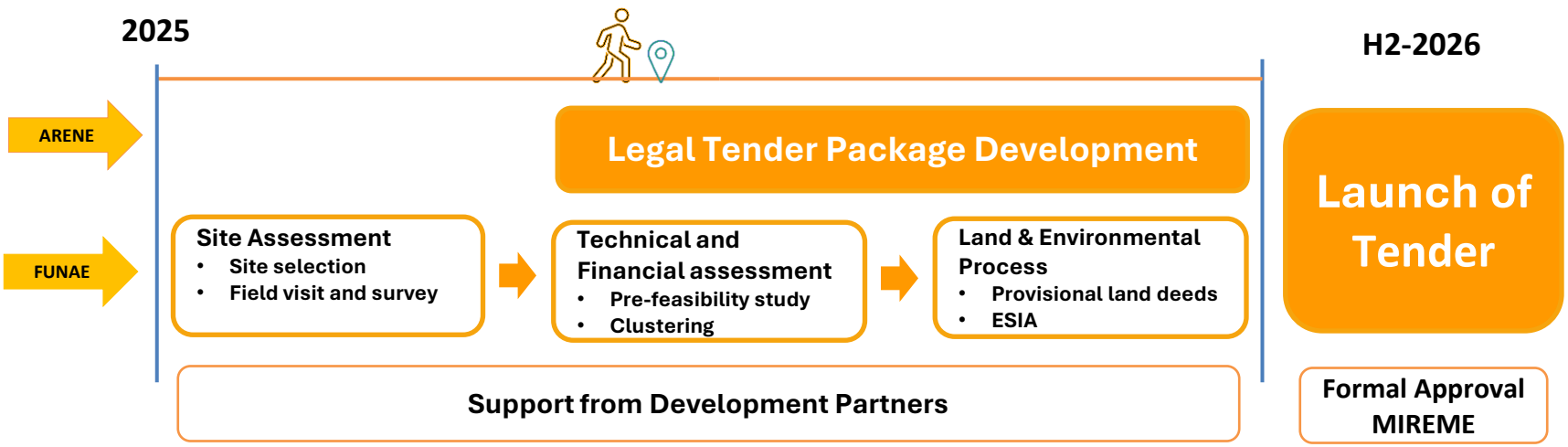
Minimum Settlement Size

Minimum of 250 buildings per settlement

National Energy Planning

Alignment with **national energy planning frameworks**

TENDER PREPARATION PROCESS



During the tender, applicants will be provided with:

- List of clustered sites per province.
- Pre - assessment studies per site.
- Provisional land securitization.
- Input assumptions for financial modelling.
- Support for Environmental and social licensing.

Location

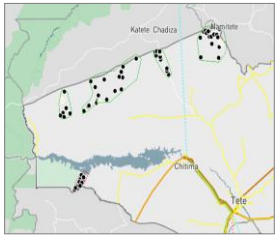
Mini-Grids Investment Pitch

Tete Province Example

Example Mini Grid Pre-Cluster – *Tete Province*

Cluster #1: Districts of Maravia

BORDER WITH ZAMBIA



~17.5M€
Estimated CAPEX

26,000+
Potential Connections

1.8+
MWp Installed Capacity

72+
Sites

300+
Connections per Site

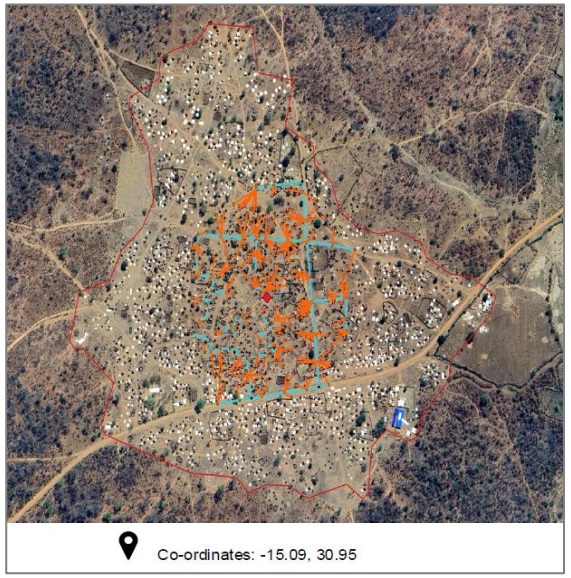
Mini Grid Cluster - *Tete Province*

Location Characteristics	
Province	Tete
District	Maravia
Locality	Metico
Village Name	Uncanha

Accessibility and Demand Characteristics	
Distance to the grid (km)	147.43
Residential demand (kWh/day)	82.19

Connection Characteristics	
Residential connections	500
Commercial connections	41
Public infrastructure	4

Generation Components	
Solar PV size (kWp)	50
Battery size (kWh)	105
Inverter size (kW)	25



Tete Province Cluster – *PURE Opportunities*

Agro-processing Centres

Milling, drying and pressing

Livestock and Fisheries Value Chains

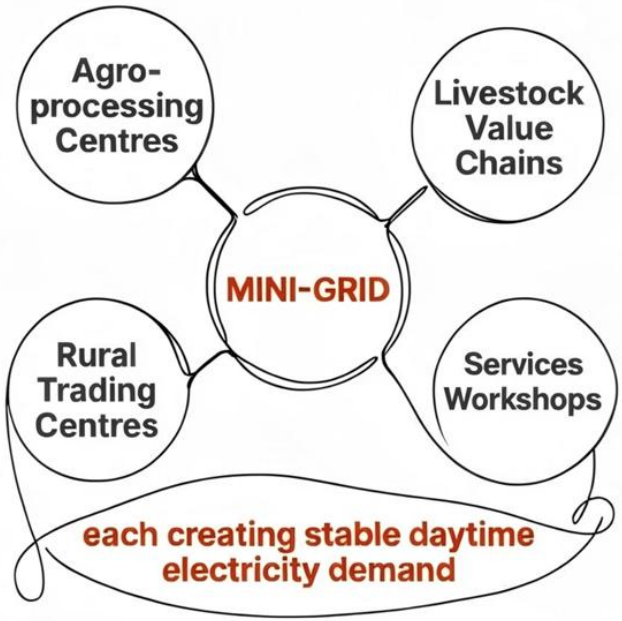
Cold storage, processing and market linkages driving demand

Service Workshops

Welding, fabrication and equipment servicing for local mining and SMEs activities

Rural Trading Centres

Commercial hubs serving cross-border and agro commodities export trade and local retail



Provincial One Pagers

TO ACCESS MOZAMBIQUE PROVINCIAL

Relevant Information

SCAN HERE

Location

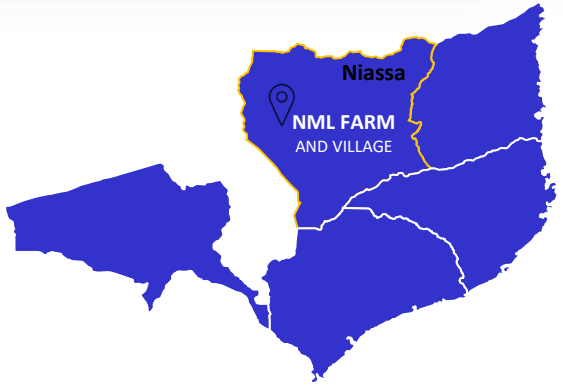
Produtive Use of Energy (PURE)

Niassa Macadamia Case Study

PURE Case Study - *Niassa Province*

Macadamia Farm

A 10,000-ha macadamia plantation with on-site processing — drying, shelling, and packing — located in a rural area of Niassa, Mozambique.

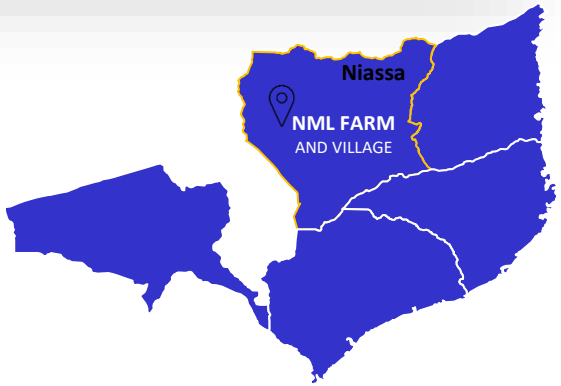


Location of NML Farm and the Village

PURE Case Study - *Niassa Province*

Macadamia Farm

Energy Project Profile



Location of NML Farm and the Village

High Daytime Baseline Load

Processing and refrigeration demand is concentrated during daylight hours, currently met by **diesel generators** — driving high OPEX and supply risk.

Catalyst for Local Electrification

The farm acts as an **anchor load**, enabling extension of electricity to surrounding community users in the region.

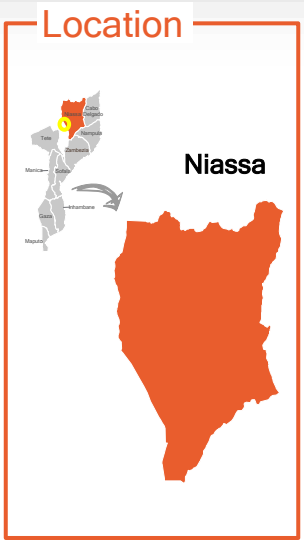
PURE Case Study - *Niassa Province*

Location Characteristics	
Province	Niassa
District	Chimbonila
Locality	Chimbonila
Village Name	Macadamia Site

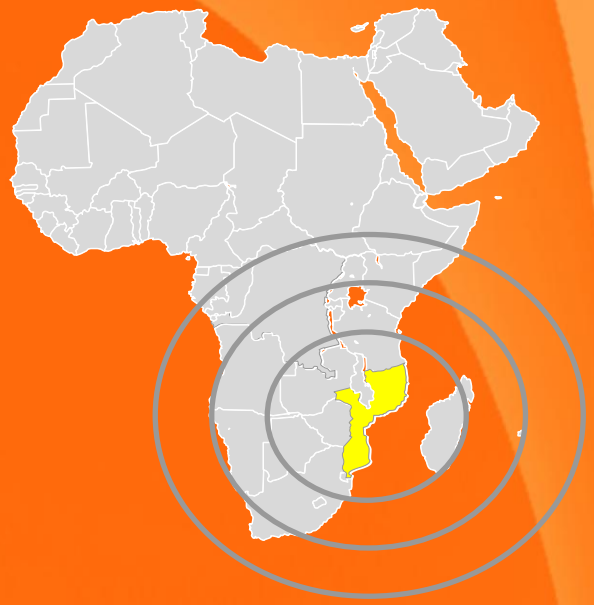
Demand Characteristics	
Processing Plant demand (kWh/day)	214
Residential demand (kWh/day)	82
Commercial demand (kWh/day)	39

Connection Characteristics	
Residential connections	401
Commercial connections	34
Public Infrastructure	2

Generation Components	
Solar PV size (kWp)	130
Battery size (kWh)	120
Inverter size (kWp)	50



Co-ordinates: -13.420408, 35.3271584



The Future Pathway of Off-Grid Energy in Mozambique

A structured, scalable mini-grid market — ready for investment.

ELECTRICIDADE DE MOÇAMBIQUE, E.P.

A Market Ready for Investment

Regulatory Framework

Clear rules enabling private sector participation.

Coordination Platform

Government-led alignment of institutions and partners.

Blended Finance

Architecture designed to de-risk investment.

Investment-Ready Pipeline

Clustered mini-grid sites with strong productive use demand.

FUNAE
FUNDO DE ENERGIA, FP