



REPÚBLICA DE MOÇAMBIQUE  
MINISTÉRIO DOS RECURSOS MINERAIS E ENERGIA

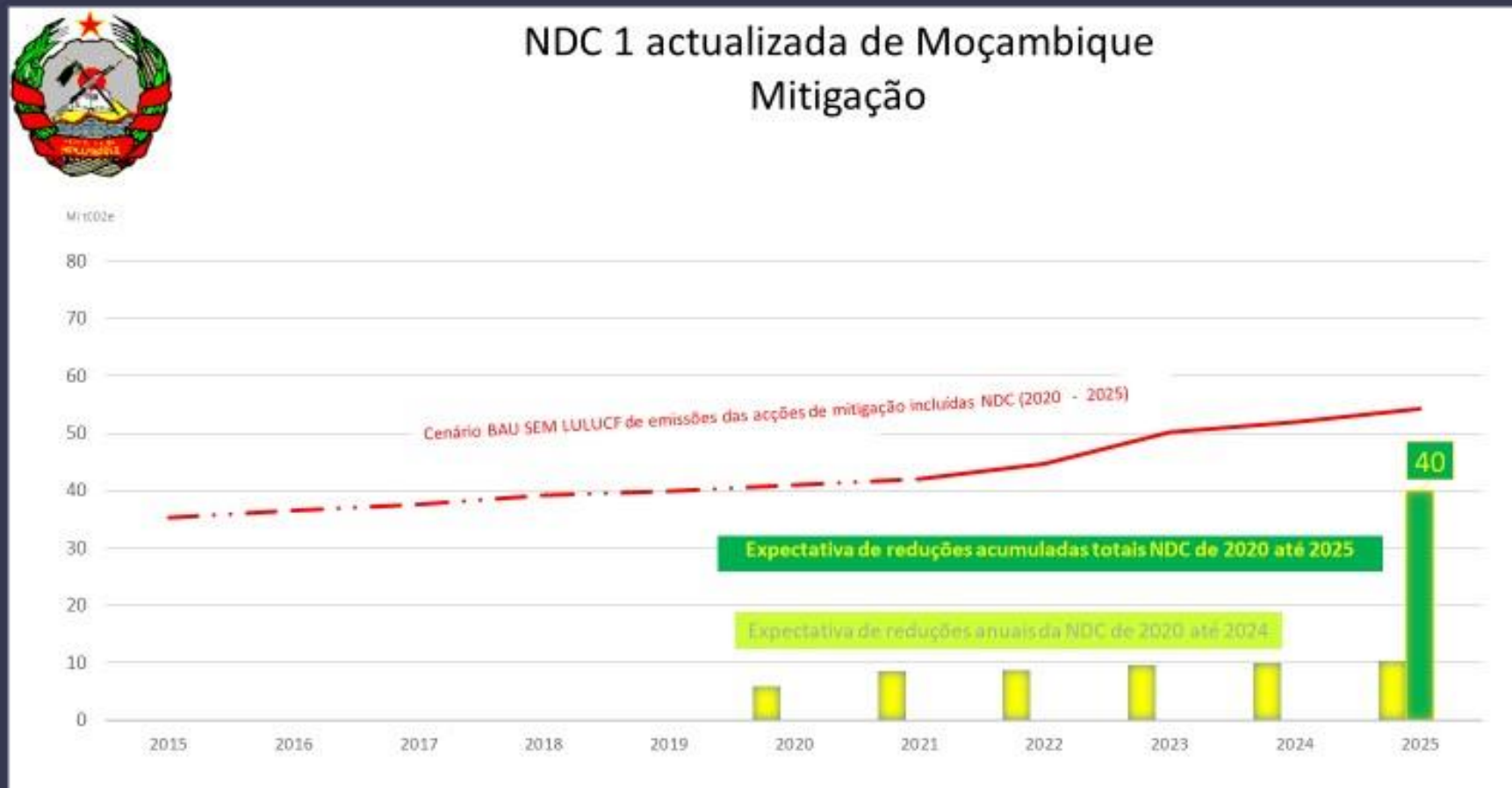
**DIRECÇÃO NACIONAL DE ENERGIA**

**“ Fourth Africa Climate Talks”**  
**Ensuring just and Equitable transition and**  
**human security in Africa**  
**Adaptation Finance to Energy Sector**

**Maputo, July 2022**

- High penetration of Renewables Energies in Mozambique Energy matrix;
- The need to accelerate electrification and industrial development;
- The decisive role of energy storage;
- Effort to achieve Global emission reduction Goals

# Emission Reduction Expectation- Updated NDC1



Updated NDC 1 Emissions Reduction Expectation from Mozambique (0.5 up to 5.4 by 2025- around 1.2 tCO<sub>2</sub> per capita below 2 degree celcyus ) This document is thus the result of the ambition progression process in several aspects, such as adaptation, mitigation, transparency and international support, adaptation and risk reduction actions that the country is committed to carrying out in the period 2020 – 2025, with a view to making Mozambique more resilient to the impacts of climate change, reducing climate risks to people and assets as much as possible.

# Efforts –Projects translates into its NDC, reduction of CO2

mitigation action	measure	Goal/Location
Improved access to renewable energies 4.6.2.2.1	Promotion of the use of renewable energy sources - hydro 4.6.2.2.1.1	New Tsate capacity (50 MW), Moamba Major (15 MW) Luaice 0.5MW Majaua 595Kw Berua 1900Kw
	Technological Action Plan for Regular Hydroelectric Turbine Technology	
	Promotion of the use of renewable energy sources - wind 4.6.2.2.1.2	Namaacha (120MW) Manhiça (120MW) Metro (40MW) Vilanculos (10 MW) Dondo (30 MW) Nacala (30 MW) Boane (30 MW) Cuamba (30 MW) Balama (10 MW) Czech – Maputo (60KW) Upper Changane – Gaza (100Kw) Changanine –Gaza (0.06MW) Zimane – Inhambane (0.06) MW Chiloane – Sofala (0.04 MW) Inhamuchindo - Sofala (0.060 MW) Chissinguana – Sofala (0.01 MW) Chicule – Manica(0/07) Mpego - Manica (40 MW) Garagua Manica (0.04 MW) Fortuna – Tete (20 MW) Mazogo Lualesse (0.04 MW) Chissimbi – Niassa (0.020 MW) Matchedje – Niassa (0.223MW) Ninga - Cabo Delgado (18MW) Ngapa - Cabo Delgado (0.200MW)
	Promotion of the use of renewable energy sources – Photovoltaics 4.6.2.2.1.3	
	Implementation of the Technological Action Plan for Regular Scale Photovoltaic Power Plants - TNA	
Promotion of the expansion of the national grid or the creation of micro-grids for energy distribution	Expansion of the urban network, creation of new connections; promotion of 100% coverage in the connection of domestic consumers in suburban areas, in districts and interconnected to the national electricity grid (SILE).	Urban areas, in districts - across the country
Promotion of low carbon urbanization 4.6.2.1.4	Construction of the 450 MW thermal power plant based on natural gas: Technological Action Plan for Natural Gas Combined Cycle Technology	Inhambane/Temane
	Massification of LPG - Increasing the number of people with access to cooking gas to around 309.02% compared to the current	Cabo Delgado/Pemba, Zambézia/Mocuba, Nampula and Tete
	Massification of Natural Gas Use: o Construction of ten (10) Compressed Natural Gas Supply Stations, o Import of one hundred and fifty (150) buses to CNG o Import of one thousand (1000) kits and respective conversion cylinders for Natural Gas. o Conversion of 1000 cars to NG	Maputo Province, Gaza and Inhambane
	Repair of 150 NG-powered buses for public transport	Maputo
Increase in Energy Efficiency in Travel	Expansion of the Metrobus to the main capitals of the country	Maputo, Beira and Nampula
Managing and valuing waste 4.6.2.4.1	Promotion of sustainable waste management in Mozambique (NAMA DE WASTE)	All country
	Implementation of the Technological Action Plan and Project Ideas for the Management and Treatment of Urban Solid Waste	
Valuing and expanding conservation farming techniques	Application and expansion of agricultural production techniques with a conservationist and soil protection nature, such as the use of no-tillage.	All country
Expansion of efficiency in the production and use of biomass fuels	Application and dissemination of production techniques and improved use of firewood and sustainability of charcoal.	All country

COP26-NDC 1- Implementation of RE project, 23 project based on Solar PV ( 4 Large-scale up 30MW) ; 2 Wind farm and 4 mini-hydro ( 1 hydro power plant Tsate HPP 50MW) ; Construction of the 450 MW (CTT) thermal power plant based on natural gas; Transport sector promotion of the use of vehicular gas-Maputo Province, Gaza and Inhambane; and Massification of the usage of LPG - Increasing the number of people with access to cooking gas ;



# Current situation and Facing Tomorrow

## Gas sector

Promote the gas infrastructure

## Actions

Considers gas has an indispensable role in the energy transition and industrialization process by promoting low-carbon emission ;

**Consider local content to channel investment to priority sector and meet the SDG for 2030 ;**

Develop gas storage and transport infrastructure including collaboration with neighbouring countries  
Evaluate the feasibility of small-scale LNG exports to the neighbouring countries;

## Renewables

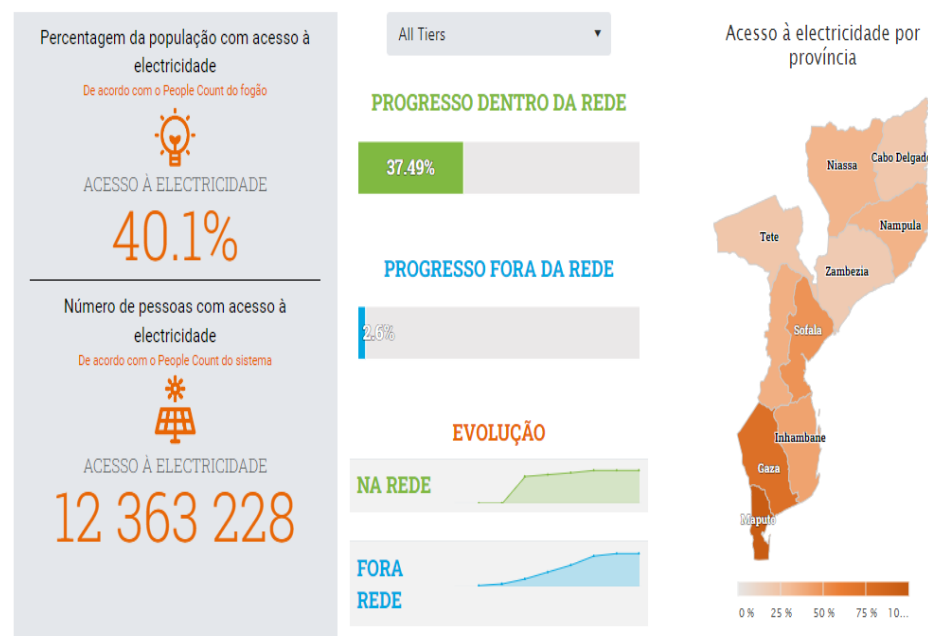
Transition based on RE, provide vast socio-economic benefits, improving Access to electricity, job creation

Mozambique is a part of the African countries in Which 900 million people do not have access to clean energy for cooking and 600 do not have access to electricity → the to approach an energy transition adapted to African context to ensure equity in all countries

## ACESSO À ELECTRICIDADE : TODOS TIERS

Ao lado da percentagem da população com acesso à electricidade em Moçambique, é apresentada a percentagem de acesso fora e na rede bem como a sua evolução ao longo do tempo

O mapa a direita mostra a percentagem actual de acesso a electricidade em cada provincia



# Key Findings

## Challenges

Developing countries like Mozambique, the Energy Transition is not a process that, by itself turn into economic growth. However the countries faces the challenge of transitioning from a situation of poverty for most of its population to a situation of well-being Mozambicans

It is fact that the cost of RE systems has continuously decreasing. However two large-scale projects under development and implementation, namely the 450MW CTT gas Thermal plant and 1500MW Mphanda Nkuwa Hydropower Plant, show a level of cost per kWh well bellow the cost of solar projects, in addition both of them are crutial for leveraging RE Power Plants;

**In conclusion, there is unequivocal recognition of the legitimacy of each country to take into account the specific prevailing conditions, we can have the fairest and sustainable energy transition posible;**

**It is important to mention that it is fair and sustainable, assuming that the financing scheme/mechanism does not include excessive conditioning.**



OBRIGADO