Mozambique: Energy Profile

Population:	23.4 million (Rural: 69%, Urban: 31%) ¹
GDP per capita:	410 USD
GDP:	9.6 billion USD

National

Rural

Urban

At less than **12%** Mozambique currently has a relatively low national electrification rate. While electricity has reached **21%** of urban households, rural electrification lies at a very low level, **0.2%**. Only **2%** of the population have access to modern cooking fuel and more than **98%** from rural areas (**69%** of country's total population) still use fuel wood for cooking.

Current Energy Access Situation²

				0.000
% of population with access to electricity		11.7	6.3	21
Fuel used for cooking	% of population with access to modern fuel for cooking (Electricity, Gas or Kerosene)	2.7	0.2	8.6
	% of population using wood for cooking	84	98.4	49.3
	% of population using charcoal for cooking	0.4	0.1	1
	% of population relying on solid fuel for cooking that use Improved Cook Stoves	-	-	-

Current Energy Supply Situation³

- The primary energy supply is dominated by biomass (78%).
- Total installed electricity capacity (2009) is 2.308 GW (hydropower 99%)
- Mozambique has large reserves of coal. Total coal reserves are estimated to be about 3 billion tons. There are exploitable reserves of natural gas that might be as high as 3 trillion cubic feet.
- Mozambique exports 73% of the electricity generated by the Hidroelectrica de Cahora Bassa (HCB) to South Africa.
- Power transmission in Mozambique faces 2 critical issues: the large size of the country and its dispersed settlement patterns make power distribution extremely expensive; HCB must first export power to Eskom, which in turn sells the power back to southern Mozambique at an increased rate.

Renewable energy potential:

- Mozambique has become a large hydroelectricity producer. Its hydropower generation potential is estimated at roughly 15,000 MW per year, of which only 2,100 MW is currently being exploited.
- Annual incident solar radiation, distributed evenly across the country, is about 1.49 million GWh thousands of times more than the country's current annual energy demand.

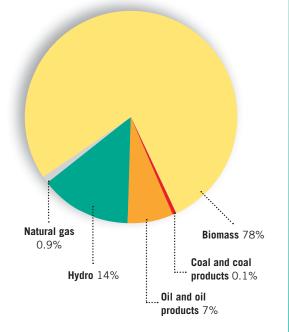
¹ World Bank Data

² Energy Access Situation in Developing Countries (WHO, UNDP 2009) and World Energy Outlook (IEA 2009) ³ Paper Access Situation in Developing Country Profiles (IRENA 2010) Policy and regulation regulation regime









M<u>ozambique</u>

Energy Targets³

- 6,000MW of wind, solar and hydro capacity (2,000 MW each)
- Installation of 82,000 solar photovoltaic systems, 1,000 bio digesters, 3,000 wind pumping systems, 5,000 renewable-energy-based productive systems and 100,000 solar heaters in rural areas

Relevant Policies and Key Players³

The **Ministry of Energy** (Ministério da Energia, ME) is responsible for all energy resources. The National Directorate for Electrical Energy (DNEE) is a central technical body within the ME, responsible for the analysis, preparation and elaboration of energy policies.

Three main energy relevant Government directorates were established: The National Directorate for Electrical Energy (Direcção Nacional de Energia Eléctrica, DNEE), National Directorate of New and Renewable Energy (Direcção Nacional de Energias Novas e Renováveis) and National Directorate of Fuel (Direcção Nacional de Combustíveis)

The **Energy Policy (1998)** is one of the main energy documents in the country that presents a clear statement on the importance of providing energy to the households and productive sectors. It aims to build capacity and improve management within the electricity sector, increase exports and efficiency, as well as other relevant matters.

The **Energy Sector Strategy (2000)** focuses specifically on how to implement the Energy Policy, including increasing the role of the private sector, developing more competitive markets, and the need for regulation. The strategy highlights development of plans of action, programmes, projects, investments and other actions for the various energy sub-sectors. It provides necessary guidance for operators in the sector, financial institutions and investors. The **Energy Reform and Access Project (2003-2011)** aim to accelerate the use of electricity for economic growth and social services in a commercially viable manner. It focuses on improving the quality of life in isolates and under serviced areas through increasing access to modern energy. The project supports the Government's National Energy Strategy that looks to reform the country's energy sector and increase private participation. The project also encourages the development of renewable energy, in particular solar photovoltaic systems and micro-hydro projects, as well as contributing to the reduction of Greenhouse Gases.

The Electricity Master Plan for Development of the National Grid 2005-2019 focuses on Grid Supply Expansion in the short-to-medium term.

The **National Electricity Council (CNELEC)** was created in 2004 under the National Energy Council as a governmental consultative which works as a regulatory instrument concerning generation, transmission and sale of electricity.

¹ World Bank Data

² Energy Access Situation in Developing Countries (WHO, UNDP 2009) and World Energy Outlook (IEA 2009) ³ Renewable Energy Country Profiles (IRENA 2010) Policy and regulation review (REEEP)





