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ELECTRICITY SUPPLY INDUSTRY OF MOZAMBIQUE

General Information for Potential Investors



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INTRODUCTION

Mozambique occupies an area of over 800,000 km² on the south-eastern coast of Africa. It borders Tanzania in the north, Malawi, Zambia and Zimbabwe to the west and Swaziland and South Africa to the south.

The Mozambican government considers access to reliable and sustainable forms of energy important for poverty alleviation and promoting economic development. The energy sector's vision is to develop the country's energy potential for social upliftment and economic growth, exploiting regional marketing opportunities while continuing to preserve and protect the environment.

The growth in energy sales was 11.8% in 2006 and the peak demand reached 285MW. Over 80% of the power is purchased from Hydro Cahora Bassa, about 1% is imported from South Africa, Malawi and Zimbabwe, and the balance is self generated by Electricidade de Mozambique.

THE REGULATORY ENVIRONMENT

Mozambique's electricity supply industry (ESI) is governed by the Electricity Act of 1997, which defines the general policy for the organization of the power sector and the administration of the supply of electrical energy. The Act provides the legal framework for electrical energy generation, transmission, distribution and sales within Mozambique, as well as its exportation and importation, and the granting of concessions for these activities. It also provides for mandatory third party non-discriminatory access to the transmission system, and permits cross-border electricity trade, subject to the approval of the Government.

Mozambique does not have an independent regulatory body for the energy sector, but is in the process of establishing one. Electricity policy

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FACT SHEET



FACT SHEET: MOZAMBIQUE

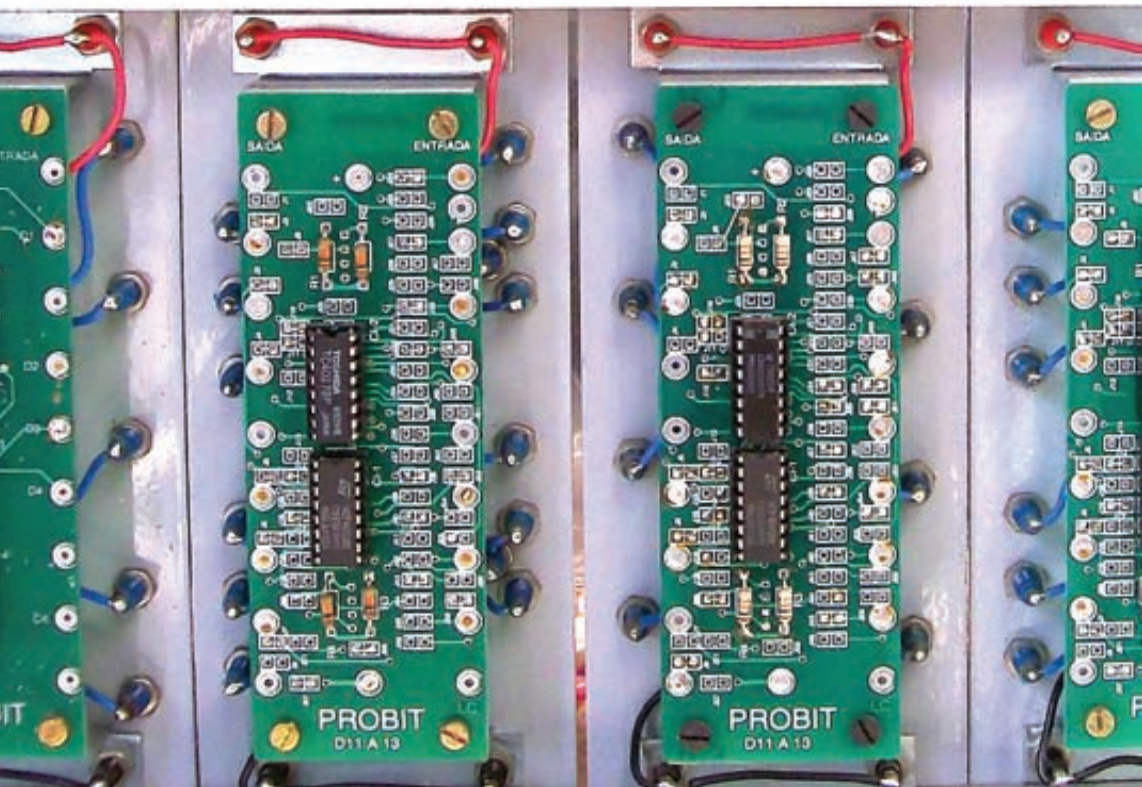
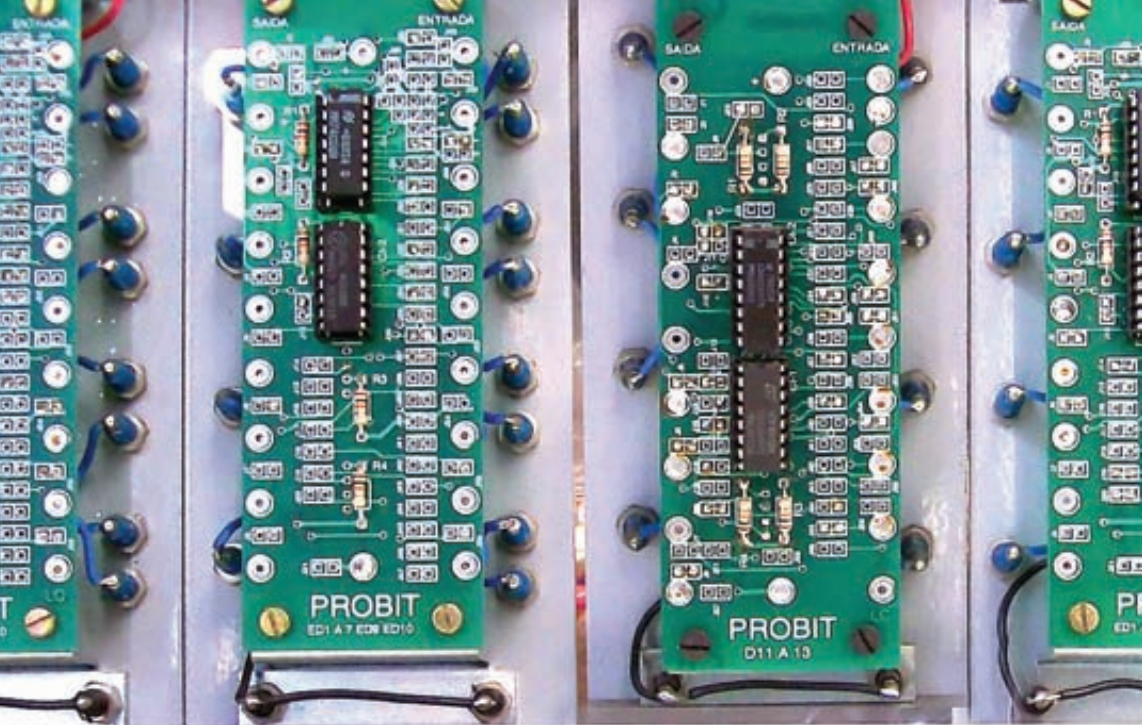
Area:	801,590 km ²	Major Exports:	aluminum, prawns, cashews, cotton, sugar, citrus, timber; bulk electricity
Population:	21,284,701	Major Imports:	machinery and equipment, vehicles, fuel, chemicals, metal products, foodstuffs, textiles
Life Expectancy:	41 years	Currency:	metical (MZM)
HIV/AIDS:	12.2% (2003 est.)	Exchange Rate per US\$:	24.14 (2008)
Literacy:	47.8%		
GDP (PPP):	US\$17.8 billion (2007 est.)		
GDP Growth Rate:	7.5% (2007 est.)		
GDP per Capita:	US\$900 (2007 est.)		



and regulations are developed and issued by the Minister of Mineral Resources and Energy (MIREME). The National Electricity Council (CNELEC) serves as a forum for consultation and protection of the public interest on electricity matters and is expected to evolve into an independent regulatory agency by the end of 2009.

CNELEC is comprised of five to seven permanent members selected from persons with recognized experience and expertise in respect of tariffs, economics and other legal and technical aspects of power systems. CNELEC currently undertakes such regulatory responsibilities as dispute resolution, protection of customer interests and tariff reviews and recommendations, and is well positioned for its transition to official energy regulator.





INSTITUTIONS RELATED TO THE ELECTRICITY SUPPLY INDUSTRY

Mozambique has a number of institutions and government agencies that are either directly or indirectly relevant to the ESI and Independent Power Producers (IPPs).

MIREME's National Directorate of Energy (DNE – *Direcção Nacional de Energia*) has overall responsibility for sector development, including: policy formulation and implementation; project definition and promotion; initiation and formulation of regulations; and energy planning, management and conservation. The DNE also has certain functions in areas such as rural electrification.

The Technical Unit for Implementation of Hydropower Projects (UTIP) is a division of MIREME, responsible for performing the technical studies related to hydropower projects.

The Ministry of Health regulates the health and safety of workplaces in accordance with the Occupational Health and Safety Act of 1989.

The Ministry of Environmental Coordination (MEC) formulates and implements environmental policies and practices.

ELECTRICIDADE DE MOZAMBIQUE

Similar to all other regional countries, Mozambique has a national state-owned electricity company - *Electricidade de Mozambique* (EdM) - an operating member of the Southern African Power Pool (SAPP).



PRIVATE INVESTMENT CONSIDERATIONS

Mozambique is one of the few countries that exports a significant portion of its electricity. Most of the 7 billion kW/h from the *Hydroelectrica de Cahora Bassa* (HCB) in the Tete province is exported directly to South Africa. However, internally, relatively few customers are connected and this is mostly limited to the larger cities and towns. Whilst HCB may seem an attractive example of how IPPs could operate in the region, some dissatisfaction has been expressed in Mozambique with its structuring as not much electricity is sold locally from HCB.

Although Mozambique is still a centrally-planned economy, the Government is instituting free market reforms. The potential for foreign investment is high and the Government has adopted investor-friendly policies and actively encourages foreign direct investment into the country. For example, in 2004 a consortium of private companies secured a long-term concession for the generation and distribution of electricity in an area of Inhambane Province.

Mozambique follows a concession-type approach for awarding generation and supply rights which bodes well for future projects as it facilitates tailor-made solutions.

Mozambique has just awarded a concession for exploration of the Moatize coal fields and is presently actively engaged in awarding a concession for a coal-fired powerstation at Moatize. It is expected that two more concessions will follow at Mpanda-Nkuwa and Temane.

Private investors in the ESI may also directly contract with local government structures which have the right to issue concessions to electricity distributors and suppliers. Some private sector concessions have already been allocated.

The ability to contract with local government structures, together with the high proportion of Mozambicans currently underserved by the electricity sector, may combine to offer significant opportunities to smaller IPPs. This is especially true of IPPs that can offer decentralized electricity

production and distribution because the low population density in many of Mozambique's underserved areas makes infrastructure investment relatively costly. It is also attractive for renewable non-grid and mini-grid energy solutions. Mozambique is also directly adjacent to South Africa, which has an immense power need. Innovative investors in the power sector could also investigate opportunities for relatively large IPPs to sell directly into South Africa. Whilst the necessary transmission infrastructure from further up north is still absent to interconnect large IPPs needing to transmit electricity to the south, good connections exist directly into the Eskom network.

INVESTMENT OPPORTUNITIES

Coal fired IPPs and hydro (new as well as the expansion of HCB) seem to provide the biggest opportunities for large investors wishing to sell electricity into the region.

Investment opportunities also exist in associated infrastructure, such as the transmission lines needed to interconnect the Moatize, Mpanda-Nkua and Temane concessions into the regional grid.

Domestically, there is a huge need for rolling out electricity outside the urban areas and non-grid solutions based on hydro or solar are promising.

Mozambique is an increasingly popular holiday destination and many opportunities for smaller, environmentally friendly options exist along the coast.



The following projects have been identified for possible private sector participation within the power sector:

Project & Capacity (MW)	Project Description & Status	Expected Date	Project Sponsors & Funders
Mavuzi and Chicamba Projects (34MW)	Hydro long term project. Feasibility study done.	2009	EdM/Public-Private Partnership (PPP)
Lurio II (120MW)	Construction of hydro-plants Ocuca and Quedas. Feasibilities concluded in 2007.	2013	EdM/Private Partner
Temane Gas (750MW)	Gas-fired plant. Negotiating with strategic partners.	2011	EdM/Strategic Private Partner
Mphanda Nkuwa (1,300MW)	Hydro plant up to 2,400MW targeting regional market. Feasibility Study completed.	2015	Private Partner
Moatize (1,500MW)	Greenfield base load coal plant for regional exports. Phase 1 - 1,000MW and phase 2 – 500MW. Strategic partner selected by end of 2007.	2011	EdM/Strategic Private Partner
Massingir (40MW)	Hydro power development. Feasibility still needs to be done.	2013	EdM/Strategic Private Partner
HCB North Bank (850MW)	Development of north bank at the existing dam site. Project to target mostly export market.	2015	Government of Mozambique/ Strategic partner



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