

# **Botswana Legal Framework for Renewables and other Climate Technologies**

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# Introduction

- **SOLAR:** Botswana has abundance of solar energy on average is 21 MJ/m<sup>2</sup> per day. (more than 300 days of clear sunny days annually)
- **WIND:** Botswana has annual average wind speeds of 2 – 4 m/s (Larsson, 1986).
- **BIOMASS:** Feasibility study on biofuels production and use completed in 2007 – indicates that there is potential to use biofuels as an alternative source of energy

# Current Situation

- The use of renewable technologies is at 0.3 %
- In NDP10, GoB is targeting to increase the use of RE to 25%.
  
- Botswana Energy Master Plan (BEMP) has been used as a guiding tool.

# Current Situation continued

## Examples of Renewable Energy Projects in Botswana

- PV battery charging station operational in Lorolwana
- RE Botswana project targeting at electrifying households with Renewable Energy funded by UNDP/GEF and GoB. PV Installations ongoing in Lentsweletau, Medie, Dikgathong and Kgope
- A Flexi-biodiesel plant is being procured to produce about 10 million liters of biodiesel per year by end of 2010. In NDP 10 a target of 50 million liters of biodiesel per year has been set.

# Barriers in the Renewable Energy Sector

## 1. Information and perception

- Low country level knowledge and exchange of information
- Customers lack sufficient information
- Customers perceive the technology as inferior

## 2. Financial

- Capital intensive
- Lack of appropriate incentives

# Barriers in the Renewable Energy Sector cont'd

## 3. Technical

- Penetration of Substandard technology
- Poor workmanship

## 4. Policy/Legal

- No policy incentives to promote wide spread adaptation and investment in RE

## 5. Theft

- Solar collectors are vulnerable to theft and vandalism

# Renewable Energy Legal Framework

- The legal and policy framework for growth of Renewable Energy in Botswana is at draft stage in the form of a Policy document.

- In the draft Energy policy, the goal for renewable energy is to *maximize the potential of renewable energy sources in meeting the socio-economic needs of the country, through;*

- i. Decentralizing the production and distribution of renewable energy to rural areas to the local communities.
- ii. Carrying out training and capacity building to develop a critical mass of locally trained manpower with requisite skills in a broad range of disciplines: technical, economic, development and socio-cultural. The training and capacity building will be targeted at SMEs, and personnel from local authorities and community development structures.

# Renewable Energy Legal Framework cont'd

- iii. An integrated rural electrification program that includes all viable technologies will be developed to remove apparent competition between grid extension and these technologies
- Draft Energy Policy aims at increasing access to affordable energy services to all sectors of the economy at the same time managing energy related environmental and health impacts

# Renewable Energy Legal Framework cont'd

- Private sector participation in the energy sector will be enhanced through effective regulation and incentives.
- Research and Development in alternative energy technologies to increase the energy base will be promoted and opportunities under clean development mechanism and carbon trading will be explored and exploited where possible. Renewable energies will be integrated into national development programs including the rural electrification program.

# Renewable Energy Legal Framework

## cont'd

- Amendment of the Electricity Supply Act in 2007 to allow for Independent Power Producers including renewables
- Work in progress to introduce Renewable Energy Feed-In Tariffs (REFIT)
- Establishment of Energy and Water Regulator

# Conclusion

- Currently no effective policy to address the legal framework on RE.
- Several positive initiatives which are meant to increase the uptake of RE are in progress. These are mainly carried out by GoB.
- Finalisation of the Energy Policy and subsequent enactment of the relevant legal framework is critical.