

**SIDS Global Business Network (SIDS-GBN) private Sector  
Partnership Forum**

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**Environmental sustainability and Renewable Energy**

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## Timeline of Environmental Development

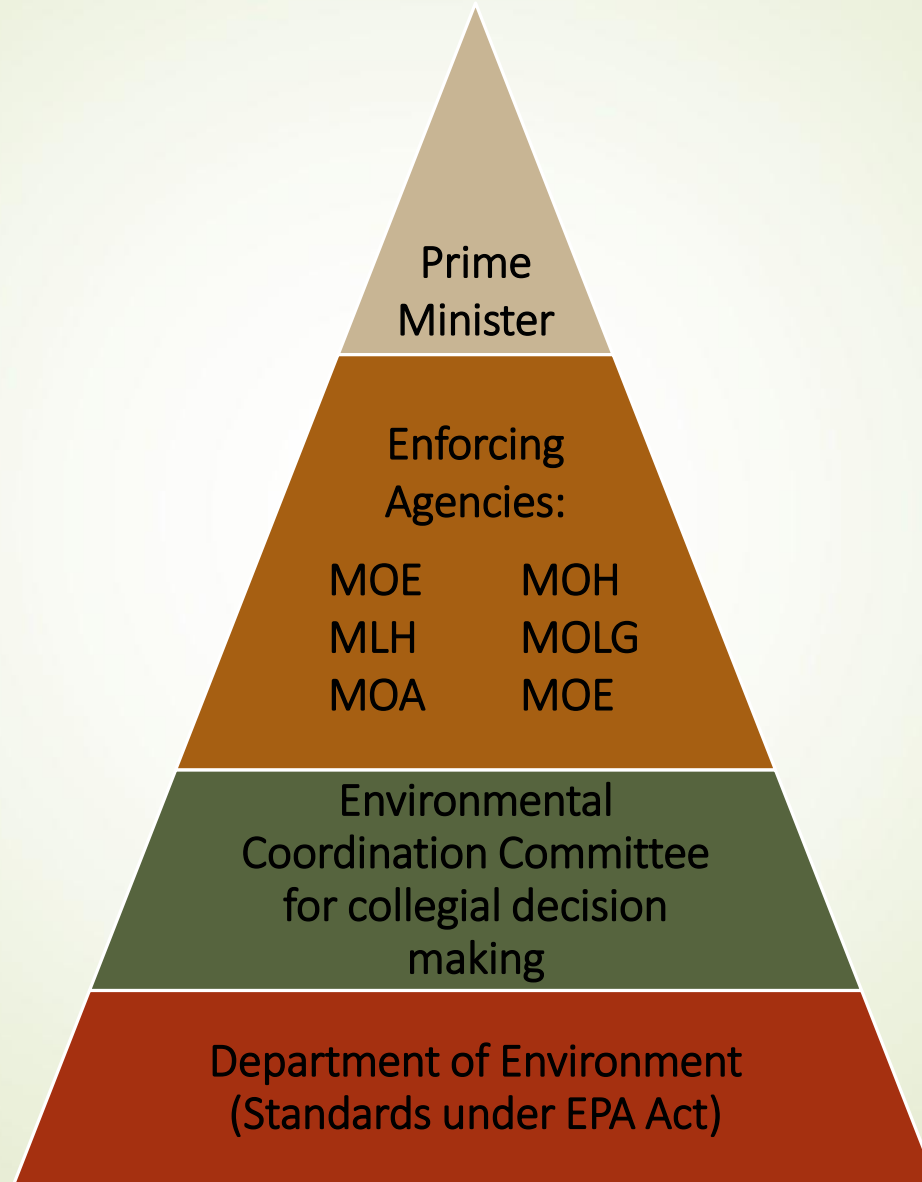
- **1989 White paper on Environment**
- **National Environment Action Plan 1989**
- **Adoption of the concept of a holistic and an Integrated Approach to Environmental Management**
- **Environment Investment Program funded by the World Bank in 1991 -1995**
  - (Institutional strengthening, Land Use planning, Zoning, National solid waste management plan, National Sewage management Plan, EPA, Standards, environmental clearance for major project through EIAs)

## Timeline of Environmental Development

### ➤ 1991 -1995 under the EIP

- Environment Protection Act of 1991
- Creation of Ministry of Environment for policy making
- Creation of the Department of Environment for setting standards and coordinating the environmental components of all major projects through a licencing system

# National Environment Commission



# Integrated approach to Environmental management

Each Ministry under its purview is responsible for enforcing the law / regulations

Local Authorities also have licensing powers and issue development permits

However, for Scheduled activities under the EPA ACT, it is the Ministry of Environment that issues an Environment Impact Assessment license **BUT** it has to consult all other authorities **and the public in general.**

Its decisions are open to Challenge and may be referred to the Environment Appeal Tribunal

National Coordination Committee is inter ministerial and each ministry has a liaison officer as member to consider applications for development

# National Energy Policies

GOM is focused on diversifying the country's energy supply, improving energy efficiency, addressing environmental and climate changes and modernizing our energy infrastructure in order to meet the challenges ahead.

Concerns are security of supply and affordability

Challenges are : 1) making a rapid shift to a low carbon, efficient and environmentally benign system of energy supply.

2) Lead change in habits through decisive policy actions, but without losing sight of the affordability criteria.

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# Energy Sector Initiatives

## ❑ STRATEGY FOR THE ELECTRICITY SECTOR

- Provide the necessary incentives for the development of the renewable energy sector and promote energy savings and energy efficiency at all levels in the country.
- CEB currently produces around 40% of the country's total power requirements, the remaining 60% being purchased from Independent Power Producers (IPP).
- Regulator to ensure level playing in relation to electricity generation.
- Encourage modern coal power plants using clean coal at improved efficiency of 40 to 45% to substitute oil.
- Address issue of ash disposal and particulate emissions in an integrated environment strategy. Omnicane in the South is undertaking ground breaking research so that there is no waste from Cane industry including use of Fly and bottom ash in cement and production of ethanol from molasses..
- Renewal of inefficient turbines. Installation in the short-term of six new engines, each of 15 MW capacity at Fort Victoria to replace the old inefficient ones at St Louis.

# National Energy Policies

This long term energy roadmap addresses both the energy and environmental challenges of Mauritius.

Innovation through science driven development of new technologies.

Committed to energy security, diversity, efficiency through the development of economically competitive fuels and renewable such as biomass, wind, solar energy and Deep Ocean Water Application.

Objective is to diversify energy supply towards alternate sources and relieve dependence on conventional energy sources over time while helping to cope with growing environmental concerns.



# SUMMARY OF STRATEGIES

## ❑ Energy Balance, Energy Security

GOM target is to achieve by 2025 about 35% self sufficiency in terms of electricity supply through use of renewable sources of energy.

- Ensure security of energy supply by diversifying the energy base and the creation of adequate stocks, to the extent it is financially viable.
- Meet demand in a consistent manner, assuring security and reliability of supply at affordable prices.

# SUMMARY OF STRATEGIES

## Power Sector Reform

Create a financially sound and self-sustainable modern electricity sector, a transparent and fair regulatory environment that appropriately balances the interests of consumers, shareholders and suppliers, conditions that provide efficient supply of electricity to consumers and improvement in customer services; and Encourage private sector participation in the generation side within the framework of a single buyer model.

## SUMMARY OF STRATEGIES

### ❑ Energy Efficiency

- Energy Efficiency Management Office (EEMO) set up as a nodal agency for energy efficiency and creation of a national data base on energy usage and act as an Observatoire de l'Énergie.
- Promote awareness on energy supply and demand.
- Develop and implement a grid-code, feed-in tariffs and incentive schemes for small power producers.
- Target all sectors in the country for improving the efficiency of energy use, including new land development , new cities, commercial and industrial developments, public open space and transportation systems.
- **Promote the concept of energy management and use of energy savings devices.**

# Mauritius energy demand

## Past trend and future forecast

Energy demand	year	Source of energy in Percentage % by Fuel type							
In kwh		Hydro	Solar	Wind	Gas turbine	Heavy fuel	Methane gas	Bagasse	Coal
<b>361,963,455</b>	1980	23	0	0	0	70	0	7	0
<b>667,056,826</b>	1990	12.7	0	0	0	53.2	0	0	11.7
<b>1,564,895,364</b>	2000	6.1	0	0	5	50.5	0	17.6	20.9
<b>2,376,058,445</b>	2010	4.2	0	0	4	36.7	0	14.4	40.7
<b>2,814,000,018</b>	2017	3.2	1.3	0.4	5	35.7	0.6	12	41.8
<b>2,820,000,000</b>	2020	3.1	7.4	2.2	2	40	0.6	10.6	34.1
<b>3,429,000,000</b>	2030	2.5	10	5	22	30	0.5	10	20

## **Percentage of renewable**

**In 2017 % of Renewable was 22.5 %**

**In 2020 % of Renewable will be 25%**

**In 2030 % of renewable will be 50%**

**Limiting resources are : Hydro and Biomass  
For security reasons Wind & Solar Power at  
peak hours**

**Environmental sustainability and  
Renewable energy forum for SIDS**

**THANK YOU**

**Q & A**

