

Renewable Energy Projects and potentials in Mauritius

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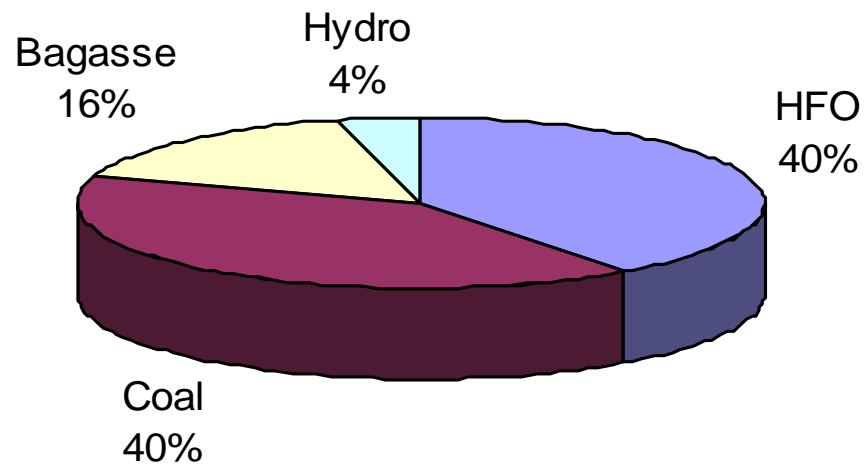
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Energy Mix for the year 2007

Energy Mix for 2007



Energy Policy

Outline Energy Policy (2007-2025) was prepared by the Mauritius Government in 2007. The Energy Policy Plan (2007-2025) will be finalised by end of September 2008. Action plans are being developed for implementation

The main objectives of the Outline Energy Policy are to maximise the use of renewable energy resources like bagasse, wind and solar and at the same time ensure sustainability of electricity supply by considering various energy saving options, like time of use tariff, use of efficient technologies

Preparation of a grid code

To encourage small independent power producers (SIPP) to generate electricity and export to the CEB network
This approach will target mostly wind and solar energies

Concept of Maurice Ile Durable (MID)

The Government has introduced measures to foster sustainable development in many energy intensive sectors

- Subsidies in the purchase of solar water heaters
- Distribution of Energy Efficient Lamps

CDM projects in progress

(1) CFL Project (started in August 2008)

CEB in partnership with a private entity will seek to obtain emission reductions for the CFL Project. The project involves the sale of 1,000,000 Compact Fluorescent Lamps (CFLs) at Highly Subsidised price to Domestic Customers in Mauritius

(2) CTSAV coal/bagasse Project (started in April 2007)

An application has been made by the World Bank to the UNFCCC to seek Carbon Emission Reduction (CER's) for the CTSAV coal/bagasse project, which is expected to accrue emission reduction of 300,000 tonnes of CO₂ per year on average.

Potential CDM projects

- Setting up of a mini-hydro power plant in Mauritius of capacity 300-350 kW
- Setting up of a wind farm in Rodrigues (up to 3MW)
- Gamma/Covanta Waste to energy project to generate electricity from municipal wastes (20MW)
- Setting up of a wind farm in Mauritius at Bigara to generate about 20 to 30 MW electricity.
- Use of available Bagasse (Re-Engineering of the Sugar Sector)
- Generation of electricity from waves (research)

Mini-Hydro at La Nicoliere

Status:

EIA license already issued

Project ready for implementation

Tender appraisal in progress

Constraints:

Project cost high

Civil works may be delayed due to accessibility

Supply of Electro-Mechanical Equipment

Low emission reduction

Mini-Hydro at La Nicoliere

Emission Reduction:

- Potential to produce about 2 GWh per annum
- Grid Emission Factor: 0.9522 tCO₂e/MWh
- Emission Reduction: approx 1900 tCO₂e /year

Baseline:

- Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002)
- Addition of a renewable energy source to an existing electricity grid.
- The geographic boundaries for the electricity grid can be clearly identified and information on the characteristics of the grid is available

Mini-Hydro at La Nicoliere

Demonstration of Additionality

- The tools from the UNFCCC
 - Identification of alternative
 - Investment analysis
 - Barrier analysis

CDM status

- PIN prepared
- Input of financial analysis based on project value
- Letter of Host Country Approval if project potentially attractive for CDM

Wind Farm at Grenade, Rodrigues

Status:

- EIA license already issued
- Project ready for implementation
- Tender awarded for the installation of two units of wind turbines in year 2009

Constraints and Remarks:

- The high cost of wind turbines limit the number of units to be installed. Up to 8 units can be installed
- The wind energy potential in Rodrigues is considerable. Up to 40% can be supplied from wind over the whole island (current renewable is 1%). Present installed capacity is 9.8 MW (mainly HFODiesel)

Wind Farm at Grenade in Rodrigues

Emission Reduction:

- Potential to produce about 7 GWh per annum
- Grid Emission Factor: 0.6 tCO₂e/MWh (approximate)
- Emission Reduction: approx 4200 tCO₂e /year

Baseline:

- Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002)
- Addition of a renewable energy source to an existing electricity grid.
- The geographic boundaries for the electricity grid can be clearly identified and information on the characteristics of the grid is available

Wind Farm in Rodrigues

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Thank you