

## **Draft Barbados National Energy Policy**

**Barbados, 2007**

**Categories:**

**Energy supply**

**Electrification**

**Climate Change**

**Energy**

**Context:**

The Government has committed to having renewable energy account for 30 percent of the island's primary electricity by 2012. However, due to the high price of fuel imports, it is trying to achieve this target earlier. Bagasse and solar water heaters contribute 15 percent of the island's primary energy supply. Currently, the Government is looking to expand the number of sources of renewable energy, which will include wind energy and fuel cane.

**Analysis**

**Lessons**

**Good Practice**

**Related Goals**

According to the Draft Barbados National Energy Policy, Government is looking to introduce gasohol based on a 10 percent ethanol to gasoline mix. Under the reform of the sugar industry it intends for approximately 14.7 million litres of ethanol to be produced annually to meet that requirement. The levels of ethanol content in the gasoline are to be progressively increased over the 20-year design period. Recognizing that ethanol can be used in the production of biodiesel, Government has pledged to encourage further investment in ethanol production.

Barbados consumes approximately 100 million litres of diesel annually. Government has also proposed in the draft policy to mandate two

percent biodiesel content for all diesel-fuelled vehicles by 2012, increased to 10 percent by 2025. An estimated 4.5 million litres of used cooking oil annually generated can be converted into biodiesel. Government has expressed the intention of providing incentives to the private sector for the development of the biodiesel industry.

Barbados has estimated natural gas reserves of 141.4 million cubic metres, with an annual consumption of 29.17 million cubic metres. With national supplies expected to run out in the next five to fifteen years, Government has turned its attention to its oil-rich neighbour Trinidad and Tobago as a source of natural gas. Cabinet recently approved the importation of gas through the pipeline being constructed by Trinidadian private company Eastern Caribbean Gas Pipeline Co. The pipeline is designed to deliver gas from Tobago to Barbados, St Lucia, Martinique, Guadeloupe and Dominica. The Minister of Energy and the Environment has stated that the increased volume of gas (between 30 million and 40 million cubic feet a day) would allow the national grid to expand in the first five years to supply a further 13 000 households across Barbados with natural gas, while guaranteeing security of supply to the Barbados Light & Power, which is in the process of constructing an 80-megawatt generation plant at Trents, St. Lucy capable of using natural gas.

A feasibility study was carried out to build a wind farm in the north of the island. Barbados Light and Power projects that the facility could generate as much as 26 million KWh annually. Given the current price of fuel imports, the facility could save \$4.6 million a year. A Fuel Cane Power Generation feasibility assessment was also carried out. A 30 MW plant could generate 263 million KWh and reduce the fuel import bill by US \$29 million per year.

The Government is looking to increase energy-efficiency by promoting energy efficient technologies and usage. The Government has recently turned its attention to energy conservation and efficiency in sectors of the economy to promote its vision of "Green Economics". Initiatives in these sectors will include incentives to:

- Manage/ minimize solid waste; promote recycling and separation;
- Promote "Green" building techniques and standards;
- Use alternative fuels/ renewable energy (tax incentives);

- Purchase "Green" products i.e. solar pumps, solar lights, composters; water-storage/ saving devices;
- Energy conservation in the public sector.

The Government has also committed to:

- Implementing economic incentives to promote energy conservation; efficient energy use; promoting renewable energy sources;
- Introducing standards for efficient energy use in technologies;
- Encourage the large-scale generation of energy using renewable sources;
- Promoting research and development into renewable energy;
- Implementing disaster management initiatives to mitigate against climate change.

Major challenges / weaknesses

- Acquiring supportive technologies to decrease the country's reliance on imported fossil fuels;
- Increased costs due to large capital investments in technology and infrastructure and on-going maintenance;
- Building capacity for utilisation and maintenance of technology and infrastructure;
- Access and availability of affordable technologies and products;
- Developing technologies and products that are appropriate for the region.