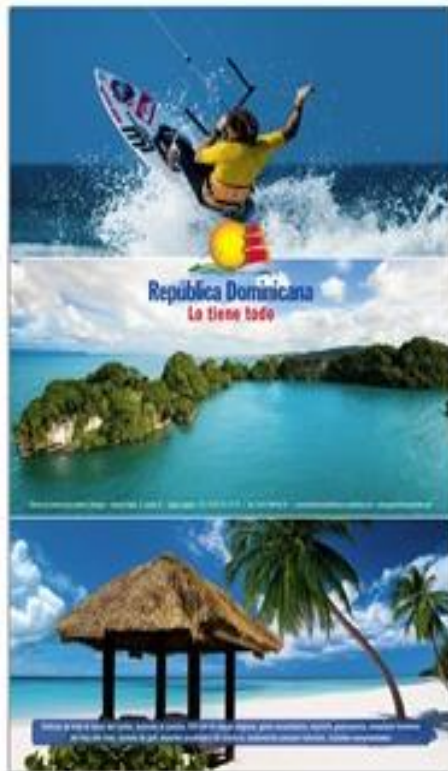




Presidencia de la República Dominicana
Consejo Nacional para el Cambio Climático
y el Mecanismo de Desarrollo Limpio

Tourism and Waste Sector NAMA of the Dominican Republic



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Highlights

MAIN GOALS

To move the tourism sector toward more sustainable practices, in terms of energy consumption and generation in hotels and other touristic facilities, including the environmentally adequate disposal of hotels and municipal solid waste, reducing the environmental impacts and imported fossil fuels dependence, and improving the energy security and economic performance for the tourism sector and the country in the long term.

ORGANIZATIONAL CONTEXT

The proposed NAMA is strongly supported by government, municipalities, private sector, and local organizations. Although the concept is still novel, certain level of engagement already exists.

SUSTAINABILITY CONTEXT

The proposed NAMA is based on measurements and actions whose profitability and co-benefits can lead to a significant amount of (cost-effective) GHG emissions reductions in a relative short time.

NAMA Background

- The tourism sector is an important contributor to the national economy: \$2.5 billion in 2011 (4.7% of GDP), and indirect impacts over \$8.1 billion (15.1%).
- Responsible directly or indirectly for over a half a million jobs, the sector is being one of largest contributors to the nation's employment.
- The sector's growth has been powered by imported fossil fuels and purchased electricity -most of it produced with fuel oil-.
- Over half of the energy is consumed in the form of purchased electricity (53.3 %), while the rest of the demand is met with fossil fuels.
- Currently, almost all solid waste from hotels and municipalities are dumped in poorly managed landfills, damaging the environment.

Sector Perspective

Hotels operators, municipalities and government officers agreed the solid waste is the biggest problem affecting the sector due to the high visibility of the current poor management practices. As well, the energy consumption is being the principal operation cost due to the higher prices of fossil fuels. The combined effect of higher cost and the potential loss of recurring tourists are menacing the sector's long term sustainability (*Workshop in Nov., 2012*).

The tourism sector emits 0.82 MtCO₂e, as stated in Country's CCDP (2010), and will emit 1.25 MtCO₂e by 2030. The waste sector emits 2.1 MtCO₂e.

WHY THIS SECTOR?

The tourism sector is viewed as country's economy motor; there is a strong private sector acting in the sector; interest showed by involved public agencies; and other favorable conditions to develop sustainable initiatives in adequate waste management, renewable energy, and energy efficiency.

Policy Context

CURRENT POLICIES

- a) Nat'l Development Strategy (it has a low carbon development objective) and CC Nat'l Policy.
- b) The net metering regulation, for cases where available surplus of cost-effective generation can be dispatched to the national grid through feed-in tariffs 57-07 law.
- c) The Renewable Energy Law (57-07) that enacts tax exceptions for renewable energy projects (100% of taxes and duties) and feed-in tariffs for such sources.

IDENTIFIED BARRIERS

- Lack of financial resources locally to support projects;
- Hotels operators don't see energy as their business;
- Difficulty to obtain additional public funds (hydrocarbons law);
- Lack of capacity to design projects and for MRV; and
- Higher capital costs.

Key NAMA Elements

COMPONENT 1: WASTE-TO-ENERGY

To use local biomass and solid waste to produce energy for hotels, in form of hot water, cooling, an electricity. A pilot project is modeled, which will be replicated in all touristic poles across the country.

COMPONENT 2: FINANCIAL MECHANISM

A lease financing mechanism that reduces or eliminates the need for any up-front equity investment and structures the financial deal such that the hotel or other beneficiary sees net benefits starting in the first year.

COMPONENT 3: RENEWABLE ENERGY AND ENERGY EFFICIENCY

Encouraging investment in alternative energy sources, as solar hot water, central station solar, wind power, and energy efficiency. Given high electric prices in the country, all of these measures can lower energy costs.

Important Facts

- The use of almost 140,000 metric tons/year of solid waste as fuel source, avoiding its inadequate disposal in poorly managed landfills.
- Additionally, the NAMA needs 270,000 metric tons of densified biomass fuel annually, locally available from agricultural and forestry waste.
- The technology involved (i.e., biomass boilers, and steam turbines) is not common in the tourism sector, but has been proved in local facilities.
- Displacing over 750,000 barrels of oil equivalent per year, which are imported and used by hotels to supply their energy needs.
- The development of quality standards for local biomass fuel and Refuse Derived Fuel (RDF) in order to increase its condition as commodities.

Proposed Policy Changes

- a) If both hydrocarbons fund and the carbon fund can be operational, a significant amount of local financial resources will be available. These mechanisms were created by law and decree, but are no working yet.
- b) The inclusion of biomass fuel and solid waste providers (or producers) into the benefits defined by the Law 57-07. Currently, such benefits are applicable only for renewable energy projects on the demand side.
- c) To facilitate the process of licensing and permits for the projects included in the NAMA. In this matter, a lot of inter-institutional work shall be done, but it is feasible under the current legal framework.
- d) To establish an intensive program to promote small companies to supply technologies which are available for hotels, such as micro turbines, solar heaters, densified biomass fuel, refused-derived fuel, and others.

Expected Outcomes

- Emissions reductions of 0.85 MtCO₂e/year for the first component (waste-to-energy). This could be higher during the implementation of this and the other components.
- Oil dependence: to substitute at least 1 million of barrels of oil equivalent per year.
- Employment: estimated 4,800 temporary jobs in facilities development and construction. An undetermined number (close to 30%) in operation;
- Investment: up to USD 370 M (total) to reach the full level of the NAMA and USD 26.5 M/year to be spent in local biomass and solid waste supply chain.
- Benefits for the government: over USD 2.0 M per year in local taxes. Just from Tax Over Earning, no need to create new taxes.

Support Requested

- Estimated Capital Needs:
\$370 MM (full implementation of waste-to-energy at country level)
- Total finance requested from the donor:
\$20 M USD (capital seed for project implementation via the financial mechanism)
- Additional support requested:
\$1 M USD for capacity building (to complete NAMA preparation, MRV, etc.)
- DR financial contributions:
40% of capital cost, in form or ISR retribution (Law 57-07)
- Other funds to be raised:
from hotels operators, utilities, banks, investors, or international.

Thanks a lot for your attention!!!

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