

PROJECT DOCUMENT



Sustainable Energy in the Caribbean: Reducing the Carbon Footprint in the Caribbean through the Promotion of Energy Efficiency and the Use of Renewable Energy Technologies

Barriers to identification and implementation of energy efficiency mechanisms and enhancing renewable energy technologies in the Caribbean.

Gregory McGuire



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Economic Commission for Latin America and the Caribbean (ECLAC)

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Introduction

In presenting his Vision for the UN global initiative - “Sustainable Energy for All”, United Nations Secretary-General Ban Ki-moon noted that the world today faces two urgent and interconnected challenges related to energy (Ki-moon, 2013). One was that of accessibility. One-fifth of the world’s population lives without access to electricity and the opportunities it provides for the development and an improved quality of life. Secondly, where modern energy services are in abundance, emissions of carbon dioxide and other greenhouse gases from fossil fuel use are contributing to climate change and its myriad consequences. The small island developing states of the Caribbean are among those whose livelihoods are most threatened by climate change. The challenges to the environment and economy posed by climate change are compounded by those related to the high costs of imported petroleum fuels to meet the energy needs of the islands. Trinidad and Tobago is the only major producer and net exporter of petroleum among CARICOM members. Barbados, Belize and Suriname supplement their needs with small local production but, like all other member countries, are net importers. For most of these countries, oil imports gobble up a significant portion their foreign exchange earnings, in some cases, leaving very little to meet other needs. Notwithstanding the challenges posed by imported fuel and climate change, and in spite of their huge potential for renewable energy, these small islands are listed among the most inefficient energy users globally.

Three overarching objectives underpin the goal of achieving sustainable energy for all by 2030:

- (i) Ensuring universal access to modern energy services
- (ii) Doubling the rate of improvement in energy efficiency
- (iii) Doubling the share of renewable energy in the global energy mix. (Ki-moon, 2013)

These objectives are of direct relevance to policy makers in the Caribbean, who have been tardy in efforts to address the issues of Climate Change adaptation and social and economic vulnerability of continued reliance on imported fuel. There have been many regional initiatives on Energy Policy and Renewable Energy and Energy Efficiency. However, the slow progress on initiatives and the limited application of Renewable Energy and Energy Efficiency give cause for concern. Have incentives been placed in the right areas? Are investors aware of the bankable opportunities in the field of renewable energy? Do Governments understand the importance of a facilitative regulatory regime?

Speaking on the sustainable energy for all initiative, United Nations Secretary General alluded to several factors constraining progress on renewable energy and energy efficiency. These included preservation of the status quo; financial obstacles such as high initial costs and limited sources financing, price and subsidies, counterintuitive regulatory policies and dated business models. To what extent are these factors at play in the Caribbean? This research paper aims to provide some answers to this important question. The paper is structured as follows. The next section describes the methodology. Section 3 provides a review of the literature of Renewable Energy and is followed by section 4 which provides a review of the literature on energy efficiency. Section 5 provides a summary and conclusions.

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