

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

Identification of mechanisms for financing of energy efficiency and renewable energy initiatives to increase investment in Dominica



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Project Document

Identification of mechanisms for financing of energy efficiency and renewable energy initiatives to increase investment in the Commonwealth of Dominica







Economic Commission for Latin America and the Caribbean (ECLAC)

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Acronyms

5Cs	Caribbean Community Climate Change Centre
AFD	Agence Française de Développement
ALBA-TCP	Bolivarian Alliance for the Americas – People Treaty of Commerce
AOSIS	Alliance of Small Island States
CARICOM	Caribbean Community
CARILEC	Association of Caribbean Electric Utilities
CDB	Caribbean Development Bank
CDM	Clean Development Mechanism
CEIS	Caribbean Energy Information Systems
CFL	Compact fluorescent lamp
CFG Services	French geothermal engineering limited company subsidiary of group BRGM
CIPORE	Caribbean Information Platform on Renewable Energy
CCREEE	Caribbean Centre for Renewable Energy and Energy Efficiency
CREDP	CARICOM Renewable Energy Department Programme
CREF	Caribbean Renewable Energy Facility
CRETAF	Caribbean Technical Assistance Facility
CSEP	Caribbean Sustainable Energy Project (a consortium of OAS, DSD, CARILEC, CARICOM, and REEEP)
C-SERMS	Caribbean Sustainable Energy Roadmap and Strategy
DOE	U.S. Department of Energy
DOMLEC	Dominica Electric Company
DOWASCO	Dominica Water and Sewage Company
DSD	Department of Sustainable Development of the OAS
ECPA	Energy and Climate Partnership of the Americas
EE	Energy Efficiency
EU	European Union
GDP	Gross domestic product
GEF	Global Environmental Facility
GEEREF	Global Energy Efficiency and Renewable Energy Fund
Geo-Caraïbe	Eastern Caribbean Geothermal Development Project (a consortium including OAS/DSD, AFD, UNEP, ADEME)
GHG	Greenhouse Gases
GIZ	Gesellschaft für Internationale Zusammenarbeit
GSEII	Global Sustainable Energy Islands Initiative (a consortium of Climate Institute, OAS/DSD, UNIDO, and other private entities)
GTZ	Gesselschaft fur Technische Zusammenarbeit (German Technical Cooperation Agency)
IDB	Inter-American Development Bank
IPP	Independent power producer
IRC	Independent Regulatory Commission
kW	Kilowatt

kWh	Kilowatt-hours
MW	Megawatt
NDF	Nordic Development Fund
NEP	National Energy Policy
NGO's	Non-governmental organizations
NREL	National Renewable Energy Laboratory - U.S. DOE
OAS	Organization of American States
OECS	Organization of Eastern Caribbean States
OLADE	Latin American Energy Organization
OPEC	Organization of Petroleum Exporting Countries
PEMFUND	Private Energy Market Fund
PETROCARIBE	Energy Agreement between Venezuela and Caribbean States
PROPARCO	French Society for the Promotion and Participation in Economic Cooperation
PV	Photovoltaic
R&D	Research and Development
RE	Renewable Energy
REEEP	Renewable Energy and Energy Efficiency Partnership
RET	Renewable Energy Technologies
SEIO	Sustainable Energy Initative Organizations
SEP	Sustainable Energy Plan
SIDS	Small Island Developing States
SPREP	Secretariat of the Pacific Regional Environment Programme
UNDP	United Nations Development Programme
UN-ECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNEP	United Nations Environmental Programme
UNIDO	United Nations Industrial Development Organization
USAID	U.S. Agency for International Development
USD	United States Dollar
VAT	Value Added Tax
WB	World Bank

Executive Summary

The 2009-2011 global recession significantly impacted the energy security of Small Island Developing States (SIDS). This impact manifested itself through increased energy costs for the production of many goods and services. This experience, along with the enduring burden of high price variability and current account deficits, have underscored the need for Dominica to adopt sustainable energy strategies that will promote renewable energy (RE) and energy efficiency (EE) wherever feasible across all sectors.

The attainment of increased energy security through the use of RE is however challenging, given that the initial cost of investing in renewable technologies is high. It is therefore necessary to implement strategies to advert and/or reduce these costs to consumers. In the case of Dominica there are good opportunities for the development of RE since the country has substancial indigenous renewable energy resources, with a high potential in geothermal as a steady energy source, and to a lesser degree with hydro, wind and solar power.

Dominica is highly dependent on imported fossil fuels for energy, which makes the country vulnerable to price increases and supply shortages. Nevertheless, Dominica is in a better position compared with other OECS countries, having already achieved about 30 percent of electricity generation from hydropower, and wind to a lesser extent.

This document identifies mechanisms for financing investments in energy efficiency and renewable energy initiatives in the Commonwealth of Dominica. The overall objective of this study is

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