



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

**Identification of mechanisms  
for financing of energy  
efficiency and renewable  
energy initiatives to increase  
investment in Saint Lucia**



UNITED NATIONS

**ECLAC**



**german  
cooperation**

DEUTSCHE ZUSAMMENARBEIT



**Identification of mechanisms for financing of  
energy efficiency and renewable energy initiatives  
to increase investment in Saint Lucia**



This document has been prepared under the supervision of Omar Bello, Coordinator of the Sustainable Development and Disaster Unit, Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters for the Caribbean with the assistance of Willard Phillips, Economic Affairs Officer, Leda Peralta, Associate Environmental Affairs Officer, Elizabeth Thorne, Research Assistant, Esther Kissoon, On-the-Job Trainee, and with input from Ramon Martin, Consultant.

The views expressed in this document, which has been reproduced without formal editing, are those of the authors and do not necessarily reflect those of the Organization.

## Contents

|  |  |
|--|--|
| Acronyms.....  | 5  |
| Executive Summary .....  | 9  |
| I. Introduction.....   | 11   |
| A. Background .....  | 11   |
| B. Objectives, scope and methodology.....  | 13   |
| II. The energy sector in Saint Lucia .....   | 15   |
| A. National economy and energy sector .....  | 15   |
| 1. Update on national economy .....  | 15   |
| 2. Profile of the energy sector.....   | 17   |
| B. Energy related projects and studies .....   | 20   |
| 1. Projects on policies, legal issues and barriers.....  | 21   |
| 2. Projects on energy efficiency and renewable energy .....  | 22   |
| III. Financing opportunities for energy projects .....   | 25   |
| A. Lessons learned .....   | 25   |
| B. Process of financing .....  | 27   |
| C. Main sources for project financing.....   | 31   |
| 1. Multilateral funds.....   | 32   |
| 2. Bilateral funds .....   | 37   |
| 3. Government Agencies.....  | 42   |
| 4. Carbon offsetting and Clean Development Mechanism (CDM).....  | 42   |
| IV. Conclusions .....  | 45   |
| Bibliography .....   | 47   |
| Annexes  |  |
| Annex 1 Energy efficiency and renewable energy projects accomplished<br>in Saint Lucia and main agencies for financing ..... | 50   |
| Annex 2 Necessary steps for the financing process for each type of project .....   | 59   |
| Tables   |  |
| Table 1  | Gross domestic product and external debt annual average growth..... 15 |
| Table 2  | Main economic indicators..... 16                                       |
| Table 3  | Gross domestic product growth from different sources..... 16           |

|           |  |    |
|-----------|--|----|
| Table 4   | Gross domestic product and current account balance forecast.....   | 17 |
| Table 5   | Renewable energy status and potential.....   | 19 |
| Table 6   | Summary of energy efficiency and renewable energy projects<br>implemented in Saint Lucia main agencies of financing..... | 20 |
| Table 7   | Summary of relationships in RE-EE projects funding.....  | 31 |
| Table 8   | Types of investments per sector.....   | 34 |
| Table A.1 | Energy efficiency and renewable energy projects accomplished<br>in Saint Lucia and main agencies of financing .....      | 50 |
| Figures   |  |    |
| Figure 1  | Historical crude oil average monthly price.....  | 17 |
| Figure 2  | Crude oil average quarterly price forecast.....  | 18 |
| Figure 3  | Investment drivers.....  | 30 |
| Box       |  |    |
| Box 1     | National energy policy at a glance.....  | 21 |

## Acronyms

|              |  |
|--------------|--|
| 5Cs          | Caribbean Community Climate Change Centre  |
| ACF          | Alba Caribe Fund   |
| ADFD         | Abu Dhabi Fund for Development   |
| AFD          | Agence Française de Développement  |
| ALBA-TCP     | Bolivarian Alliance for the Americas – People Treaty of Commerce                             |
| AOSIS        | Alliance of Small Island States  |
| Bls          | Barrels  |
| BMU          | Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany        |
| BOE          | Barrel of Oil Equivalent   |
| BOEpd        | Barrels of oil equivalent per day  |
| CARICOM      | Caribbean Community  |
| CARILEC      | Association of Caribbean Electric Utilities  |
| CDB          | Caribbean Development Bank   |
| ChDB         | China Development Bank   |
| CDM          | Clean Development Mechanism  |
| CEC          | Clean Energy Council   |
| CEIS         | Caribbean Energy Information Systems   |
| CFL          | Compact fluorescent lamp   |
| CFG Services | French geothermal engineering limited company subsidiary of group BRGM                       |
| CI           | Climate Institute  |
| CIDA         | Canadian International Development Agency  |
| CIPORE       | Caribbean Information Platform on Renewable Energy   |
| 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  |
| DECC         | Department of Energy and Climate Change of United Kingdom                                    |
| DFID         | Department for International Development   |
| DOE          | U.S. Department of Energy  |
| DSD          | Department of Sustainable Development of the Organisation of American States                 |
| DSM          | Demand-side management   |
| EA           | Electricity Act  |
| EAP          | Energy action plan   |
| ECERA        | Eastern Caribbean Energy Regulatory Authority  |
| ECELP        | Eastern Caribbean Energy Labelling Project   |
| ECLAC        | United Nations Economic Commission for Latin America and the Caribbean                       |
| ECPA         | Energy and Climate Partnership of the Americas   |

|              |  |
|--------------|--|
| EDF          | European Development Fund  |
| EE           | Energy Efficiency  |
| EERE         | Energy Efficiency and Renewable Energy   |
| EIB          | European Investment Bank   |
| EPA          | Environment Protection Agency, United States of America  |
| EPDT         | Establishment, Personnel and Training Department   |
| EST          | Energy Sustainable Technologies  |
| EU           | European Union   |
| EUEI         | European Union Energy Initiative   |
| FAO          | Food and Agriculture Organisation  |
| FI           | Financial Institutions   |
| Gal          | Gallon   |
| GDP          | Gross Domestic Product   |
| GEA          | Geothermal exploration and exploitation agreement  |
| GEF          | Global Environmental Fund  |
| GEEREF       | Global Energy Efficiency and Renewable Energy Fund   |
| Geo-Caraïbes | Eastern Caribbean Geothermal Development Project (a consortium including OAS/DSD, AFD, UNEP)                                 |
| GHG          | Greenhouse Gases   |
| GIZ          | Gesellschaft für Internationale Zusammenarbeit   |
| GoSL         | Government of Saint Lucia  |
| GSEII        | Global Sustainable Energy Islands Initiative (a consortium of Climate Institute, OAS/DSD, UNIDO, and other private entities) |
| GTZ          | Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation Agency)   |
| GW           | Gigawatt   |
| IDEA         | Institute for Diversification and Saving of Energy of Spain  |
| IDB          | Inter-American Development Bank  |
| IMF          | International Monetary Fund  |
| IPP          | Independent power producer   |
| IRC          | Independent Regulatory Commission  |
| IRENA        | International Renewable Energy Agency  |
| ISO          | International Organisation for Standardisation   |
| kBoe         | Thousands of barrel oil equivalent   |

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/报告?reportId=5\\_799](https://www.yunbaogao.cn/report/index/报告?reportId=5_799)

