



Narrative Report for Global Environment Facility
The Ten Island Challenge: De-risking the Transition of
the Caribbean from Fossil Fuels to Renewables

Project ID 00095631

Washington DC, October 2016

Introduction: The Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables (heron referred to as the Project) seeks to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and establish a blueprint for other SIDS. The Project has three main outcomes:

- Outcome 1: Policy De-risking Measures – Island – wide de-risked enabling environment for low Green House Gas (GHG) development through innovative policy tools;
- Outcome 2: Institutional and Technical Capacity – strengthened island capacity for integrated low GHG technical and operation planning and coordination;
- Outcome 3 Investments Projects and Financial Mechanisms – Catalyzed island funding for low GHG technology deployment.

This document constitutes the narrative report of the main outputs of the activities from the 2015 / 2016 as part of the Project.

I. Activities 2015

ACTIVITIES 2015		
GEF OUTCOME	AMOUNT ALLOCATED	AMOUNT SPENT
Outcome 1 - Policy De-risking Measures	\$70,000	\$0
Outcome 2 - Institutional and Technical Capacity	\$137,000	\$34,501
Outcome 3 - Investment Projects and Financial Mechanisms	\$225,000	\$65,578
Outcome 4 – Project Management	\$36,499	\$1,985

a. Outcome 1 –Policy De-risking Measures:

- There were not activities undertaken in 2015 under outcome 1.

b. Outcome 2 – Institutional and Technical Capacity:

CARILEC Renewable Energy Conference (Guadeloupe)

- At this event, our team presented on 'An Integrated Approach to Energy Transition Planning' and 'Next Generation Utility'. These presentations were well received and the latter offered a different perspective on the opportunity for utilities in the Caribbean, while sparking a strong discussion. Our team also met with the executives of CARILEC to continue cementing the partnership for our joint community of practice platform for Energy practitioners in the Caribbean. These presentations as well as the feedback we received following them helped our team refine our approach to outcome 1 of our project around Policy De-risking measures.

CREF – Attended Utility Workshop put on by Brattle Group with Caribbean utility audience

- Our project team attended a workshop at CREF 2015, focused on Economics, Tariffs, and Implementation and The Challenge of Integrating Renewable Resources for utilities in the Caribbean. As per the above, our attendance at this workshop was

critical to develop relationships with the Caribbean utility audience for our work on Community of Practice platform as well as as well as helping our team refine our approach to achieving outcome 1 of our project around Policy De-risking measures.

Aruba Learning Event

- At the Aruba Learning Event (ALE), ministers of energy, utility executives and engineers, and regulators from across the Caribbean convened to accelerate learning and share renewable energy best practices. Attendees expressed great enthusiasm for a Renewable Energy Community of Practice. To ensure the online platform is successful, a partnership with CARILEC was established and an initial discussion started to develop the content for this platform. This platform will enable the development of institutional and technical capacity across the Caribbean, an important outcome of our Project.

CARILEC Knowledge Infrastructure Platform

- Often island government energy divisions consist of one person that lacks the ability to connect and engage with regional experts. The development of a Community of Practice will fill that void by connecting renewable energy practitioners to the tools and knowledge they need - quickening the time to project implementation. RMI - CWR worked with a consultant to design the structure and content requirements for the platform and build the relationship with our platform partner CARILEC. CARILEC is the regional association of electric utilities and expertise is in providing utility educational opportunities for its members. We are pleased to have CARILEC host and own the CARILEC Renewable Energy Community (CAREC) - the launch occurred in July 2016

c. Outcome 3 - Investment Projects and Financial Mechanisms

The Bahamas - BAMSI Solar RFP

- As part of RMI - CWR's work in the Bahamas, we plan to develop, publish and manage a Request for Proposals (RfP) tender to select an Engineering, Procurement and Construction (EPC) company to engineer, procure and construct a 2.6 MW solar PV project on North Andros Island for the Bahamas Agricultural and Marine Science Institute (BAMSI). To date, Renewable Energy consultants, DNV-GL, have been contracted to prepare the initial contract and site visit work to North Andros for geotechnical studies. This is part of the project preparation for the Family Islands 17MW Solar and Storage project, which includes 11 Family Islands, including North Andros and the BAMSI facility.

The Bahamas - Government Building Energy audits & retrofits

- RMI - CWR have been working with DNV-GL to create and manage a RfP for (4) four Bahamas Government facilities energy retrofits and/or renewable energy generation. We will manage and oversee the contract and the process on behalf of the Government of Bahamas. Currently, DNV GL has completed technical facility audits on six government buildings of The Bahamas. Once these were completed, a draft RfP will be prepared for the Government of Bahamas.

Belize - Hospital RFP

- RMI - CWR are working with DNV-GL to create and manage a RfP for two Belize Hospital energy retrofits. RMI - CWR will manage and oversee the contract and the process on behalf of the Government of Belize. To kick off our hospital project in Belize, the team visited Belmopan and Belize City, the two hospitals were identified to conduct energy audits for the Project.

Belize - LED Streetlighting Procurement Project

- The project team is working with DNV-GL to provide advisory support to the utility, Belize Electricity Limited (BEL), for retrofitting all of the utility's public streetlights from halogen luminaires to conventional LED luminaires with smart controls. As part of this project, BEL's RFP for Street Lighting was reviewed by DNV-GL for industry consistency and compliance.

Saint Lucia - Distribution and transmission Grid Integration study

- Our Energy Transition planning work fits directly into outcome 1 of our Project and policy de-risking measures. For this initiative, in partnership with the local utility, LUCELEC, in St Lucia, RMI - CWR worked with DNV GL to complete a distribution and transmission grid integration study. The results of this were shared at a data verification and analysis alignment workshop, planned to discuss all collected data and the forthcoming analyses and refine analytical approach based on feedback from the workshop. The objective of the workshop was to align all actors on the analysis, and ensure no duplication of effort. This workshop required travel for two DNV GL consultants.

d. Outcome 4 - Project Management

Saint Lucia - Full time On-Island Project Coordinator

- In order for us to work effectively in Saint Lucia, a project coordinator was identified as the optimal solution to support the project. The Coordinator is based in the Energy Division and their purpose is to facilitate the development and implementation of renewable energy and energy efficiency projects identified by the Government of Saint Lucia and LUCELEC, which are supported by the Carbon War Room-Rocky Mountain Institute partnership.

II. Activities from 2016

ACTIVITIES 2016		
GEF OUTCOME	AMOUNT ALLOCATED	AMOUNT SPENT
Outcome 1 - Policy De-risking Measures	\$70,000	\$54,000
Outcome 2 - Institutional and Technical Capacity	\$137,000	\$17,000
Outcome 3 - Investment Projects and Financial Mechanisms	\$225,000	\$102,000
Outcome 4 - Project Management	\$36,499	\$20,865

a. Outcome 1 - Energy Transition Strategy

Grenada - Analysis of Economic Impacts of Waste Resource Pathways

- RMI-CWR worked on developing an Integrated National Waste Management Strategy for the Government of Grenada. One of the issues to be addressed is the need for future disposal capacity. An approach to be considered is whether to build a new landfill. Gershman, Brickner and Bratton, Inc. (GBB) was engaged to provide an estimate of the costs to develop and operate a new landfill in Grenada. This information was utilized to assess whether waste to energy technology would be suitable for Grenada.

Saint Lucia - Data Verification and Alignment Workshop

- Within the Caribbean region, there is a divergence over the future of the energy sector between governments and utilities. We address that gap by bridging the relationship between governments and utilities - and spurring renewable development that financially benefits both parties. Saint Lucia has committed to setting and executing their national energy transition goals by 2020 at 35%, this aligns with our project indicator of establishing five energy transition plans by 2018. The purpose of this workshop in particular was to present our initial Integrated Resource Plan (IRP) findings and draft scenarios to the Government of Saint Lucia and the local utility LUCELEC at the Conceptual Review meeting and to present our work to the broader Saint Lucian energy industry in the IRP Public Consultation.

Saint Vincent and the Grenadines - Financial advisory support

- The local utility VINLEC is planning the construction of a 12MW geothermal plant prior to considering any further RE technology. This plant is projected to serve 67% of VINLEC'S energy needs. As part of their work in Saint Vincent, RMI - CWR developed a grid integration study for the purpose of assessing the integration of a potential geothermal energy project with the existing diesel and hydro generation on the main island of Saint Vincent in order to evaluate the impacts on the stability and reliability of the electricity grid.

b. Outcome 2 - Institutional and Technical Capacity:

Regional - Development of an Online Platform (CAREC)

- Many island government energy divisions possess the ability to connect and engage with regional experts. The development of a Community of Practice will fill that void by connecting renewable energy practitioners to the tools and knowledge they need - quickening the time to project implementation. Following our scoping exercise in 2015, we hired a consultant to develop the structure of this platform in coordination with our regional partner CARILEC. This platform was launched in July of 2016 as the CARILEC Renewable Energy Community (CAREC).

Regional - Visit Case study Locations, collect information

- Through the work on the CAREC platform, RMI - CWR hired a consultant to collect feedback on the development of the platform to ensure it was meeting its objectives for the target audience. Several locations were visited across the region to disseminate information and collect feedback and data on CAREC via CARILEC'S Renewable Energy conference. The conference in Sint Marteen was attended by utility executives/engineers, industry professionals and renewable energy vendors

showcasing new methodologies and technologies for the benefit of Caribbean utilities. This audience was critical for us to collect accurate feedback for the platform.

c. Outcome 3 - Investment Projects and Financial Mechanisms

Bahamas - Management of tender process for Solar PV Systems

- The Bahamas electric utility, Bahamas Electricity Corporation (BEC), is looking to procure power from solar facilities developed and operated by Independent Power Producers for the Family Islands. Around 17MW were proposed by BEC. RMI - CWR worked with DNV GL to develop an RfP to obtain proposals for the solar PV projects.

Belize – Creation and management of a full request for proposal through award for two Belize Hospital energy retrofits

- RMI - CWR are working with DNV-GL to create and manage a RfP for two Belize Hospital energy retrofits. RMI - CWR will manage and oversee the contract and the process on behalf of the Government of Belize. Following the kick off trip to Belize, where the team visited Belmopan and Belize City, the two hospitals identified and energy audits are underway for the project. DNV GL was contracted to gather data and draft the RfP for the government's review.

Saint Lucia - Project development for 3.2 MW solar photovoltaic installations at the Vieux-Fort Airport.

- RMI-CWR has been assisting LUCELEC in the development and procurement of a 3-MW Solar PV project near the international airport in Vieux Fort. Earlier this year, the site visit was successfully organized by LUCELEC, Government of Saint Lucia, and RMI-CWR team. Over 70 persons from 35 interested companies attended, with representation from the US, Canada, Europe, the Caribbean, and Latin America. The internal team was represented by RMI-CWR, DNV GL, Government of Saint Lucia (Ministry of Sustainable Development, Energy, Science & Technology and the Physical Planning Section/Development Control Authority), and LUCELEC. Two members of the National Utilities Regulatory Commission (NURC) also attended the site visit. The meeting took place in the National Skills Development Centre (NSDC) Training Room. In May 2016, 11 Bidders submitted proposals for the EPC contract with LUCELEC. After shortlisting bidders and conducting a detailed technical evaluation, the joint evaluation committee (LUCELEC, RMI-CWR, and DNV GL) selected a final bidder. Contract negotiations are underway and a contract is expected to be executed by the end of October 2016.

Regional - Perform RMI-CWR/CCI NPC Training

- Earlier this year, RMI-CWR convened in DC to provide training for project managers and national focal points located across the Caribbean. Training topics included tutorials' on Levelized Cost of Energy (LCOE), Energy Procurement and the CAREC platform. This training enabled the trainees to exchange their experience and learnings from the region and equip them to further their initiatives within their respective portfolios.

Bahamas – Project Management Travel Costs

- In order for us to work effectively in the Bahamas, a project manager was identified as the optimal solution to support our initiatives there. The PM is based in the

region and their purpose is to support on a range of initiatives around solar development and audits and retrofits of the government buildings.

d. Outcome 4 – Project Management

Saint Lucia - On Island Coordinator

- In order for us to work effectively in Saint Lucia, a national project coordinator was identified as the optimal solution to support the project. The Coordinator is based in the Energy Division and their purpose is to facilitate the development and implementation of renewable energy and energy efficiency projects identified by the Government of Saint Lucia and LUCELEC, which are supported by the RMI-CWR partnership.

Bahamas - On Island Project Coordinator

- In order for us to work effectively in the Bahamas, a project coordinator was identified as the optimal solution to support our initiatives there. The PM is based in the region and their purpose is to support on a range of initiatives around solar development and audits and retrofits of the government buildings.

TOTAL ACTIVITIES 2015 & 2016			
GEF OUTCOME	AMOUNT ALLOCATED	AMOUNT SPENT	BALANCE 2016
Outcome 1	\$70,000	\$54,000	16,000
Outcome 2	\$137,000	\$51,501	85,499
Outcome 3	\$225,000	\$167,578	57,422
Outcome 4	\$36,499	\$22,850	13,649
Total	468,499	295,929	172,570

