



REQUEST for PROPOSAL

**Site Engineer to Conduct Due Diligence and
Inspection services on the Installation of a
500kW Solar PV System
at
Argyle International Airport
in
St. Vincent and the Grenadines**

Submission Deadline: February 23, 2018

Overview

The purpose of the Project Preparation Consultant position is to facilitate the development and implementation of renewable energy and energy efficiency projects identified by Governments of St. Vincent and the Grenadines, Saint Lucia, Grenada, Belize and / or The Bahamas which are supported by the Rocky Mountain Institute-Carbon War Room (RMI-CWR) and funded by the Global Environment Facility (GEF).

Background

Island nations are in a unique position to reduce their dependence on imported fossil fuels and benefit from the positive environmental, social, and economic impacts of using sustainable energy sources. They can combine their abundant renewable resources with economically viable technologies to become more independent and resilient.

By accelerating the transition of islands to renewable energy and energy efficient sources, island governments, utilities and other stakeholders can:

- Reduce the dependence on imported fossil fuels and greenhouse gas emissions
- Stabilize the cost of electricity for households and businesses
- Increase investment opportunities and investment returns on-island
- Increase resiliency of the grid and defer maintenance on transmission and distribution
- Enhance and diversify the local job market with higher-skilled, better paying jobs

In the process, islands will demonstrate that entire economies can transition to low- carbon solutions while improving their long-term viability.

The Islands Energy Program

The Clinton Climate Initiative Islands Diesel Replacement Program and Rocky Mountain Institute-Carbon War Room Islands Team have merged to form one team: the Islands Energy Program -- <https://www.rmi.org/our-work/global-energy-transitions/islands-energy-program/>. The Partnership helps to scale renewable projects and supports the capacity of islands to achieve their sustainable energy goals by delivering technical expertise, engaging with governments, utilities and island stakeholders, and providing communications support. This partnership brings a diverse mix of skills and experience in integrated resource planning, project identification and development, construction implementation support as well as a range of business advisory services. The partnership also leverages an array of consulting services from leading engineering and consulting firms, as well as legal and financial advisory firms in the power generation and transportation sectors.

Together, the Program will:

- Help Caribbean countries identify their specific renewable energy goals and conduct early and ongoing stakeholder engagement to ensure success
- Conduct a detailed energy transition planning process, which explores the economics/energetics of a specific country's transition pathway;
- Develop renewable energy projects, and assist governments and utilities in conducting a bidding and evaluation procurement process;
- Help build capacity across the region to enable future project planning, design, and implementation; and
- Create an enabling environment for project financing across the region.

The team's approach is facilitated by a comprehensive plan ([‘The Playbook’](#)) that provides clear guidance, steps, and helpful tools for islands to develop and execute their energy transition vision.

To date, the team has successfully:

- Created recommendations for a transition to a low-carbon future for Aruba, Bahamas, Belize, Colombia, Grenada, Saint Vincent & the Grenadines and Saint Lucia;
- Identified more than \$900 million of investable clean energy projects across 28 projects in 10 countries;
- Identified, developed and procured energy efficiency;
- Provided energy audit analysis and energy efficiency project preparation documents for several hospitals and government buildings in the Caribbean;
- Successfully developed, published and managed public renewable energy project procurement across several islands;
- Provided circuit level grid integration analysis to properly design and develop a utility scale renewable energy solutions;
- Consulted on new renewable energy interconnection policy and regulations for Caribbean utilities

BACKGROUND INFORMATION

Relevant Country Background

St. Vincent and the Grenadines (SVG) is a multi-island state comprising of the main island of St. Vincent and seven smaller inhabited islands as well as about 30 uninhabited islets constituting the Grenadines. The islands are home to a population of 110,000 people and cover a land area of 389 square kilometres. Apart from the main island of St. Vincent, other Grenadine islands with significant energy demands include, Bequia, Union Island and Canouan.

General Objectives

The main objective of proposed consultancy will be to conduct technical due diligence and inspection services on the installation of a ground mounted, grid connected 500kW PV system at the Argyle International Airport, and to make interventions where necessary to ensure system compliance.

Deliverables to be achieved by the Consultant

- Draft report to be submitted no later one (1) week after the substantial completion of the project. The report must include compliance with the manufacturer's equipment specifications, approved installation plans and the specifications outlined in the Project's Terms of Reference.
- Final report to be submitted no later two (2) weeks after the completion of the project. The report must include compliance with the manufacturer's equipment specifications, VINLEC guidelines for grid connection, approved installation plans and the specifications outlined in the Project's Terms of Reference.

ASSUMPTIONS & RISKS

Assumptions underlying the project intervention

- The quality of materials and workmanship are compatible with industry standards and best practices (NABCEP)
- The system meets all of VINLEC requirements for grid tied installations

SCOPE OF THE WORK

The Site Engineer will work within the framework of the objectives to be achieved. The activities that are established as part of the work program and the deliverables must be accomplished.

Specific Activities

The Site Engineer will be required to undertake the following activities to fulfill his/her obligations under the contract:

- Participate in a briefing meeting with the Govt/VINLEC/RMI project team.
- Engage the EPC Contractors in discussions on all matters relating to the scope of his work, all technical matters with regard to schedule of activities, equipment, standards and quality, system compliance and performance, system connectivity, etc.
- Review Terms of Reference for the Argyle International Airport solar PV installation projects for clarity in the execution of the assignment.
- Conduct a minimum of four (4) site visits in conjunction with payment milestones to the Argyle International Airport in fulfillment of the terms and conditions of this assignment.
- The first visit must be a preliminary visit to inspect all materials, sub-assembly parts and components with regards to technical specifications as outlined in the tender document for compliance.
- Interface with the Project Team and the on matters relating to the progress of the installation and adherence to specific guidelines including, compliance with manufacturer's equipment specifications, and VINLEC's guidelines for grid connection and any other relevant industry guidelines.
- Bring to the attention of the Contractor any activity or equipment that is not in compliance with applicable codes, guidelines and contract documents.
- Make recommendations relating to the installation when and where necessary to improve the quality and lifespan of the installed system. Ensure that system output is equivalent to AEP in each of the EPC contracts and the capacity is 500kWdc.

- Ensure that the system is performing to the full satisfaction of the client and that the Contractor conducts relevant system operation and maintenance training is conducted in accordance with the terms of reference.

RESPONSIBLE BODY

The Site Engineer shall report to the RMI Islands Energy Team Operations Manager and liaise on a weekly basis with the VINLEC Project Officer and the Govt Project Officer within the Energy Unit of the Ministry of National Security, Air and Sea Port Development.

LOGISTICS AND TIMING

Location

The Site Engineer will be located at the usual place where he/she conducts business. He/She will be required to conduct site visits to the Argyle International Airport at set intervals to monitor and interface with the Contractor. He/She will also be required to visit the office of the Govt Energy Unit and VINLEC to report on matters relating to the installation of the system to the Project Officer.

Commencement Date & Period of Implementation

The Site Engineer will be contracted during the period March 1, 2018 to October 30, 2018.

PERSONNEL REQUIREMENTS

Qualifications and Experience

Site Engineer

Candidate must possess at least a:

- Bachelor Degree in Electrical Engineering from an accredited University.
- Candidate must have at least five years of experience in solar PV installation and electrical installation
- Process a current NABCEP certification
- Candidates should be fluent in the English Language with excellent analytical and communication skills. He/she must be computer proficient in MS Office Suite and a digital project management tool such as MS Project.
- Preferred Candidate is to have local electrical engineering experience on St. Vincent or in the OECS
- Previous experience working with donor and governmental agencies within the Caribbean Region would be an asset

FACILITIES TO BE PROVIDED BY THE SITE ENGINEER

Site Engineer shall provide all the facilities required to discharge his/her work.

EQUIPMENT

No equipment is to be purchased on behalf of the Contracting Authority / beneficiary country as part of this service contract or transferred to the Contracting Authority / beneficiary country at the end of this contract.

REPORTS

Reporting Requirements

The Site Engineer shall submit to the RMI Operations Manager, one original report and one other copy along with an electronic file copy of all reports generated from this consultancy, including but not limited the Draft Substantial Completion and Final Completion report.

APPROVAL OF PROGRESS REPORTS

- i. The Site Engineer shall submit to the Client any additional report(s) that may be reasonably requested in connection with the progress of the elements of the Project for which the Site Engineer has responsibility as outlined in the Terms of Reference.
- ii. All reports shall be deemed to be accepted by the Client if the Client does not provide the Site Engineer within 10 days from the date of receipt of reports, with written notice specifying in detail, recommended changes or corrections or deficiencies in the quality of the report. The Site Engineer, on receipt of such written notice, shall thereupon promptly make any necessary corrections, amendments and/or adjustments to the reports which, shall be resubmitted to the Executing Agency for its approval.

MONITORING AND EVALUATION

Definition of Indicators

The indicators against which the Site Engineer will be evaluated on with respect to his/her performance include:

- i. Compliance with the schedule for the submission of reports on the outputs of the project.
- ii. Adherence to established professional standards in clarity of thought, knowledge of the subject, vision, etc.

PROPOSALS

Please provide a fixed cost proposal in US Dollars for the entire scope of work outlined in this Terms of Reference along with your current CV and NABCEP certification. Proposals are to be submitted electronically to: cburgess@rmi.org

Deadline for the submission of proposals: February 23, 2018 11:59pm EST