

ROCKY MOUNTAIN INSTITUTE



Request for Quotation
For
Barbados Renewable Cold Chain Storage Project

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Project Name: Barbados Renewable Cold Chain Storage Project

Document Package: Request for Quotation (RFQ) for Barbados Renewable Cold Chain Storage Project

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Task and Objective: Rocky Mountain Institute (RMI) is issuing this Request for Quotation (RFQ) to qualified prospective tenderers for installation services for solar-powered refrigeration units equipped with battery backup at ten (10) medical clinics in Barbados.



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1. SUMMARY OF PROCUREMENT

Rocky Mountain Institute (RMI) is seeking the services of a qualified company to install solar-powered refrigerators equipped with battery backup at ten (10) medical clinics in Barbados. The hybrid refrigerators are manufactured by SunDanzer, and each comes equipped with solar panels, batteries, battery charge controller, wiring, tools, temperature display, lock, and manuals. The contractor is required to install the fridges and the accompanying solar panels and battery systems. Specifically, a robust racking system must be provided by the installer to increase the likelihood that the solar array would survive a Category 5 storm.

1.1. About RMI

RMI decarbonizes energy systems through rapid, market-based change in the world's most critical geographies to align with a 1.5°C future and address the climate crisis. We work with businesses, policymakers, communities, and other organizations to identify and scale energy system interventions that will cut greenhouse gas emissions at least 50% by 2030.

For nearly 40 years, RMI has utilized our unique techno-economic expertise and whole-systems thinking to both publish groundbreaking research and analysis. We bring together collaborations of rare reach, range, and expertise—creating unconventional partnerships and mobilizing action to drive change on the massive scale needed to combat the climate crisis.

1.2. About RMI's Renewable Cold Chain Storage Project

The Barbados Ministry of Health & Wellness is undertaking a pilot project to outfit ten (10) medical clinics on the island with solar-powered refrigerators for the storage of temperature-sensitive medicines and vaccines. While these polyclinics already have conventional refrigerators for this purpose, occasional power outages put these goods at risk of spoilage. The use of solar-powered refrigerators, which can also be equipped with battery backup, ensures that power is available to keep these medical products at an appropriate temperature even when the electricity grid is down. This project will help to ensure that these life-saving medical supplies are available and safe for use at the medical clinics when they are needed.

RMI is providing project management and technical oversight support for the installation of the solar-powered refrigeration units at the medical clinics. As such, RMI is issuing this Request for Quotation (RFQ) for the installation of solar powered refrigerators and their accompanying solar panels and battery energy storage systems at the ten (10) medical clinics in Barbados.

This will be known collectively as the "Project". The Project will be implemented in a single phase, starting in Q2 2022.

The contents of this document pertain to the RFQ for the renewable cold chain storage project. It is accompanied by a list of Exhibits (provided with this document and available electronically [here](#) to view and download), and a list of Appendices (provided with this document and available electronically [here](#) to view and download). The list of accompanying Exhibits include:



- Exhibit 1 – Clinic Locations and Site Detail
- Exhibit 2 – DCRV75 Hybrid Quick Start Guide
- Exhibit 3 – User’s Manual for SunDanzer Hybrid Vaccine Refrigerators
- Exhibit 4 – DCRV20-75 Hybrid Kit Specifications Sheet
- Exhibit 5 – Litio SFS Storage Device User Manual
- Exhibit 6 – SunDanzer Installation Manual for Solar Panel Roof Mount

The list of Appendices consists of:

- Appendix A – RFQ Notice of Site Visit Acknowledgement Form
- Appendix B – Mutual Confidentiality Agreement (MCA)

1.3. Site Descriptions

Table 1 below specifies details on the locations of the medical clinics, proposed number of refrigeration units for installation, and the size of the units to be installed at each location.

No.	Clinic Name	Location	Clinic Size	Number of Refrigeration Units	Refrigeration Unit Size
1	David Thompson Health and Social Services Complex	St. John	Medium	1	75L
2	St. Phillip Polyclinic	St. Phillip	Small	2	75L
3	Edgar Cochrane Polyclinic	St. Michael	Small	2	75L
4	Randal Phillips Polyclinic	Oistins	Large	2	75L
5a	Winston Scott Polyclinic (Immunization room)	St. Michael	Large	2	75L
5b	Winston Scott Polyclinic (Issuing Room)	St. Michael	Large	6	75L
6	#2 Harbour Road Office/ Vaccine Site	St. Michael	Small	2	75L
7	Branford Taitt Polyclinic	Blackrock	Medium	3	75L
8	Glebe Polyclinic	St. George	Small	1	75L
9	Eunice Gibson Polyclinic	Warrens	Small	2	75L
10	Maurice Byer Clinic	St. Thomas	Medium	2	75L
	Total			25	

Table 1: Overview of clinic locations, size, and number of refrigeration units to be installed at each location



Exhibit 1 – Clinic Locations and Site Details provides additional details on each of the clinics, including geographic coordinates, building details, and suggested room modifications for accommodating the refrigerators.

1.4. Product Description

All clinics will be supplied with the SunDanzer DCRV75 Hybrid refrigeration unit. Specifications on the refrigeration units, and accompanying solar PV and batteries are highlighted in Table 2 below.

Specification	Value
Unit Gross Vaccine Storage Capacity	75 Litres
Unit Dimensions (H x L X D)	97 x 78 x 86 centimetres (cm)
Unit Weight	83.46 kilograms (kg) / 184 pounds (lbs)
Solar Modules	2 x 100 Watts
Battery Chemistry	Lithium Iron Phosphate (LiFePO4)
Battery Connector Type	Plug and Play

Table 2: Specifications for SunDanzer DCRV75 hybrid refrigeration units, solar PV modules, and batteries

Additional information on the DCRV75 solar refrigerator specifications, and manuals for PV and battery installations are provided in Exhibits 2 – 6.

2. SCOPE OF SERVICES AND OUTPUT/DELIVERABLES

The Contractor will be supplied with the SunDanzer DCRV75 refrigeration units for installation, which each come equipped with solar panels, batteries, battery charge controller, wiring, tools, temperature display, lock, and manuals. The contractor is required to fully install the fridges and the accompanying solar panels and battery systems at the 10 facilities. While the solar panels are supplied with roof installation hardware these have been deemed by RMI to be unsuitable for use in hurricane-prone regions such as the Caribbean. Therefore, a more robust racking system must be supplied by the installer to increase the likelihood that the solar array would survive a Category 5 storm. Additionally, at two sites (Randal Phillips Polyclinic and Maurice Byer Clinic minor modifications to cabinets and countertops would be required in the rooms where the refrigerators will be placed. Further details and visualizations on the potential room modifications are highlighted in ‘Exhibit 1 - Clinic Locations and Site Details’.

The following are the technical requirements for the installations:

1. Equipment shall be installed in accordance with manufacturer instructions.
2. Solar arrays shall be installed using racking solutions, and in appropriate roof locations to provide a minimum wind speed rating of 157mph (Category 5 hurricane).
3. All work shall be done in accordance with local electrical and building codes and standards as well as industry best practice.



2.1. Project Deliverables

The deliverables associated with project are generally described above, and are provided here for completeness. They are as follows:

- Racking manufacturer engineering report for proposed roof-mount solar array at each location confirming the required Category 5 design.
- Installed solar-powered refrigeration units and accompanying solar panels and battery system
- Photographs of completed work at each facility

2.2. Duration

Period of performance is June 27, 2022 – September 9, 2022. This is a limited term contract ending September 2022.

3. GUIDELINES FOR QUOTATION SUBMISSION

3.1. Requirements

Each tenderer must fill in the grayed sections in Table 3 below.

<i>For RMI Procurement Lead to fill in:</i>				<i>For Tenderer to fill in:</i>	
<i>Line-item no.</i>	<i>Description of Goods / Services</i>	<i>Unit</i>	<i>Quantity required</i>	<i>Total Price (US \$)</i>	<i>Estimated delivery date</i>
1	Engineering Work for Solar Arrays	Lump Sum	1	\$	
2	Installation of 25 solar powered refrigeration units	Lump Sum	1	\$	
3	Minor modifications to cabinets/ countertops	Lump Sum	1	\$	
Subtotal				\$	
Sales tax (if applicable)				\$	
Delivery charge (if applicable)				\$	
Other charges (if applicable)				\$	
TOTAL				\$	

Table 3: Quotation submission table to be filled in by tenderers



The selected tenderer will also be able to demonstrate capacity in similar work or delivery of goods, particularly:

- *Small-scale solar PV installations in the Caribbean*

3.2. Quotation Content

Tenderers should submit:

- A statement of interest that includes a description of how the above Requirements are met
- *Tenderer's official name, address, and contact information*
- *Name, position, address, and contact information of person who is authorized to make decisions or represent the tenderer*
- *Type of entity*
- Curriculum Vitae(s) (CVs) of core team
- *Examples of and references for prior solar PV installations*
- *Tenderer contact details*
- *Signed Mutual Confidentiality Agreement (see Appendix B – Mutual Confidentiality Agreement)*
- *Quotation details and validity period*
- *Technical information on all components provided by the contractor, including, but not limited to:*
 - *Racking system*
 - *Wiring*
- *Warranty and guarantee information of equipment supplied by the contractor*

Quotations, including all supporting documents, should be written in English and financial information should be provided in USD. Supporting documents may be in another language, provided they are accompanied by an accurate translation of the relevant passages in English.

RMI is aware that information contained in a quotation may indicate a tenderer's current operations and may be confidential. Therefore, RMI requests that any confidential information in a quotation be clearly identified as such and RMI will treat it as confidential. **Additionally, tenderers are required to enter into a Mutual Confidentiality Agreement (MCA) with RMI by completing *Appendix B – Mutual Confidentiality Agreement*, and submitting it via email to sjules@rmi.org and fneverson.contractor@rmi.org by Friday April 29th, 2022.**

All materials submitted with a quotation become property of RMI. RMI will have the right to use all ideas or adaptations of the ideas contained in the quotations received subject to clearly identified confidential or proprietary limitations. Disqualification of any quotation does not restrict or eliminate this right.



3.3. RFQ Process & Timeline

The timeline for the RFQ is listed in Table 4 below.

Stage of Procurement	Date
RFQ released	Friday April 22, 2022
Deadline for confirming attendance at site visits	Friday April 29, 2022
Deadline for submitting Mutual Confidentiality Agreement (MCA)	Friday April 29, 2022
Mandatory site visits to medical clinics	Tuesday May 3, 2022
Deadline for questions	Friday May 6, 2022
Questions answered by RMI	Wednesday May 11, 2022
Quotation submission deadline	Friday May 13, 2022
Bid clarification meetings (if required)	
Final tenderer selection	Monday June 6, 2022

Table 4: Timeline for RFQ Process

Site Visit: A mandatory site visit to the medical clinics will be held on **Tuesday May 3rd, 2022**. Prospective tenderer's are required to acknowledge their intention to attend the site visit by completing *Appendix A – Notice of Site Visit Acknowledgement Form*, and responding via email to sjules@rmi.org and fneverson.contractor@rmi.org. The deadline for confirming attendance at the site visits is **Friday April 29th, 2022**. To maintain proper health and safety protocols, each organization is limited to having up to two (2) people attending the site visit. Additionally, prospective tenderers are requested to submit a signed copy of *Appendix B – Mutual Confidentiality Agreement* by **Friday April 29th, 2022**.

All questions about this RFQ must be received via electronic mail to the contacts below in Table 5 by **Friday May 6th, 2022**. Answers to the questions will be shared with all parties who have asked questions or otherwise expressed interest.

All quotations must be sent via electronic mail to the same contacts listed below by Friday May 13th, 2022, 5:00 pm Eastern Caribbean Time.

<i>Sidney Jules</i>	<i>Fidel Neverson</i>
<i>Manager, Islands Energy Program</i>	<i>Technical Manager, Islands Energy Program</i>
<i>RMI</i>	<i>RMI</i>
sjules@rmi.org	fneverson.contractor@rmi.org

Table 5: Contacts for Barbados Renewable Cold Storage Project RFQ

When sending questions or submitting a quotation please use this electronic mail subject: ***Quotation for Barbados Renewable Cold Chain Storage Project.***

Please note that it is the tenderer's responsibility to ensure that the quotation and all other required documents are received by the closing date at the email address specified above. Quotations received after the time and date specified will not be reviewed or considered. Failure to provide any information requested in this RFQ may result in rejection for non-responsiveness.



4. EVALUATION AND SELECTION

4.1. Evaluation Criteria

The following elements will be the primary considerations in evaluating quotations submitted in response to this RFQ.

Criteria	Weighting
1. Price, or Financial proposal (or formula) for the work	60%
2. Approach to the project, including a thoughtful response to the objectives outlined in the RFQ, with attention to the scope of work, deliverables, and other major details, including approaching for designing more robust racking system	20%
3. Demonstrated capacity and qualifications of the prospective firm to perform the work, and the portfolio of prior work, and description of engineering tools used for solar PV design	20%
Total	100%

Table 6: Evaluation Criteria for Barbados Renewable Cold Chain Storage Project RFQ

The tenderer offering the best overall value will be selected. For this procurement, price is considered more important than non-price aspects.

4.2. Selection Process

No quotation development costs shall be charged to RMI. All expenses are to be borne by the tenderers. RMI may award to the tenderer offering best value without discussions. However, RMI reserves the right to seek tenderer clarifications and to negotiate with those tenderers deemed to be within a competitive range.

RMI may, at its discretion and without explanation to the prospective tenderers, choose to discontinue this RFQ without obligation to such prospective tenderers or make multiple awards under this RFQ. Procurement contracts will not be awarded to tenderers debarred by the Government of Barbados or the U.S. government, or named on restricted parties lists. Any quotation may be rejected in whole or in part for good cause when in the best interests of RMI.

A quotation will be selected based on the evaluation of the RFQ response, the interview results, any necessary vetting and due diligence, and the satisfactory outcome of financial negotiations. After the selected tenderer and RMI have entered into a contract for goods/services, RMI will notify the unsuccessful tenderers.

Any Tenderer who wishes to ascertain the grounds on which its quotation was not selected, should request explanation. The RMI procurement contact shall promptly provide in writing an explanation of why such quotation was not selected. Please note, if a tenderer requests a debriefing meeting, the Tenderer shall bear all their costs of attending such a debriefing meeting and the hourly rates of the RMI staff required for the meeting if significant expenses are incurred by RMI.