

**“PROMOTING ACCESS TO CLEAN ENERGY SERVICES IN ST. VINCENT AND THE GRENADINES (PACES) (PIMS 5146)”**

Photo: AIA solar PV system, Kingstown, Saint Vincent and the Grenadines

## TERMINAL EVALUATION REPORT (draft)

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UNDP - GEF

Evaluation period: November – December 2018

Saint Vincent and the Grenadines

This project contributes to the Effect of Countries are able to reduce the likelihood of Conflict and lower the risk of natural disasters, including from climate change (FA)

Partner for the execution: Energy Unit of the Ministry of National Security

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## Executive Summary

### PROJECT SUMMARY TABLE

Project Title:		Promoting Access to Clean Energy Services in St. Vincent and the Grenadines		
GEF Project ID:	5297		<u>at endorsement</u> <u>(Million US\$)</u>	<u>at completion</u> <u>(Million US\$)</u>
UNDP Project ID:	90426	GEF financing:	1,726,484	
Country:	St. Vincent and the Grenadines	IA/EA own:		
Region:	Latin America and the Caribbean	Government:	11,025,000	
Focal Area:	Climate Change	Other:	78,600,000	
FA Objectives, (OP/SP):	Countries are able to reduce the likelihood of	Total co-financing:	89,625,000	

	conflict and lower the risk of natural disasters, including climate change			
Executing Agency:	Energy Unit of the Ministry of National Security	Total Project Cost:	91,351,484	
Other Partners involved:		ProDoc Signature (date project began):		December 11, 2014
		(Operational) Closing Date:	Proposed: December 31, 2017	Actual: December 31, 2018

**Source: Project Files**

## PROJECT DESCRIPTION

According to the project document, the PACES initiative was designed to reduce GHG emissions from fossil fuel-based power generation by exploiting the renewable energy resources for electricity generation in St. Vincent and the Grenadines (SVG). To achieve this objective, the Project will promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused renewable energy resources that may include hydropower, wind, solar and biomass waste. The basic approach of the Project will be to promote renewable energy (RE) in SVG through Project activities aimed at achieving a greater share of RE in its energy mix by (i) the strengthening of the country’s clean energy policy framework including the streamlining of processes for RE investment approvals; (ii) increasing the capacities of appropriate institutions and individuals to support clean energy developments in SVG; and (iii) mobilizing investments for RE demonstration projects utilizing solar resources for electricity generation. The lessons learned from the demonstration projects will be used to scale-up investments for other on-grid RE projects and RE technologies in SVG as well as other member states of CARICOM.

This solution rests on three main pillars.

- Component 1: Establishment of a clean energy enabling policy framework
- Component 2: Clean energy capacity development.
- Component 3: Clean energy RE-based electricity generation demonstrations

## Evaluation score table

Project performance rating			
1. Monitoring and evaluation	<i>qualification</i>	2. Execution of the IA and EA:	<i>qualification</i>
M&E input design	Satisfactory	Quality of UNDP enforcement	Highly Satisfactory
M&E Execution plan	Satisfactory	Quality of execution: executing an agency	Highly Satisfactory
M&E overall quality	Satisfactory	The overall quality of enforcement and execution	Highly Satisfactory
3. Evaluation of the results	<i>qualification</i>	4. Sustainability	<i>Qualification</i>
Relevance	Relevant	Financial resources:	Moderately unlikely
Effectiveness	Highly Satisfactory	Socio-politicians:	Likely

Efficiency	Highly Satisfactory	Institutional framework and governance:	Likely
Overall rating of project results	Highly Satisfactory	Environmental:	Likely
Impact	Significant	The overall probability of sustainability:	Moderately unlikely

## *SUMMARY OF CONCLUSIONS, RECOMMENDATIONS, AND LESSONS*

### **Findings and Conclusions**

- The evaluation concludes that the project was relevant from the onset and continues to be so because it focuses on an environmental and development priority that is aligned with the interests of St. Vincent and the Grenadines, UNDP, GEF, the environment in general, the energy sector, and the community.
- The project relates to the GEF Climate Change focal area as it is aimed at several GEF focal strategies, PACES project is also aligned with national priorities stated in the National Development Plan, and it is also in line with CARICOM objectives, specifically objectives c and d.
- PACES project acknowledged prior developments on Renewable energies and built its intervention based on the progress from past experiences in the region. The PACES project design is also relevant because it defined the results, effects, and outputs, as well as measurement indicators, baselines, and targets. The project developed a logical framework in the project document, with specific links between the inputs, activities, outputs and expected results.
- The initial design is a holistic one since the project involves a mix of short-term solutions with long-term strategies; the components include institutional outcomes, capacity building, and demonstrative projects in the field. This is a very ambitious and robust approach because it aims at providing short-term results with longer-term strategies. The idea is not only to provide tangible solutions, but to link those replicable RE projects with public policy making, and institutional arrangements.
- The component number one, regarding the establishment of a public policy was needed because the institutional change is pivotal for RE implementation in SVG, nevertheless, it is ambitious

given the human and financial resources, the time available and all the external factors that are needed in order to do policy making. The evaluation highlights the fact that the project created an exit strategy with dedicated activities, roles and follow-up schemes in order to progress towards policy change after the project ends.

- The levels of stakeholder participation were favorable due to the call but also to the relevance of the initiative and its potential impact; one of the relevance indicators is the government ownership of the project.
- It is important to note that there was no specific gender strategy within the project, but, the project did make some efforts to involve gender perspectives.
- The evaluation rates the efficiency of the PACES project as highly satisfactory given the number of outputs delivered, the scope of the project and the resources available (both human and financial).
- The project partnered with other strategic organization such as CCCP – Giz, and CARICOM, amongst others to create synergies. Also, the project team developed a series of no-cost activities.
- In the other hand, the project faced some efficiency issues that hindered the progress; there were some administrative issues around procurement requirements, for example, lack of local suppliers demanded international bids to purchase some solutions, getting payments were slow through Government procedures as a NIM project, so the decision was to use UNDP procedures.
- The most prominent results of the project were: to launch a national dialogue on renewable energies amongst key stakeholders from government agencies, and the private sector. The project has led to a critical mass of actors discussing institutional arrangements, draft policies, based on demonstrative projects. Lastly, the project has built capacities in key partners to raise the knowledge and understanding of these topics. The evaluation found that one of the vital non-expected results was raising the awareness towards renewable energies in SVG.
- The project delivered a series of high-quality products that can be used by stakeholders, the government or third parties to generate positive changes and more favorable conditions for the use of renewable energies, and reducing fuel-based solutions.

- One of the success factors for this project has been that it was well staffed with dedicated project team members. This is very relevant taking into account that many foreign aid projects in the Caribbean fail, due to government understaffing, high turnover rates, and high workloads, so when a new project is assigned to national institutions, it struggles a lot during implementation. Also, the partnership with VINLEC meant good support to the project in technical aspects
- The evaluation found that the sustainability of the project is a point of attention because it is moderately unlikely to guarantee financial resources.
- Sustainability has been integrated into the project design, and the project has an exit strategy with specific goals to continue the benefits achieved by the project
- The evaluation highlights the ownership of the project by the government, but also the fact that the private sector was involved.
- Regarding the financial and economic sustainability of the project, the entities consulted during the field visit have expressed their interest in continuing with the advanced processes, but there needs to be clear data on RE performance, costs, etc., as well as some institutional changes: SVG has a high duty structure with lengthy processes for RE solutions acquisition. If RE is not competitive with other alternatives, then the project benefits won't be sustained in time.

## Recommendations

### For UNDP

- For future NIM projects that require an implementing agency, it is important to analyze the administrative challenges and procurement delays, as well as mitigation measures and alternatives for an agile execution
- All GEF interventions need to consider gender mainstreaming strategies from the onset, as well as a clear link to the achievement of the SDGs.

### For SVG Government

- The government needs to encourage incentives for the uptake of EV; the process of the government for giving duty-free and tax-free concessions creates unnecessary delays and noncompetitive costs. The EU has a leading role in this regard.

- As a successful experience, UNDP and the SGV Government can make an extra effort in dissemination and communication. The project should make a compilation of the lessons learned and good practices in the process, focusing on the active participation of the private sector, decision-makers, and the incentives to keep a productive collaboration. This information can be translated into a common language, identifying key messages and narratives to share with UNDP regional and country offices, development partners, UNDP website, email lists, media, and social networks. Likewise, this information can be used for the systematization of PACES experiences.

### **Lessons learned**

- Every design must include from the beginning a clear theory of change that allows identifying the chain of results from the inputs, through the activities, products and expected results.
- Projects should have a holistic approach combining short-term solutions with long term impacts. Nevertheless, when aiming for institutional changes and policy making, the projects need to clearly define outputs and results that fall under its control.
- Regarding the gender and human rights approach and SDG contributions, the evaluation highlights that the project aimed at male-dominated sectors, and focused on changes at the institutional level, making it difficult to have a robust gender strategy. However, PACES made efforts to strengthen the integration of the gender perspective in its implementation, as it strived for the equal participation of men and women in project activities, training was also carried out for all people, documents and project reports were also prepared to respond to the role of women in the project and disaggregating data by gender. It is important to note that women are particularly affected by the lack of access to energy, especially in rural areas.
- The project faced some efficiency issues that hindered the progress; there were some administrative issues around procurement requirements, for example, lack of local suppliers demanded international bids to purchase some solutions, getting payments were slow through Government procedures as a NIM project, so the decision was to use UNDP procedures.

- For future NIM projects that require an implementing agency, it is important to analyze the administrative challenges and procurement delays, as well as mitigation measures and alternatives for an agile execution. Given the novelty of the RE topic in SVG it is recommended to set realistic timelines taking into account the scarcity of local suppliers. Together with other UNDP Cos in the Caribbean, it would be beneficial to build a list of international suppliers, consultants, experts, etc.

# Abbreviations and acronyms

AA Administrative Assistant

APR Annual Progress Report

BAU Business-as-usual

BLPH Barbados Light & Power Holdings Limited

BTOR Back-to-office report

CARICOM Caribbean Community Secretariat

CCCCC CARICOM's Climate Change Center

CEIS Caribbean Energy Information System

CPAP Country Programme Action Plan

CRECS Caribbean Renewable Energy Capacity Support

CREDP Caribbean Renewable Energy Development Programme

CTA Chief Technical Advisor

CWSA Community Water and Sanitation Agency

EC Eastern Caribbean

ECCAA East Caribbean Civil Aviation Authority

ECERA Eastern Caribbean Energy Regulatory Authority

EDF European Development Fund

EE Energy Efficiency

EIAs Environmental Impact Assessments

EOP End of Project

EPSS Electric power supply systems

ESA Electricity Supply Act

ESIA Environmental and social impact assessment

EU European Union

EV Electric vehicle

EWH Electric water heaters

FIT Feed-in tariff

FPS Financial Procurement Specialist

FY Fiscal year

GDP Gross Domestic Product

GEF Global Environment Facility

GHG Greenhouse Gases

GHI Global horizontal irradiance

GIZ German Agency for International Cooperation

GoSVG Government of St. Vincent and the Grenadines

GJ Gigajoules

GWh Gigawatt-hour

HEV Hybrid-electric vehicle

ICAO International Civil Aviation Organization

IEA International Energy Agency

INC Initial National Communication

IPP Independent power producers

IRENA International Renewable Energy Agency

kWh Kilowatt hours

LAC Latin American Caribbean Regional Center

Lol Letter of intent

LPG Liquid Propane Gas

UNDP Environmental Finance Services Page 5

Acronym Meaning

MDG Millennium Development Goals

M&E Monitoring and Evaluation

MJ Megajoules

MoHWE Ministry of Health, Wellness, and Environment

MoNS Ministry of National Security

MW Megawatt

MWh Megawatt-hour

NAMA Nationally appropriate mitigation actions

NEP National Energy Policy

NEAP National Energy Action Plan

NGOs Non-Government Organizations

NPD National Project Director

NPM National Project Manager

NREL National Renewable Energy Laboratory

NWRMSP National Water Resource Management Study Programme

OECS Organization of Eastern Caribbean States

PACES Promotion of Access to Clean Energy Services in St. Vincent

PIR Project Implementation Report

PMU Project Management Unit

PPA Power purchase agreement

PPP Public-private partnership

ProDoc UNDP Project Document

PSC Project Steering Committee

PV Photovoltaic

RE Renewable energy

RET Renewable energy technology

RO Reverse osmosis

SIDS-DOCK Small Island Developing States – Island Energy for Island Life

SNC Second National Communication

SPACC Special Project on Adaptation to Climate Change

SVG Saint Vincent and the Grenadines

SWH Solar water heaters

TJ Tera joules

TOE Tons of oil equivalent

ToR Terms of Reference

UNDP United Nations Development Programme

UNDAF United Nations Development Assistance Framework

UNFCCC United Nations Framework Convention on Climate Change

VINLEC St. Vincent Electricity Services Limited

VRE Variable renewable energy

WTE Waste-to-energy

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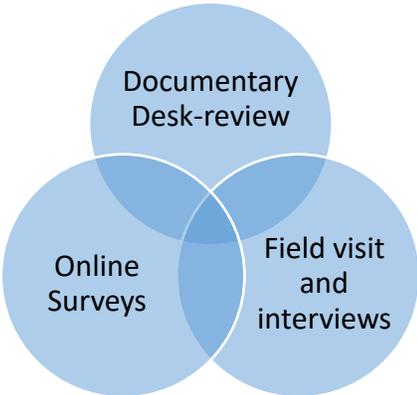
# Introduction

## Purpose of the evaluation

According to the ToR, the Final Evaluation will analyze the results of the project, draw lessons that can improve the sustainability of the benefits of this project and help improve overall UNDP programming. The evaluation is carried out with the purpose of assessing (i) the performance of the project in terms of its relevance, effectiveness (results, products) and efficiency; (ii) sustainability and the expansion of results; and (iii) the real and potential impact of the project; as well as compliance with the UNDP evaluation policy mandate on the contributions of development results in the area of human development. The objective is to provide information on the status of project implementation, which generates evidence and objective information to allow managers to make informed decisions to define new strategic lines. The final evaluation of the project will inform, to strategic partners and the beneficiaries, the results of the exercise, thus ensuring accountability.

## Scope and methodology

The objective of this evaluation is to review the efficiency, effectiveness, relevance, sustainability, and



impact, of the project implementation and, more particularly, document the results the project attained to its overall objectives and expected results as defined in the project document.

The evaluation assesses the extent to which the project successfully mainstreamed other UNDP priorities, including gender equality, poverty alleviation, improved governance, and the prevention and recovery from natural disasters.

The TE is conducted according to the guidance, rules, and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects. The objectives of the evaluation are to assess the achievement of project results and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

The evaluation places a significant emphasis on identifying lessons learned and good practices that derive from the project's implementation, sustainability and the potential of replicating them in similar interventions.

For conducting the evaluation, 4 phases were developed:

Phase 1 - start-up phase and design

Phase 2 - documentary review

Phase 3 - field work

Phase 4 - analysis and synthesis

These four phases allow for a participatory process where the evaluator was able to consult with stakeholders in each of the phases to ensure maximum relevance to UNDP, GEF and key stakeholders. This is part of the participatory process.

### Evaluation phases description

As previously mentioned, the evaluation will contribute to institutional learning by promoting the active participation of key actors during the different stages of the mission.

#### ***Phase 1 - start-up phase and design***

During this phase, the evaluator made initial approaches with UNDP and the project team to align the mission approach, agree on the scope and set specific expectations. Also, the context diagnosis, the draft agenda and the evaluation framework were addressed. With this, the process, the structure of the actors involved, and the conceptual design of the assessment tools were planned, based on the evaluation questions in the ToR.

#### ***Phase 2 - documentary review***

Before the visit, all documents were delivered to the consultant by the project team and the UNDP Country Office in Barbados.

Documentary analysis of the project was made regarding its objectives, results, products, and activities to determine if the original design presented problems in its formulation, had monitoring indicators, assumptions, baselines, goals.

Content Analysis helped to find configurations and relationships in Reports and texts, contributing in interpretations and establishing a coherent conceptual scheme that allows making judgments about the project regarding the achievements of products and results concerning the objectives in the context of what happened and its initial design.

### ***Phase 3 - field work***

The field mission was developed from December 3rd to the 7th, 2018. The evaluation used qualitative methods common to this type of research, structured and semi-structured interviews were conducted mainly. For field visits to St. Vincent and the Grenadines, the methodology was based on a theoretical and practical scheme developed in 1994 by Alforja<sup>1</sup> for the popular education sector, which has gained much recognition in Latin America, and whose basic principles have been taken up and applied by various organizations such as IFAD<sup>2</sup>, the Giz<sup>3</sup>, IICA<sup>4</sup>, AECID<sup>5</sup> y FAO, among others.

A variety of methods of data collection were used involving the following:

**Project visits:** The evaluator conducted a field mission to Kingstown-St. Vincent and the Grenadines, including the following project sites:

- Solar PV Installation and charging port at the Argyle International Airport
- Solar PV Installation and Biodigester at the Belle Isle Correctional Facility
- Solar charging port and Electric Vehicle at the Administrative Complex

**Observation:** observation checklists were used by the evaluator to register visual progress, attitudes, processes, infrastructure status, goods, etc.

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<sup>1</sup> "To systematize experiences", Oscar Jara (1994).

<sup>2</sup> "Sistematización de experiencias locales de desarrollo agrícola y rural: Guía metodológica", Julio Berdegué y otros (2002).

<sup>3</sup> Formando sistematizadores: Una guía para desarrollar competencias y generar conocimientos", Ruth Varela y otros (2005).

<sup>4</sup> "Develando experiencias: Otra mirada hacia la sistematización", Cecilia Díaz y otros (2010).

<sup>5</sup> "Guía metodológica de sistematización: Programa Especial para la Seguridad Alimentaria PESA en Centroamérica"

**Stakeholder interviews:** Key informant interviews and consultations were used to complement and validate the qualitative information gathered through the desk review. The evaluation consultant conducted interviews with relevant stakeholders and clients. Efforts were made to ensure a range of voices is represented covering all the categories of the key stakeholders. See Annex2.

**Online questionnaires:** to complement the information collected from the field, the evaluator also submitted brief questionnaires to dedicated informants, avoiding duplication.

In sum, the methodology is participative and dynamic, for which, the participation of the groups/sectors that have been part of the project, and that have lived the experience, was sought. Additionally, a survey was designed and distributed to collect perceptions and opinions.

#### ***Phase 4 - analysis and report***

In this phase, the evaluator compiled and added all the collected data about lessons learned and good practices were dedicated to the verification of the data and the articulation of results, lessons learned, conclusions and good practices. At this point the evaluator reviewed the results, identified trends integrating the strategic elements obtained in the document review and fieldwork. It was ensured that the information collected was triangulated correctly and the result of a rigorous collection process.

Once the evaluation has been approved, the Reference group will proceed to elaborate a response strategy to the recommendations and make the socialization that is required. This phase is an excellent opportunity to reflect on the lessons learned, but also on how to scale up or replicate the good practices identified, how to communicate achievements, and how to avoid past mistakes. Additionally, to discuss future recommendations regarding UNDP support.

## Project description<sup>6</sup>

The objective of the Project is to reduce GHG emissions from fossil fuel-based power generation by exploiting the renewable energy resources for electricity generation in St. Vincent and the Grenadines (SVG). To achieve this objective, the Project will promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused renewable energy resources that may include

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<sup>6</sup> From the ToR and other project documents

hydropower, wind, solar and biomass waste. The basic approach of the Project will be to promote renewable energy (RE) in SVG through Project activities aimed at achieving a greater share of RE in its energy mix by (i) the strengthening of the country’s clean energy policy framework including the streamlining of processes for RE investment approvals; (ii) increasing the capacities of appropriate institutions and individuals to support clean energy developments in SVG; and (iii) mobilizing investments for RE demonstration projects utilizing solar resources for electricity generation. The lessons learned from the demonstration projects will be utilized to scale-up investments for other on-grid RE projects and RE technologies in SVG as well as other member states of CARICOM. The objective of the Project is to reduce GHG emissions from fossil fuel-based power generation by exploiting the renewable energy resources for electricity generation in St. Vincent and the Grenadines (SVG). To achieve this objective, the Project will promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused renewable energy resources that may include hydropower, wind, solar and biomass waste.

The basic approach of the Project will be to promote renewable energy (RE) in SVG through Project activities aimed at achieving a greater share of RE in its energy mix by (i) the strengthening of the country’s clean energy policy framework including the streamlining of processes for RE investment approvals; (ii) increasing the capacities of appropriate institutions and individuals to support clean energy developments in SVG; and (iii) mobilizing investments for RE demonstration projects utilizing solar resources for electricity generation. The lessons learned from the demonstration projects will be utilized to scale-up investments for other on-grid RE projects and RE technologies in SVG as well as other member states of CARICOM.

**Structure of the evaluation report**

The evaluation report has five main sections as follows:

i.	<p><b>Opening page:</b></p> <ul style="list-style-type: none"> <li>• <b>Title of UNDP supported GEF financed project</b></li> <li>• <b>UNDP and GEF project ID#s.</b></li> <li>• <b>Evaluation time frame and date of evaluation report</b></li> <li>• <b>Region and countries included in the project</b></li> </ul>
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	<ul style="list-style-type: none"> <li>• <b>GEF Operational Program/Strategic Program</b></li> <li>• <b>Implementing Partner and other project partners</b></li> <li>• <b>Evaluation team members</b></li> <li>• <b>Acknowledgments</b></li> </ul>
<b>ii .A</b>	<p>Executive Summary</p> <ul style="list-style-type: none"> <li>• Project Summary Table</li> <li>• Project Description (brief)</li> <li>• Evaluation Rating Table</li> <li>• Summary of conclusions, recommendations, and lessons</li> </ul>
<b>iii.</b>	<p>Acronyms and Abbreviations (See: UNDP Editorial Manual<sup>7</sup>)</p>
<b>1.</b>	<p>Introduction</p> <ul style="list-style-type: none"> <li>• Purpose of the evaluation</li> <li>• Scope &amp; Methodology</li> <li>• Structure of the evaluation report</li> </ul>
<b>2.</b>	<p>Project description and development context</p> <ul style="list-style-type: none"> <li>• Project start and duration</li> <li>• Problems that the project sought to address</li> <li>• Immediate and development objectives of the project</li> <li>• Baseline Indicators established</li> <li>• Main stakeholders</li> <li>• Expected Results</li> </ul>
<b>3.</b>	<p>Findings (In addition to a descriptive assessment, all criteria marked with (*) must be rated<sup>8</sup>)</p>
<b>3.1</b>	<p>Project Design / Formulation</p> <ul style="list-style-type: none"> <li>• Analysis of LFA/Results Framework (Project logic /strategy; Indicators)</li> <li>• Assumptions and Risks</li> <li>• Lessons from other relevant projects (e.g., same focal area) incorporated into project design</li> <li>• Planned stakeholder participation</li> </ul>

<sup>7</sup> UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008

<sup>8</sup> Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.

	<ul style="list-style-type: none"> <li>• Replication approach</li> <li>• UNDP comparative advantage</li> <li>• Linkages between project and other interventions within the sector</li> <li>• Management arrangements</li> </ul>
<b>3.2</b>	<p>Project Implementation</p> <ul style="list-style-type: none"> <li>• Adaptive management (changes to the project design and project outputs during implementation)</li> <li>• Partnership arrangements (with relevant stakeholders involved in the country/region)</li> <li>• Feedback from M&amp;E activities used for adaptive management</li> <li>• Project Finance:</li> <li>• Monitoring and evaluation: design at entry and implementation (*)</li> <li>• UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues</li> </ul>
<b>3.3</b>	<p>Project Results</p> <ul style="list-style-type: none"> <li>• Overall results (attainment of objectives) (*)</li> <li>• Relevance(*)</li> <li>• Effectiveness &amp; Efficiency (*)</li> <li>• Country ownership</li> <li>• Mainstreaming</li> <li>• Sustainability (*)</li> <li>• Impact</li> </ul>
<b>4.</b>	<p>Conclusions, Recommendations &amp; Lessons</p> <ul style="list-style-type: none"> <li>• Corrective actions for the design, implementation, monitoring and evaluation of the project</li> <li>• Actions to follow up or reinforce initial benefits from the project</li> <li>• Proposals for future directions underlining main objectives</li> <li>• Best and worst practices in addressing issues relating to relevance, performance and success</li> </ul>
<b>5.</b>	<p>Annexes</p> <ul style="list-style-type: none"> <li>• ToR</li> <li>• Itinerary</li> <li>• List of persons interviewed</li> <li>• Summary of field visits</li> </ul>

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|  | <ul style="list-style-type: none"><li>• List of documents reviewed</li><li>• Evaluation Question Matrix</li><li>• The questionnaire used and summary of results</li><li>• Evaluation Consultant Agreement Form</li></ul> |
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# Findings

## Project Design

Analysis of the logical framework (AML) and the results framework (logic and project strategy, indicators)

- 1.1. **The evaluation has been able to find that the design of the project is robust by clearly defining the results, effects, and outputs, as well as measurement indicators, baselines, and targets.** The design is based on thorough research, technical and scientific developments in the development of renewable energies.
- 1.2. **The project developed a logical framework in the project document, with specific links between the inputs, activities, outputs and expected results.** That is, the project did have a particular theory of change that allows identifying a chain of results and causality in the intervention.
- 1.3. The objective of the project was "Reduction in GHG emissions from fossil-fired power generation and fossil fuel consumption for road transport through the exploitation of SVG's renewable energy resources for power generation.
- 1.4. **The project is based on three main pillars that are interconnected:** (i) establishment of a clean energy enabling policy framework, (ii) clean energy capacity development, and (iii) clean energy RE-based electricity generation demonstrations. **This is a very ambitious and robust approach because it aims at providing short-term results with longer-term strategies. The idea is not only to provide tangible solutions, but to link those replicable RE projects with public policy making, and institutional arrangements.**
- 1.5. **Since the project approach was aimed at the institutional level, and outcomes were aimed at reducing emissions, building capacity, assessing the policy framework, and piloting RE projects, it did not have a specific gender strategy.** The project document does not include a gender strategy to mainstream gender, or to implement gender activities. This fact was pointed out by PIR reports, and as a consequence, the project made every effort to be inclusive; women were targeted to participate in all capacity building/awareness activities conducted by the

project. According to PIRs, on average women generally, made up about 40% of the participants at workshops/consultations. This number, however, varies based on the content of the activity. Also, the project supported the single, woman electrical inspector to achieve her NABCEP Associate Solar PV Installers certification and Residential and Commercial Photovoltaic Systems Certification at Solar Energy International thereby equipping her with the necessary contract hours should she aspire to further pursue additional NABCEP PV Installation Professional Certification. The project included the country's National Women Committee in the consultation on the Electricity Supply Act, engaged with several females by inviting them to consultations and workshops; the Project made sure to include Gender in several of the consultation documents.

- 1.6. **The lack of a gender strategy resulted in a lack of information on gender balance in the RE sector in SVG, the first step in a gender strategy is a diagnosis or needs assessment, but the project did not have one. Therefore, the PIR identified the gaps and made the project react.** The project actions towards gender mainstreaming were reactive but given the context, acceptable in terms of women involvement in the project. A gender strategy could have set the roadmap for gender equality in the RE sector, with a clear context, actions to be taken, milestones, and goals. It is very difficult to establish the differentiated impact that reduction of emissions brings to men and women, but a gender strategy could have started this discussion, as well as the gender analysis in the sector.

### Assumptions and risks

- 1.7. **The project did a risk analysis from the onset and established external and internal risks. The following are the external risks, but the evaluation found there were no mitigation measures:**
- Continued or sustained levels of energy subsidies to fossil fuels and electricity prices. While the GoSVG is trying to reduce these subsidies, political pressure may result in the GoSVG being unable to reduce subsidies to the extent that the economics of renewable energy projects may not be attractive; ·
  - Inability to build the necessary institutional and local capacity during the Project period due to lack of qualified personnel; ·

- Failure to secure co-financing from potential project partners. This may result from the unforeseen diversion of government budgets and resources for issues with more pressing priorities such as disaster relief and large infrastructure projects that would generate significant economic benefits.

**The list of risks that are out of the project control is quite complete, but the project design didn't include any mitigation strategies. Even when some external factors are out of the projects domain, prevention and mitigation measures can be taken to reduce the occurrence or negative effects from risks happening.**

The project also listed a set of internal risks, indicating the level of risk and mitigation actions. The list of risks covers the main challenges, and the mitigation measures were proper; for example, the project did identify potential Delays due to lack of government capacity as a risk with a high level of probability to happen, and the mitigation action was to do Capacity building efforts to strengthen the Energy Unit and VINLEC in their capacity to promote and support development of RE in SVG. This was the case, and the project did build capacities to overcome the risk. In sum, there was a clearly defined risk identification, categorization, and mitigation strategy for internal risks, but not for external ones.

### Lessons from other relevant projects (e.g., the same area of interest) incorporated into the project design

- 1.8. **As mentioned above, the project design is based on previous research on the GHG emissions, RE in the Caribbean, as well as a dependency on global oil price volatility. There is no clear evidence of past national experiences that fed into the PACES project design.** Beyond rigorous studies from CARICOM and other key institutions, the PACES project took stock upon 2004, GEF supported the Caribbean Renewable Energy Development Programme (CREDP) Project that was aimed at dismantling identified barriers (in the areas of policy, capacity, information, awareness and finance) to the increased use of RE in the region. CREDP was implemented by UNDP and executed by the Energy Programme within the CARICOM Secretariat with co-financing from GIZ. GEF support for CREDP was concluded in 2009 with only GIZ support continuing until 2012. CREDP did strengthen capacity and raised awareness of RE issues, laying a useful foundation for further developments in RE and EE in CARICOM countries.

- 1.9. In April 2008, the CARICOM Secretariat established an Energy Programme with the key objective of finalizing a CARICOM Energy Policy and facilitating its implementation. The Energy Programme provided greater focus on regional energy sectors issues and development by implementing a programmatic approach to regional energy sector developments. In March 2013, CARICOM completed the Community Energy Policy, the primary goals of which is to improve regional energy security through diversification of energy supplies and greater utilization of renewable energy and cleaner fossil fuel such as natural gas. The policy also seeks to encourage the establishment of more sustainable energy systems
- 1.10. **PACES project design acknowledged this prior development and built its intervention based on the progress from past experiences in the region.** As confirmed by the interviewees who participated in the project design, and the project document; the PACES project took stock on the prior experiences and acknowledge the need for further capacity building, policy making, and raising awareness towards RE.

### Stakeholders participation

- 1.11. **In general, the project managed to bring together Government, Private Enterprise and foreign aid. This combination of actors is a case study worthy of analysis because participation remained active during the implementation of the project, including organizations that traditionally did not use RE like VINLEC.** During the project implementation, partition also has been one of the project landmarks; for example, for the revision of the electricity supply act, there have been different stakeholders' consultations including technical and policy level representatives from the Attorney Generals Chambers, Ministries of Health, Customs, Energy Unit, VINLEC, NGOs, Private sector, Chamber Commerce, etc.

### Replication approach

- 1.12. **In the current circumstances, the possibility of replicating the experience of the project to other products, organizations or even countries, is highly possible.** The project has made efforts to register and share lessons and knowledge with the material generated by the training, the reports, and assessments. PACES has been sure to incorporate in all its contractual

arrangements a need for knowledge transfer and training to those in direct receipt of the service. All trainings participants are obliged to share the learnings with colleagues in a trainer-of-trainers approach to replicate the capacities.

- 1.13. **According to project reports, the project has partnered with key stakeholders.** For example, together with CARICOM and GIZ REETA, the project did deliver hands-on training for the financial modeling and analysis of sustainable energy projects. This training activity was hosted in St. Vincent and brought together participants from Antigua and Barbuda, Barbados, Belize, Guyana, St. Lucia, St Vincent, and the Grenadines, Trinidad and Tobago and Jamaica.
- 1.14. PACES is also collaborating with the CARICOM Energy Unit C-SERMS platform to forward the E-mobility agenda throughout CARICOM member states via participation in a working group. The main objective of the group is to develop an EV Road Map for CARICOM by the end of 2018. Basically, the main challenge for replication is to gather data from the demonstrative projects, analyze it, and share it with others.
- 1.15. It has also promoted and encouraged the staff of the Energy Unit to share their knowledge with their colleges through presentation sessions on Friday mornings. Additionally, the project completed a 30 minute documentary on RE development in SVG and has since had several viewings of the film.<sup>9</sup>
- 1.16. **The main challenge the Energy Unit ahead for replication is to collect data on the EV and other Solar PV projects to analyze efficiency rates, costs, and be able to share it with other key institutions.**

### The comparative advantage of UNDP

- 1.17. **UNDP is an institution with experience and technical capacity in project management, and in initiatives that seek the conservation of the environment and biodiversity.** The Project was implemented by The Government and was closely followed by the programme officer from Barbados CO, and had the administrative support of that office. Likewise, the knowledge of the GEF and its administrative processes was an added value for the execution of the project, operational management

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<sup>9</sup> <https://www.youtube.com/watch?v=Ex3fo1aZDuA>

- 1.18. The figure of the Project Coordination Unit, which is typical of UNDP projects, had a project coordinator, a project manager, and a program associate, who also fulfilled the role of monitoring the Project and both assumed the role of administrative assistant with the support of the CO Barbados. The relationship with the Barbados CO has been satisfactory according to the project team, and counterparts.
- 1.19. The project has also received technical support from the UNDP-GEF Regional Technical Advisor, and the entire monitoring and evaluation scheme, with tools to monitor the progress observed.

## Project Implementation

### Adaptive management

- 1.20. **The adaptive management corresponds to the level of flexibility that the project had to attend to the changing dynamics and the supervening needs.** These are the adjustment mechanisms to improve the execution of the project, after an agreement between the UNDP, GEF and the institutions of St. Vincent and the Grenadines.
- 1.21. At the beginning of the project, the project coordinator resigned and had to be replaced in full by the Energy Unit Director. This fact meant a challenge for the PACES project given the workload of the director, but at the same time, it reinforced the government ownership and leveraged influence on key stake holders. Having the EU director as project coordinator enabled a closer influence with high officials from the government, up to the Prime Minister.
- 1.22. **Document findings show that there were no major changes to the logical framework or the components 1, 2 and 3. There were some changes following the government's demands and the project steering committee decisions.** For example, assistance to VINLEC to promote a national program for rooftop solar PV installation; this was not done due to the Project Steering Committee's decision not to pursue it as it was not in the interest of the Government to follow through with such a programme at the moment, according to the meeting minutes for the PSC meeting on April 23, 2018. Also, given some savings in PV the project steering committee decided to invest in an Electric Vehicle to incentivize citizens to use these solutions. This initiative came from the government, and it is difficult to assess its relevance given that there are different variables; one is the political side of accepting or rejecting the government initiative, another is the budget available, and lastly the effectiveness of the EV to raise awareness. With no data available, it can be said that just watching and EV in the streets is not

enough for public motivation, that may be an electric bus where people could hop-on have been more interesting, but as said before, it is difficult to assess the effectiveness of the EV.

- 1.23. Regarding the duration of the project, it started in March 2015, and due to the delays caused by the institutional environment and factors external to the project, an extension of time was made (with no-cost increase), being extended for 18 months until December 2018, when the original execution period was three years.

### Monitoring and Evaluation: input and execution design.

- 1.24. The project had different tools for monitoring and evaluation: logical framework matrix with results indicators, annual project implementation reports (PIR), quarterly narrative reports, tracking tools (GEF), follow-up with the UNDP Atlas administrative tool, and follow-up meetings. The project document includes a mid-term evaluation, but still, there was no budget for such evaluation. This is a missed opportunity because mid-term evaluations are formative, and can provide insights, and recommendations to improve implementation if needed.

List of PACES indicators
Objective
Reduction in GHG emissions from fossil-fired power generation and fossil fuel consumption for road transport through the exploitation of SVG’s renewable energy resources for power generation
<b>Cumulative direct and direct post-project CO2 emission reductions resulting from the RE technical assistance and investments by end-of-project (EOP), ktons CO2.</b>
<b>% share of RE in the power generation mix of SVG by EOP</b>
Outcome 1
The Energy Unit with the support of VINLEC evolves into a facilitation center to support private sector RE investment development, enable regulators to determine fair, flexible tariff structures, bring confidence to private RE investors, and increase the number of approved RE projects
<b>Number of on-grid RETs approved based on studies of improved RE policy and tariffs and RE grid integration</b>
<b>Number of RE development project proponents that were assisted by staff from the Energy Unit and VINLEC in the technical design of their projects</b>

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Outcome 2

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Raised awareness and increased capacity of government personnel and local entrepreneurs to support the development of RE projects in SVG and by geographic extension, other CARICOM countries

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**Number of managers in VINLEC and Energy Unit dedicated to promoting of RE investments**

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**Number of technical personnel in VINLEC, Energy Unit and the private sector who can provide technical oversight on RE project development in SVG and other OECS countries**

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**Number of tradespersons who have local certification to construct, assemble, operate and maintain RE technologies**

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Outcome 3

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Renewable energy accounts for an increased share of SVG's power generation mix

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**Number of RE projects that are financed through RE funds where VINLEC has involvement in operationalization by EOP**

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**Number of privately-financed RE projects connected to VINLEC electricity grid by EOP**

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**MW of RE on-grid projects installed by EOP**

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**MW capacity of RE generation projects (on-grid and off-grid) in planning and design stages by EOP**

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**% reduction in electricity drawn from the grid for each household with on-grid rooftop solar-PV panels**

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1.25. The indicators of the logical framework were measurable and specific, with clear units of measurement, and targets. The indicators are related to the products and results of the project, and the total number of indicators was manageable. However, in some cases, the indicators didn't include a baseline because data was not available since this is a recent topic in the country. Not having a baseline makes it impossible to assess evolution and change, but also, to set proper targets from the onset. This is a difficulty derived from the novelty of the topic and the lack of data bases.

1.26. Examples of good SMART indicators are *Cumulative direct and direct post-project CO<sub>2</sub> emission reductions resulting from the RE technical assistance and investments by end-of-project (EOP), ktons CO<sub>2</sub>*, and, *% share of RE in the power generation mix of SVG by EOP*. Both indicators are

SMART and useful to measure the project objective on *Reduction in GHG emissions from fossil-fired power generation and fossil fuel consumption for road transport through the exploitation of SVG's renewable energy resources for power generation.*

- 1.27. At the outcome level (components) there are also some good indicators such as *Number of on-grid RETs approved based on studies of improved RE policy and tariffs and RE grid integration (outcome 1), Number of tradespersons who have local certification to construct, assemble, operate and maintain RE technologies (outcome 2), Number of RE projects that are financed through RE funds where VINLEC has involvement in operationalization by EOP, Number of privately-financed RE projects connected to VINLEC electricity grid by EOP (outcome 3).*
- 1.28. **But also, there were some indicators that are not very useful to measure progress to results at the outcome level;** for example, Outcome 1 has an indicator on *Number of managers in VINLEC and Energy Unit dedicated to promoting of RE investments.* This indicator duplicates the metrics on capacity building from Outcome 2, and it doesn't measure a specific result, just an output which is staff promoting RE solutions; promotion of solution is not a result by itself as it is an activity or process.
- 1.29. The final evaluation highlights the good quality of the annual PIR project implementation reports because it contains qualitative information about the project and its progress, with assigned ratings, identified obstacles, risks, and adjustments.
- 1.30. **The project had no monitoring and evaluation officer as it was foreseen, so the project team fulfilled these functions with support from UNDP.**

### Feedback of M&E activities used for adaptation management

- 1.31. The project indicators are adequate at the output level, and the monitoring scheme shed light on the execution of resources, performance, and progress in the implementation of the project during the execution.
- 1.32. **According to the implementation reports, the project ranged from moderately unsatisfactory rating in 2016 to satisfactory ratings, and the recommendations resulted in actions and institutional agreements for the achievement of the expected results.** Several of the recommendations or suggestions in these reports were addressed in subsequent periods for improvement.

- 1.33. According to the project team, **the Project Implementation Report (PIR) was always used as a guide to inform the Project on how it has been progressing to date and to raise awareness of the outstanding targets that need to be achieved as well as to identify the gaps for reporting.** One such example is that of the need for Gender reporting and inclusiveness in the project implementation. Given the project's unsatisfactory production of gender statistics and inclusiveness the project strived to rectify that by including the country's National Women Committee in the consultation on the Electricity Supply Act, offered training to the lone female electrical inspectorate at the Ministry of Transport and Works as well as engaged with several females by inviting them to consultations, workshops etc. The Project has also made sure to include Gender in several of the consultation documents by involving women during the consultations, but also, by including data on men/women.
- 1.34. Another example is that the PIR reports expressed concern about the slow pace of the installations; as a result, the PMU worked assiduously to identify and implement the additional solar PV systems as well as to support the Energy Unit's ability to support planning and design of RE systems. All these efforts resulted in a faster delivery rate.

### Project financing

- 1.35. **According to the data obtained, of the total GEF budget, to 2017, \$ 877,926.76 had been executed, corresponding to 89.62% of the total. By the end of 2018, it is planned to complete 100% between executed expenses and commitments made at the evaluation date.**
- 1.36. Execution at the start of the project was delayed by a couple of months at the start of the project due to slight procurement delays to furnish the office and so on. Later, during the implementation of the project, resources for the advancement were allocated to the operation of the project and support to the project personnel that was hired from competitive processes by UNDP. Slight delays were a consequence of external factors like lightning damage to the Argyle system, and an accident of the Electric Vehicle.
- 1.37. In total, the raw numbers show that co-financing for the PACES Project has been supported by the following institutions:

- Barbados Light and Power Holdings - \$78.0 million
- Energy Unit, Ministry of National Security, Air and Sea Port Development - \$0.725 million
- VINLEC - \$10.30 million
- Private Sector Investors - \$0.60 million

1.38. **National ownership and Buy-In is a goal for any given project, but to set an amount of co-financing that is more than 40 times the GEF funds invested in the project is an issue of design because there is an unbalanced approach where the vast majority of resources falls out of the project team control.** If the needs or problems that the project aims at to solve require such amount of resources, then the theory of change is flawed because the chain of results from inputs to results falls under external actors that might have political pushes. The project team would be in a bad position for negotiating.

1.39. The evaluation found that it was difficult for the project to track co-financing; basically, the number of resources for co-financing exceeded by far the project budget with a total of USD 89 Million.

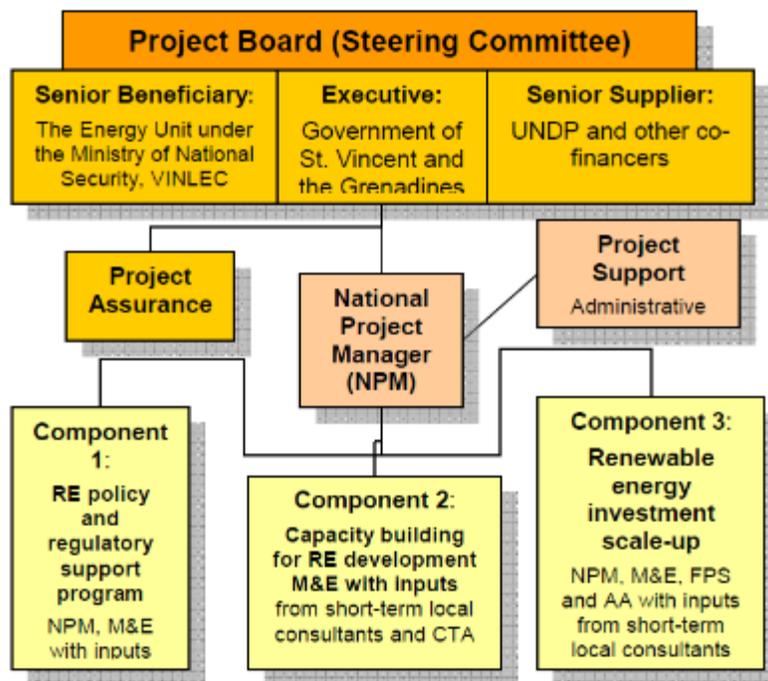
1.40. Also, **the project team mentioned difficulties to track the co-finance funds execution because some data goes down to the in-kind contribution from the Government like office space, venues, equipment, public services, etc.** There is also VINLEC's space for project steering committee meetings, good technical support, and about private sector project team can't speak to specific contributions. The project team didn't have access to the information on co-finance execution, enough staff members, nor the tools to do the tracking. The team believes that the co-financing has been achieved except VINLEC's purchase of an HEV and installation of a charging station. This is however in their plans but has not been achieved by EOP but will be done shortly

### Coordination of the implementation and execution of UNDP and the partner for implementation and operational issues

1.41. The initial modality of the project is National Implementation (NIM). Ministry of National Security was acting as an implementer, as per the NIM project management implementation guidelines agreed by UNDP and the Government of St. Vincent and the Grenadines. The Project

is co-financed with funding from the GEF and UNDP acts as the GEF Executing Agency. Components 1, 2 and 3 of the Project were implemented by the Energy Unit of MoNS, who assumed the overall responsibility for the achievement of Project results as the Implementing Partner (GEF Local Executing Agency). The organization structure of PACES is depicted in Figure 1.

## 1. PROJECT ORGANIZATION STRUCTURE



SOURCE: PROJECT DOCUMENT

1.42. **One of the success factors for this project has been that it was well staffed with dedicated project team members.** This is very relevant taking into account that many foreign aid projects in the Caribbean fail, due to government understaffing, high turnover rates, and high workloads, so when a new project is assigned to national institutions, it struggles a lot during implementation. Also, the partnership with VINLEC meant good support to the project in technical aspects.

## Project Results (effectiveness)

### Evaluation questions

- Has the project achieved its output and outcome level objectives?
- Were lessons learned captured and integrated into project planning and decision-making?
- How well were risks, assumptions and impact drivers being managed?
- Were relevant counterparts from government and civil society involved in project implementation, including as part of the project steering committee?
- Has the project contributed directly to any changes in legislation or policy in line with the project's objectives?
- Is there evidence that the project outcomes have contributed to better preparations to cope with natural disasters.
- Has the project carefully considered the thematic issues related to human rights? In particular, has the project sought to and actively pursued equality of access to clean energy services and opportunities for women and men (i.e., project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc.)

1.43. **According to all information sources, the expected results and the goals were achieved despite slight delays of the project in the initial months and external contingencies that were resolved during implementation.** Figure 2 below shows the scale of the general ratings assigned to the project of the annual implementation reports (PIR). As you can see, the project radically improved its ratings from moderately unsatisfactory, to satisfactory.

	2016	2017	2018
<b>Overall DO Rating</b>	No info	Moderately Unsatisfactory	Moderately Satisfactory
<b>Overall IP Rating</b>	No info	Moderately Unsatisfactory	Satisfactory

TABLE 1. GENERAL QUALIFICATIONS OF THE PROJECT IN THE PIR

1.44. **Despite all the challenges of delivering in a quite recent sector in SVG, it is important to note that the project did deliver a series of high-quality products, awareness, capacity building, and information that can be used in the future to generate positive changes and more favorable conditions for RE in St. Vincent and the Grenadines.**

**TABLE 2. RESULTS DELIVERY**

Component	Output	Result	
<p>Component 1: Establishment of a clean energy enabling policy framework:</p>	<p>Output 1.1: Approved framework and assessment of RE resources for long-term energy planning that supports RE targets of the 2010 Energy Action Plan</p>	<p>Partially delivered</p>	<p>Ground work on the Geothermal project was done, the project is to be completed in 2021.</p> <p>Two studies have been undertaken – (1) A Draft Policy For The Promotion Of Energy Efficient And Electric Vehicles has been developed which proposes several measures and incentives to catalyze investments in EVs and solar PV charging facilities. (2) The Electricity Supply Act has been reviewed which can feed into the legislative process to foster future RE development on the island.</p> <p>The augmentation of the 2010 National Energy Policy and Action Plan was not achieved due to insufficient time and numerous challenges that hindered the progress of the activity.</p>
	<p>Output 1.2: Approved and streamlined procedures for RE project development.</p>	<p>Partially delivered</p>	<p>The assistance to VINLEC to promote a national program for rooftop solar PV installation; this was not done due to the Project Steering Committee's decision</p>
	<p>Output 1.3: Grid code that will define the requirements for variable renewable energy sources to reduce the risks of power outages resulting from voltage dips and sudden drops</p>	<p>Delivered</p>	

	in renewable energy inputs.		
	Output 1.4: Institutional arrangements that involve an independent energy regulatory authority to determine fair market electricity tariffs for SVG	Partially delivered	This initiative was explored by the PACES Project an attempt was made but due to the Government's relationship and stand on the matter; the Project was unable to pursue this activity further.
	Output 1.5: Energy Unit RE investment facilitation center.	Delivered	
Component 2: Clean energy capacity development.	Output 2.1: RE learning and mentoring programs	Delivered	
	Output 2.2: Dissemination of best practices and lessons learned on the development of RE solutions for SIDS	Delivered	
Component 3: Clean energy RE-based electricity generation demonstrations	Output 3.1: Completed specific Project site RE assessments.	Delivered	
	Output 3.2: Feasibility studies.	Delivered	

	Output 3.3: Bankable documents containing business plans and financing options for RE demo projects.	Delivered	
	Output 3.4: Support for implementing RE demo projects.	Delivered	
	Output 3.5: Replication plans for additional RE projects.	Delivered	
	Output 3.6: RE demo investment projects	Delivered	

1.45. **According to key stakeholders, the PACES project has facilitated policy background, raised awareness, created capacity, and provided tangible evidence. All these in a context of lack of understanding and institutional barriers to access RE solutions.** For example, PACES went to rural areas to do shows, and demonstrations of RE solutions and the feedback was very positive raising comments from people, demanded to repeat displays, asked for PV solutions, showing interest, when there was little or no interest before.

1.46. Some project success factors that the evaluation found were:

- Understand people perception of energy, as well as politicians’ point of view.
- Setting clear goals
- Good management:
  - Commitment from the Energy Unit, VINLEC
  - Dedicated project staff (no time-sharing)
  - Good feedback and support from UNDP Barbados CO
- Identify solutions to implementation and administrative hurdles

- Speed up the procurement process

#### COMPONENT 1: ESTABLISHMENT OF A CLEAN ENERGY ENABLING POLICY FRAMEWORK

- 1.47. **The project developed two studies namely an Electric Mobility Readiness Assessment and an Economic Impact assessment of E-Mobility Transition report. Based on the two studies, draft policy for the promotion of energy efficient and electric vehicles has been completed which proposes several measures and incentives to catalyze investments in EVs and solar PV charging facilities.**
- 1.48. The project is also in the process of reviewing the National Energy Policy and Action Plan as well as the existing Energy Supply Act. The Electricity Supply Act (currently reviewed) already had a first draft produced, and a final version by the 14th of December. The Draft policy for energy efficiency and low carbon vehicles is already completed too, and the Director is finalizing the memo for the Permanent Secretary/ Cabinet.
- 1.49. **The evaluation highlights the fact that not only the PACES project delivered public policy inputs for a sustained-in-time change towards green energy, but also, the project facilitated a policy discussion amongst all key stakeholders ranging from NGOs, civil society, the private sector, and the government.** Engaging in this type of discussions is a step forward in development cooperation that should be systematized to share the learnings with other interventions. Needless to say that the EU was involved in the entire facilitation process, providing feedback, gained exposure to the process of developing the policy, assisted with data, and the expectations of the Ministry.
- 1.50. **Another result within component one was the technical assistance by staff from the Energy Unit and VINLEC;** the Energy Unit interacts with the public and provides information daily ranging from solar PV installations, energy audits, queries related to the geothermal project, to procedures to access tax breaks for RE equipment. Data from the Energy Unit website and social media page suggest that there is much engagement related to employment opportunities within the energy sector and the various capacity/building and awareness activities that are posted to the gallery. The media pages also indicate high interest in the electric vehicle demonstration project.

- 1.51. These interactions on technical assistance take place mainly over the telephone, face to face and emails; however, these engagements are generally not recorded. According to the project document, the target was not feasible to establish, and so, according to reports the PACES project managed to reach more than 400 interactions.
- 1.52. Finally, the project also delivered a training workshop on financial modeling of RE projects, together with GiZ. This training served as a tool for participants to model the projects, calculate rates of return, identify risks, do forecasting and identify the financial viability. This was key for local installers that were not savvy in the topic, and it is essential to note that the training was replicated from the participants as they signed an MoU to pass the knowledge.

## COMPONENT 2: CLEAN ENERGY CAPACITY DEVELOPMENT.

- 1.53. **The project contributed to institutional strengthening by warranting that five managers in VINLEC and Energy Unit were dedicated to promoting of RE investments, and also that nine technical staff members in VINLEC, the Energy Unit, and in the private sector were able to provide technical oversight on RE solutions.** VINLEC has five male managers who provide technical oversight to RE projects, and the Energy Unit has four technical officers of which 3 are men, and 1 is a woman.
- 1.54. Regarding the number of tradespersons who have local certification to construct, assemble, operate and maintain RE technologies, two technicians received IMI certification on maintenance and repairs for Electric Vehicles. Both participants were men, 13 locals received NABCEP Associate Solar PV Installers Certification. This group comprised of 12 men and one woman and three individuals who completed the NABCEP Certification were supported to receive Residential and Commercial Photovoltaic Systems Certification at Solar Energy International. This included two men and one woman.
- 1.55. **The project also aimed at civil society by doing community outreach in different ways;** launching the website for the Energy Unit ([www.energyunit.gov.vc](http://www.energyunit.gov.vc)), visiting rural areas and thought them about energy efficiency and RE (4 VILLAGES), producing brochures on RE (disseminated during exhibitions), visited schools (5 schools visited). The project also delivered a documentary showcasing the current state of the energy sector (Hydro stations, solar PV farms), and it is uploaded onto Youtube and Facebook.

1.56. There was also an Electric mobility conference – partnered with Giz and CARICOM (vehicle) that established the roadmap for EV developments. This was useful for sensitization since there were presenters and case studies from Barbados and Grenada.

### COMPONENT 3: CLEAN ENERGY RE-BASED ELECTRICITY GENERATION DEMONSTRATIONS:

1.57. **Activities have been implemented to increase the number of RE projects that are financed through RE funds where VINLEC has involvement; in total there are 3 specific projects: the Mayreau Micro-grid – 120 kW with 100 kW battery storage, the AIA solar PV – 367.2 kW grid-connected (plus 155 kW financed by PACES which brings the total system size to 522.2 kW), and the Union Micro-grid – 800 kW with 800 kW battery storage.**

1.58. **The Solar PV at Argyle airport and prison proved significant financial savings; increased resilience regarding Climate Change, e.g., against storms, and capacity building in installation.**

1.59. **In Belle Isle, the project was seen as highly positive** because from inception EU contacted the prison directives to discuss plans, going green, and saving costs (it is very expensive to run prisons). PACES is seen as a high need for Energy saving, lower costs of electricity and gas. The Biogas is not yet implemented but expected to generate a high impact. The Grid connected solution generates 6.000 EC / month in credit from a total bill of 9.000 EC bill/month.

1.60. The prison provided labor counterpart with seven inmates and a couple of officers who were trained on installing solar PV, and maintenance. As results, the interviewees expressed their satisfaction with the capacity built, the drive in the men, encouragement, and motivation.

*“When I leave from here I will motivate to do work in a company.” Belle Isle Inmate.*

1.61. In the Argyle Airport, the installed system generates a credit of EC40.000 to EC60.000 each month out of a monthly expense of EC 100.000 in electricity. The AIA has established an energy committee to do a follow-up, there is now an energy policy in place to raise awareness from staff and travelers, and there are plans to get 2MW with grants and own revenues. E.g., CDF is willing to do 400kW to reach 1MW with a grant.

*“In a couple of years, this airport will be an example of energy matters.” An electrical engineer from the airport*

- 1.62. Although it is difficult to establish the level of attribution of PACES regarding privately-financed RE projects connected to VINLEC electricity grid by EO; according to records, SVG has so far 79 domestic installations, ten commercial installations, one industrial installation, and 3 VINLEC owned installations.
- 1.63. Regarding MW of RE on-grid projects installed by EOP, there is a total of 1.64MW (1643.65 kW) installed solar PV to date. The geothermal project which is expected to contribute over 10 MW to the national grid has experienced several delays and is not expected to be commissioned until 2021 based on the current schedule.

## Relevance

### Evaluation questions

- Does the project relate to the GEF Climate Change focal area and has it been designed to deliver global environmental benefits in line with relevant international climate change objectives?
- Is the project aligned to National development objectives, broadly, and to national energy transition priorities specifically?
- Is the project relevant to stated regional development objectives as defined by CARICOM, OECS, and other regional frameworks?
- Is the project's Theory of Change relevant to addressing the development challenge(s) identified?
- Is the project's results framework relevant to the development challenges and are results at the appropriate level?
- Is the project appropriately aligned with relevant UN system priorities, including thematic objectives at the national/regional and international levels?
- Have the relevant stakeholders been adequately identified and have their views, needs, and rights been considered during design and implementation?
- Have the interventions of the project been adequately considered in the context of other development activities being undertaken in the same or related thematic area?
- Have relevant lessons learned from previous projects informed the design, implementation, risk management and monitoring of the project?

1.64. **The Government of SVG ratified the UN Framework Convention on Climate Change (UNFCCC) on December 2, 1996, and the Kyoto Protocol on December 31, 2004. With this being done it indicates the country's commitment to climate change and the reduction of carbon emissions.** The PACES Project has contributed significantly to the country's goals of carbon reduction through numerous installations and adoption of Renewable Energy Technologies (RETs) as well as through the establishment of the necessary policy framework. Similar to the UNFCCCs main goal to prevent the rise of greenhouse gas concentrations, the PACES Project has an overall goal to reduce GHG emissions from fossil fuel-based power generation by exploiting RE resources for electricity generation in SVG. As with the UNFCCC and many other international climate change initiatives, the project has sort of fostering awareness on the issue of the need for reduction of GHG emissions and has provided suitable

alternatives and solutions to doing such. The Project's reference to several sustainable development goals references its close relationship to the objectives of many climate change organizations.

- 1.65. **The project relates to the GEF Climate Change focal area as it is aimed at several GEF focal strategies.** For example, GEF 4 states that “[Concerning Strategic Program 3]...the emphasis will be upon developing policies and regulatory frameworks that provide limited incremental support to strategically important investments.” GEF 5 says “GEF support will be directed toward developing and enforcing strong policies, norms, and regulations to achieve large-scale impact in terms of energy savings and GHG [greenhouse gas] emissions reduction.”
- 1.66. **PACES project is also aligned with national priorities;** the Objective 4.9 from the National Economic and Social Development Plan 2013-2025 of Saint Vincent and the Grenadines aims at:
- Legislation in place to promote energy efficiency and alternative sources of energy.
  - The increased energy efficiency of public and private buildings.
  - Private enterprises established to complement the production of renewable energy.
  - A modern, expanded and adaptable power grid to accommodate various energy inputs.
  - Increased production and use of energy from renewable sources.
- 1.67. Objective 4.10 is To reduce the adverse impacts of climate change. Also, the project is aligned with the National Energy Policy and action plan. The St. Vincent and the Grenadines Intended Nationally Determined Contribution Communicated to the UNFCCC on November 18, 2015, says that St. Vincent and the Grenadines intends to achieve an unconditional, economy-wide reduction in greenhouse gas (GHG) emissions of 22% compared to its business as usual (BAU) scenario by 2025.
- 1.68. **PACES project is also in line with CARICOM objectives,** specifically objectives c and d: (c) *accelerated, coordinated and sustained economic development and convergence;* (d) *expansion of trade and economic relations with third States;*
- 1.69. The promotion of RE ensures essential steps towards sustainable development, improvements in the economy, and the well-being of the population. The livelihoods of people and the economic productivity of companies are highly dependent on sustainable sources of energy.
- 1.70. According to the sources consulted, **the levels of stakeholder participation were favorable due to the call but also to the innovation of the initiative and its potential impact. The**

specific activities in the field (demonstrative projects) were also consulted and endorsed by key actors.

*“PACES has been valuable, and hope that similar projects like these take place in the future.” A solar installation company representative*

- 1.71. **One of the relevance indicators is government ownership of the project. PACES project is very important for the Ministry since the Energy Unit was not well established at the beginning, and now after the project ends it has one administrative person, three energy officers, one deputy, and one director, all trained by the project.**
- 1.72. **Another relevance factor is the Theory of Change behind the project design;** the project established the core problem to solve and the short-term and long-term solutions, clearly linking inputs, to activities, outputs, and outcomes.
- 1.73. There is an energy issue linked to environmental consequences and costs to society. The project understood that there was a need to sensitize both politicians and civil society, build capacities, and adjust public policies to RE requirements.
- 1.74. Regarding the gender and human rights approach and SDG contributions, the evaluation highlights that the project focused on changes at the institutional level and therefore did not have a specific gender strategy. However, PACES made efforts to strengthen the integration of the gender perspective in its implementation, as it strived for the equal participation of men and women in project activities, training was also carried out for all people, documents and project reports were also prepared to respond to the role of women in the project and disaggregating data by gender. It is important to note that women are particularly affected by the lack of access to energy, especially in rural areas.
- 1.75. **In sum, there was no specific gender strategy within the project, but, the project did make some efforts to involve gender perspectives.** For example, the project hired female consultants in a sector predominantly dominated by men, the training involved women as much as possible, during community outreach activities, the majority were women. (See also, project design section)

## Efficiency

### Evaluation questions

- Has the project achieved its output and outcome level objectives?
- Were lessons learned captured and integrated into project planning and decision-making?
- How well were risks, assumptions and impact drivers being managed?
- Were relevant counterparts from government and civil society involved in project implementation, including as part of the project steering committee?
- Has the project contributed directly to any changes in legislation or policy in line with the project's objectives?
- Is there evidence that the project outcomes have contributed to better preparations to cope with natural disasters.
- Has the project carefully considered the thematic issues related to human rights? In particular, has the project sought to and actively pursued equality of access to clean energy services and opportunities for women and men (i.e. project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc.)

- 1.76. **The evaluation rates the efficiency of the PACES project as highly satisfactory given the number of outputs delivered, the scope of the project and the resources available (both human and financial).** During the consultation phase, no complaints were received about the project execution and progress during implementation. The project had to extend its execution period due to implementation delays already mentioned. According to all interviewees, a key success factor for the implementation was the selection of the project team that was key to implement the project activities, supervise consultants, and do a follow-up.
- 1.77. **The PIR reports are of good quality, and when alerts were raised about the execution of the project, the measures could be taken for an adequate adjustment and improvement of the implementation.**
- 1.78. **The project partnered with other strategic organization such as CCCP – Giz, and CARICOM, amongst others to elaborate studies, conduct key regional events, and elaborate regional guidelines.** For example, the financial modeling for RET was done in a joint effort with GiZ or

the electro-mobility conference with CARICOM (in St. Lucia) that led to guidelines for electric vehicles for the region. All these partnerships were synergies to maximize efficiency and results.

**1.79. Also, the project team developed a series of no-cost activities like the (i) Legislation follow up and uploaded into the EU website (done by the project team), (ii) Grid stability study (done by VINLEC), and (iii) Processes and procedures tendering and licensing of electricity outlines.**

**1.80. The project also faced some efficiency issues that hindered the progress; there were some administrative issues around procurement requirements, for example, lack of local suppliers demanded international bids to purchase some solutions, getting payments were slow through Government procedures as a NIM project, so the decision was to use UNDP procedures.** Also, the coordinator resigned affected the process for a while until the EU director took over, some projects were affected by contingencies like AIA system hit by lightning, or the EV crash. The Aeronautic authority approval for the project took very long, so the PM sent a letter to sped up the process.

## Sustainability

### Evaluation questions

- Has the project achieved its output and outcome level objectives?
- Were lessons learned captured and integrated into project planning and decision-making?
- How well were risks, assumptions and impact drivers being managed?
- Were relevant counterparts from government and civil society involved in project implementation, including as part of the project steering committee?
- Has the project contributed directly to any changes in legislation or policy in line with the project's objectives?
- Is there evidence that the project outcomes have contributed to better preparations to cope with natural disasters.
- Has the project carefully considered the thematic issues related to human rights? In particular, has the project sought to and actively pursued equality of access to clean energy services and opportunities for women and men (i.e., project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc.)

- 1.81. **The evaluation found that the sustainability of the project is a point of attention because it is moderately unlikely to guarantee financial resources. On the other hand, socio-politicians support is likely, as well as the institutional framework and governance (likely).**
- 1.82. **Sustainability has been integrated into the project design, and the project has an exit strategy with specific goals to continue the benefits achieved by the project.** Components 1 and 2 are aimed at sustainability addressing issues of institutionalization and capacity building, engaging with decision makers and key stakeholders such as the PM, government agencies, attorney general office, parliament, private sector.
- 1.83. **The evaluation highlights the ownership of the project by the government, but also the fact that the private sector was involved.** Private sector survives political stages, has financial, and technical resources.
- 1.84. **The project elaborated an exit strategy to ensure that conditions for continued renewable energy development in St. Vincent and the Grenadines are favorable and continued investments are sustained beyond the end of the project.** This exit strategy/ sustainability objective is that the achieved results under the Project will be improved upon and maintained,

by (1) providing clear direction for all major activities under each component, (2) assigning responsibility to the various project beneficiaries and stakeholders with direct responsibility for Energy in SVG and (3) providing a timeline for activities to be completed. In sum, the exit strategy provides detailed guide for the project's activities as externally provided programme resources are withdrawn.

- 1.85. **Regarding the financial and economic sustainability of the project, the entities consulted during the field visit have expressed their interest in continuing with the advanced processes, but there needs to be clear data on RE performance, costs, etc., as well as some institutional changes: SVG has a high duty structure with lengthy processes for RE solutions acquisition. If RE is not competitive with other alternatives, then the project benefits won't be sustained in time.**

## Impact

### Evaluation questions

- Are there verifiable improvements in ecological status, or reductions in ecological stress that can be linked directly to project interventions?
- Are there any impacts or changes at the institutional level? Is there any evidence of contribution to policy making?

- 1.86. **Given the moment in time this evaluation was conducted, the evaluation methodology implemented, and the time it takes to assess impact, this evaluation cannot make a full impact assessment.**
- 1.87. The analysis of the impacts refers to the evaluation of the changes from the implementation of the project. In this regard, **the evaluation has been able to conclude that impact is significant given that the project has generated impacts in two aspects: at the level of the institutional framework, and the level of demonstrative projects.**
- 1.88. On the one hand, thanks to the project, an inter-institutional group has been formed with actors from the private sector, international cooperation, and the public sector. This complementarity of institutions is also reflected in the diversity of disciplines that were involved in the

development of the project: technical operators, private companies, government officials, and organizations.

- 1.89. In this way, the project constitutes a paradigm shift by demonstrating that inter-institutional experiences are possible and that private companies can contribute with their expertise and resources to joint initiatives in RE solutions. **The project constitutes a positive effect for achieving the integration of different groups and disciplines, but also for demonstrating that short-term and long-term results can be achieved from a positive experience of dialogue and negotiation.** The impacts of the project were mostly presented at the process level because the project is a good practice of institutional participation and capacity building of RE.
- 1.90. On the other hand, **the project constitutes a milestone in the search for RE solutions, which raised awareness, achieved practical projects in the field that can be used for future analyses,** since RE projects have been developed with the potential to improve energy diversification. The future advances in this initiative can generate very positive impacts on the reduction of fuel based energy, and it has also managed to reduce the learning curve in this process.

## Conclusions

- The evaluation concludes that the project was relevant from the onset and continues to be so because it focuses on an environmental and development priority that is aligned with the interests of St. Vincent and the Grenadines, UNDP, GEF, the environment in general, the energy sector, and the community.
- The project relates to the GEF Climate Change focal area as it is aimed at several GEF focal strategies, PACES project is also aligned with national priorities stated in the National Development Plan, and it is also in line with CARICOM objectives, specifically objectives c and d.
- PACES project acknowledged prior developments on Renewable energies and built its intervention based on the progress from past experiences in the region. The PACES project design is also relevant because it defined the results, effects, and outputs, as well as measurement indicators, baselines, and targets. The project developed a logical framework in the project document, with specific links between the inputs, activities, outputs and expected results.
- The initial design is a holistic one since the project involves a mix of short-term solutions with long-term strategies; the components include institutional outcomes, capacity building, and demonstrative projects in the field. This is a very ambitious and robust approach because it aims at providing short-term results with longer-term strategies. The idea is not only to provide tangible solutions, but to link those replicable RE projects with public policy making, and institutional arrangements.
- The component number one, regarding the establishment of a public policy was needed because the institutional change is pivotal for RE implementation in SVG, nevertheless, it is ambitious given the human and financial resources, the time available and all the external factors that are needed in order to do policy making. The evaluation highlights the fact that the project created an exit strategy with dedicated activities, roles And follow-up schemes in order to progress towards policy change after the project ends.

- The levels of stakeholder participation were favorable due to the call but also to the relevance of the initiative and its potential impact; one of the relevance indicators is the government ownership of the project.
- It is important to note that there was no specific gender strategy within the project, but, the project did make some efforts to involve gender perspectives.
- The evaluation rates the efficiency of the PACES project as highly satisfactory given the number of outputs delivered, the scope of the project and the resources available (both human and financial).
- The project partnered with other strategic organization such as CCCP – Giz, and CARICOM, amongst others to create synergies. Also, the project team developed a series of no-cost activities.
- In the other hand, the project faced some efficiency issues that hindered the progress; there were some administrative issues around procurement requirements, for example, lack of local suppliers demanded international bids to purchase some solutions, getting payments were slow through Government procedures as a NIM project, so the decision was to use UNDP procedures.
- The most prominent results of the project were: to launch a national dialogue on renewable energies amongst key stakeholders from government agencies, and the private sector. The project has led to a critical mass of actors discussing institutional arrangements, draft policies, based on demonstrative projects. Lastly, the project has built capacities in key partners to raise the knowledge and understanding of these topics. The evaluation found that one of the vital non-expected results was raising the awareness towards renewable energies in SVG.
- The project delivered a series of high-quality products that can be used by stakeholders, the government or third parties to generate positive changes and more favorable conditions for the use of renewable energies, and reducing fuel-based solutions.
- One of the success factors for this project has been that it was well staffed with dedicated project team members. This is very relevant taking into account that many foreign aid projects in the Caribbean fail, due to government understaffing, high turnover rates, and high workloads, so

when a new project is assigned to national institutions, it struggles a lot during implementation. Also, the partnership with VINLEC meant good support to the project in technical aspects

- The evaluation found that the sustainability of the project is a point of attention because it is moderately unlikely to guarantee financial resources.
- Sustainability has been integrated into the project design, and the project has an exit strategy with specific goals to continue the benefits achieved by the project
- The evaluation highlights the ownership of the project by the government, but also the fact that the private sector was involved.
- Regarding the financial and economic sustainability of the project, the entities consulted during the field visit have expressed their interest in continuing with the advanced processes, but there needs to be clear data on RE performance, costs, etc., as well as some institutional changes: SVG has a high duty structure with lengthy processes for RE solutions acquisition. If RE is not competitive with other alternatives, then the project benefits won't be sustained in time.

## Recommendations

### For UNDP

- For future NIM projects that require an implementing agency, it is important to analyze the administrative challenges and procurement delays, as well as mitigation measures and alternatives for an agile execution
- All GEF interventions need to consider gender mainstreaming strategies from the onset, as well as a clear link to the achievement of the SDGs.

### For SVG Government

- The government needs to encourage incentives for the uptake of EV; the process of the government for giving duty-free and tax-free concessions creates unnecessary delays and noncompetitive costs. The EU has a leading role in this regard.
- As a successful experience, UNDP and the SGV Government can make an extra effort in dissemination and communication. The project should make a compilation of the lessons learned and good practices in the process, focusing on the active participation of the private sector,

decision-makers, and the incentives to keep a productive collaboration. This information can be translated into a common language, identifying key messages and narratives to share with UNDP regional and country offices, development partners, UNDP website, email lists, media, and social networks. Likewise, this information can be used for the systematization of PACES experiences.

### **Lessons learned**

- Every design must include from the beginning a clear theory of change that allows identifying the chain of results from the inputs, through the activities, products and expected results.
- Projects should have a holistic approach combining short-term solutions with long term impacts. Nevertheless, when aiming for institutional changes and policy making, the projects need to clearly define outputs and results that fall under its control.
- Regarding the gender and human rights approach and SDG contributions, the evaluation highlights that the project aimed at male-dominated sectors, and focused on changes at the institutional level, making it difficult to have a robust gender strategy. However, PACES made efforts to strengthen the integration of the gender perspective in its implementation, as it strived for the equal participation of men and women in project activities, training was also carried out for all people, documents and project reports were also prepared to respond to the role of women in the project and disaggregating data by gender. It is important to note that women are particularly affected by the lack of access to energy, especially in rural areas.
- The project faced some efficiency issues that hindered the progress; there were some administrative issues around procurement requirements, for example, lack of local suppliers demanded international bids to purchase some solutions, getting payments were slow through Government procedures as a NIM project, so the decision was to use UNDP procedures.
- For future NIM projects that require an implementing agency, it is important to analyze the administrative challenges and procurement delays, as well as mitigation measures and alternatives for an agile execution. Given the novelty of the RE topic in SVG it is recommended

to set realistic timelines taking into account the scarcity of local suppliers. Together with other UNDP Cos in the Caribbean, it would be beneficial to build a list of international suppliers, consultants, experts, etc.

## Annexes

### Annex 1. Terms of Reference

#### Terminal Evaluation Terms of Reference

##### INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the *Promoting Access to Clean Energy Services in St. Vincent and the Grenadines (PACES)* (PIMS 5146)

The essentials of the project to be evaluated are as follows:

##### Project Summary Table

Project Title:	Promoting Access to Clean Energy Services in St. Vincent and the Grenadines			
GEF Project ID:	5297		<u>at endorsement</u> <i>(Million US\$)</i>	<u>at completion</u> <i>(Million US\$)</i>
UNDP Project ID:	90426	GEF financing:	1,726,484	
Country:	St. Vincent and the Grenadines	IA/EA own:		
Region:	Latin America and the Caribbean	Government:	11,025,000	
Focal Area:	Climate Change	Other:	78,600,000	
FA Objectives, (OP/SP):	Countries are able to reduce the likelihood of conflict and lower the risk of	Total co-financing:	89,625,000	

	natural disasters, including from climate change			
Executing Agency:	Energy Unit of the Ministry of National Security	Total Project Cost:	91,351,484	
Other Partners involved:		ProDoc Signature (date project began):		December 11, 2014
		(Operational) Closing Date:	Proposed: December 31, 2017	Actual: December 31, 2018

## Objective and Scope

The project was designed to: *reduce GHG emissions from fossil fuel-based power generation by exploiting the renewable energy resources for electricity generation in St. Vincent and the Grenadines (SVG). To achieve this objective, the Project will promote clean energy decentralized electricity solutions in Saint Vincent and the Grenadines from unused renewable energy resources that may include hydropower, wind, solar and biomass waste. The basic approach of the Project will be to promote renewable energy (RE) in SVG through Project activities aimed at achieving a greater share of RE in its energy mix by (i) the strengthening of the country's clean energy policy framework including the streamlining of processes for RE investment approvals; (ii) increasing the capacities of appropriate institutions and individuals to support clean energy developments in SVG; and (iii) mobilizing investments for RE demonstration projects utilizing solar resources for electricity generation. The lessons learned from the demonstration projects will be utilized to scale-up investments for other on-grid RE projects and RE technologies in SVG as well as other member states of CARICOM.*

*More specifically, the project will achieve its objectives through the removal of barriers to the application of RE-based power generation in SVG. This will be done through the following specific Components and Outputs:*

### **Component 1: Establishment of a clean energy enabling policy framework**

*Output 1.1: Approved framework and assessment of RE resources for long-term energy planning that support RE targets of the 2010 Energy Action Plan.*

*Output 1.2: Approved and streamlined procedures for RE project development.*

*Output 1.3: Grid code that will define the requirements for variable renewable energy sources to reduce the risks of power outages resulting from voltage dips and sudden drops in renewable energy inputs*

*Output 1.4: Institutional arrangements that involve an independent energy regulatory authority to determine fair market electricity tariffs for SVG.*

*Output 1.5: Energy Unit RE investment facilitation center.*

**Component 2: Clean energy capacity development.**

*Output 2.1: RE learning and mentoring programs:*

*Output 2.2: Dissemination of best practices and lessons learned on the development of RE solutions for SIDS:*

**Component 3: Clean energy RE-based electricity generation demonstrations:**

*Output 3.1: Completed specific Project site RE assessments*

*Output 3.2: Feasibility studies.*

*Output 3.3: Bankable documents containing business plans and financing options for RE demo projects.*

*Output 3.4: Support for implementing RE demo projects.*

*Output 3.5: Replication plans for additional RE projects.*

*Output 3.6: RE demo investment projects.*

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

### Evaluation approach and method

An overall approach and method<sup>10</sup> for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the [UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects](#). A set of questions covering each of these criteria have been drafted and are included with this TOR ([Annex C](#)) **The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.**

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to *(St. Vincent and the Grenadines)*, including the following project sites:

*Solar PV Installation and charging port at the Argyle International Airport*

*Solar PV Installation and Biodigester at the Belle Isle Correctional Facility*

*Solar PV Installation on Mayreau*

*Solar charging port and Electric Vehicle at the Administrative Complex*

Interviews will be held with the following organizations and individuals at a minimum:

#### **Ministry of National Security, Air and Sea Port Development**

Mr. Godfred Pompey, Permanent Secretary

Elsworth Dacon, Director, Energy Unit

Lance Peters, Deputy Director, Energy Unit

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<sup>10</sup> For additional information on methods, see the [Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 7, pg. 163

**St. Vincent Electricity Services Ltd. (VINLEC)**

Thornley Myers, CEO

Technical personnel

**Ministry of Transport Works, Urban Development and**

Hudson Nedd Permanent Secretary

**Sustainable Development Unit, Ministry of Economic Planning, Sustainable Development, Industry,  
Information & Labour**

Janeel Miller-Findlay – GEF Focal Point

Decima Corea – Director of Planning(Ag) & UNDP Focal point

**Private Sector**

Ricardo Boatswain – Local solar pv installer and also SEI recipient

Fidel Neverson – Local solar pv installer

Ricardo Adams – Site Engineer on the Belle Isle Project

Alston Stoddard – Policy Consultant

**UNDP**

Ludmilla Diniz, Regional Technical Advisor

Danielle Evanson, Programme Manager

Jason LaCorbiniere, Programme Specialist, a.i.

## **Project Management Unit**

Leshan Monrose, Technical Project Officer

D'Andre Jackson, Administrative Associate

## **AIA**

Hadley Bourne – Chief Executive Officer

Josette Greaves – Electrical Engineer

## **Belle Isle**

Benton Charles – Superintendent of Prisons

## **Mayreau**

Fidel Neverson – Project Manager, RMI

Dr. Vaughn Lewis – Engineering Manager, VINLEC

Thornley Myers – Chief Executive Officer, VINLEC

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in [Annex A](#) of this Terms of Reference.

## **Evaluation Criteria & Ratings**

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see pages 40-42 of the Project Document), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings

must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in [Annex D](#).

<b>Evaluation Ratings:</b>			
<b>1. Monitoring and Evaluation</b>	<i>rating</i>	<b>4. Sustainability</b>	<i>rating</i>
M&E design at entry		Financial resources:	
M&E Plan Implementation		Socio-political:	
Overall quality of M&E		Institutional framework and governance:	
<b>3. Assessment of Outcomes</b>	<i>rating</i>	Environmental :	
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		<b>5. Impact</b>	<i>rating</i>
<b>2. IA&amp; EA Execution</b>	<i>rating</i>	Environmental Status Improvement	
Quality of UNDP Implementation		Environmental Stress Reduction	
Quality of Execution - Executing Agency		Progress towards stress/status change	
Overall quality of Implementation / Execution			

#### Project finance / cofinance

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Private Sector (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants			0		1.726		0		1.726	
Loans/Concessions			11.025		0		78.600		89.625	
In-kind support			1.150						1.150	
Other			9.875				78.600		88.475	
Totals			11.025		1.726		78.600		91.351	

### Mainstreaming

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project successfully mainstreamed other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender equality.

### Impact

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status (through mitigation actions, biodiversity conservation, and ecosystems-based adaptation) b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.<sup>11</sup>

### Conclusions, recommendations & lessons

The evaluation report must include a chapter providing a set of **conclusions, recommendations** and **lessons**.

### Implementation arrangements

The principal responsibility for managing this evaluation resides with the UNDP CO in Barbados. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country

<sup>11</sup> A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: [ROtI Handbook 2009](#)

for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

### Evaluation timeframe

The total duration of the evaluation will be 18 work days over 4 weeks according to the following plan:

Activity	Timing	Completion Date
<b>Preparation</b>	3 days	<i>October 31 – November 2, 2018</i>
<b>Evaluation Mission</b>	5 days	<i>November 5- 9, 2018</i>
<b>Draft Evaluation Report</b>	7 days	<i>November 10-16, 2018</i>
<b>Final Report</b>	3 days	<i>November 28-30</i>

### Evaluation deliverables

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
<b>Inception Report</b>	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
<b>Presentation</b>	Initial Findings	End of evaluation mission	To project management, UNDP CO
<b>Draft Final Report</b>	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
<b>Final Report*</b>	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

**\*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.**

### Team Composition

The evaluation team will be composed of one (1) *international evaluator*. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluators selected will not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Evaluator must present the following qualifications:

Minimum 10 years of relevant professional experience

Knowledge of UNDP and GEF

Previous experience with results-based monitoring and evaluation methodologies;

Technical knowledge in the targeted focal area(s): climate change, energy and related areas.

Prior experience working in the Caribbean is an asset.

**Evaluator Ethics**

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the [UNEG 'Ethical Guidelines for Evaluations'](#)

**Payment modalities and specifications**

% Milestone	
10%	At submission of Inception Report
40%	Following submission and approval of the 1 <sup>ST</sup> draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

**Application process**

Applicants are requested to apply as per instructions in the procurement notice. Individual consultants are invited to submit applications together with their CV for these positions. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact.

Shortlisted candidates will be requested to submit a price offer indicating the total cost of the assignment (including daily fee, per diem and travel costs).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

## Annex 2. Agenda

TIME	ACTIVITY	LOCATION
<b>Monday December 3, 2018</b>		
9:00 AM	<b>Project Management Unit – Leshan Monroe &amp; D’Andre’ Jackson</b>	<b>Energy Unit</b>
10:00 AM	<b>Private Sector, Policy Consultant – Alston Stoddard</b>	<b>Energy Unit</b>
11:00 AM	<b>Local Solar PV installer and SEI recipient -Ricardo Boatswain</b>	<b>Meet at the Energy Unit</b>
1:30 PM	<b>Project Management Unit – Leshan Monroe and D’Andre’ Jackson</b>	<b>Energy Unit</b>
3:00 PM	<b>Local Solar PV installer – Fidel Neverson</b>	<b>Conference call</b>
4:00 PM	<b>PACES Project Director – Mr. Ellsworth Dacon</b>	<b>Energy Unit</b>
<b>Tuesday December 4, 2018</b>		
9:00 AM	<b>Electrical Inspectorate, SEI recipient – Hetlyn Francis</b>	<b>Ministry of Transport and Works</b>
10:00 AM	<b>Site Engineer on the Belle Isle Project – Ricardo Adams</b>	<b>ACES office</b>
11:00 AM	<b>Ministry of Transport &amp; Works, Urban Development – Permanent Secretary Mr. Hudson Nedd</b>	<b>Ministry of Transport &amp; Works, PS Office</b>
1:30 PM	<b>Ministry of National Security, Air and Sea Port Development – Godfred Pompey, Ellsworth Dacon and Lance Peters</b>	<b>Ministry of National Security</b>

<b>Wednesday December 5, 2018</b>		
<b>9:30 AM</b>	<b>Belle Isle Correctional Facility Site Visit –</b> <i>Superintendent Charles</i>	<b>Belle Isle Correctional Facility</b>
<b>Thursday December 6, 2018</b>		
<b>9:00 AM</b>	<b>Megapower – Jo Edghill</b>	<b>Via WhatsApp</b>
<b>3:00 PM</b>	<b>St. Vincent Electricity Services Limited (VINLEC)</b> <i>– Thornley Myers, CEO</i>	<b>CEO’s Office at VINLEC</b>
<b>Friday December 7, 2018</b>		
<b>10:00 AM</b>	<b>Argyle International Airport –</b> <i>Josette Greaves,</i> <i>Electrical Engineer</i>	<b>AIA</b>

### Annex 3. List of documents reviewed

- PIF
- Project Document
- HACT Assessment
- Inception Report
- Letter (s) of Agreement
- CDRs
- FACE Forms
- GEF 5 CC Mitigation Tracking Tool
- Quarterly Narrative Progress Reports
- Financial Audit Reports
- Asset Registry
- Annual Reports (PIRs)
- Site Visit/Field Reports
- Pilot Project Data Reports
- Draft National Energy Policy/Action Plan

- National Electric Mobility Assessment
- Steering Committee Meeting Minutes

#### Annex 4. Co-financing report

### **PROMOTING ACCESS TO CLEAN ENERGY SERVICES IN SAINT VINCENT AND THE GRENADINES (PACES)**

#### **LIST OF CO-FINANCING EXPENSES TO DATE BY THE PROJECT**

Co-financing for the PACES Project has been supported by the following institutions;

1. Barbados Light and Power Holdings - \$78.0 million
2. Energy Unit, Ministry of National Security, Air and Sea Port Development - \$0.725 million
3. VINLEC - \$10.30 million
4. Private Sector Investors - \$0.60 million

<b>Co-Financer</b>	<b>Amount (USD)</b>	<b>General Description of Co-Financed Activities</b>
<b>Barbados Light and Power Holdings</b>	78.0 million	<ul style="list-style-type: none"> <li>• Preparations and implementation of a drilling program (USD 8 million) to site the geothermal wells;</li> <li>• Engineering, financing and development of a 10MW power plant from the geothermal resources of Mount Soufriere with an estimated capital cost of USD 70 million.</li> </ul>
<b>Energy Unit under the Ministry of National Security, Air and Sea Port Development</b>	0.725 million	<ul style="list-style-type: none"> <li>• Component 1 (in-kind); Inventory of RE resources, augmenting NEAP, periodic review of NEP, amendments to ESA (Output 1.1); guidelines to procurement, tendering and licensing (Output 1.2); RE</li> </ul>

		<p>investment facilitation centre (Output 1.5), energy regulatory agency liaison (Output1.4);</p> <ul style="list-style-type: none"> <li>• Component 2 (in-kind); provision of workshop venues</li> <li>• Component 3 (in-kind); Support for RE demo implementation (Output3.4); replication plans for RE projects (Output3.5);</li> <li>• Project Management (in-kind); Office space and various administrative support for the Project.</li> </ul>
<b>VINLEC</b>	10.30 million	<ul style="list-style-type: none"> <li>• Component 1: Rules and procedures for becoming an IPP, local grid assessment (Output 1.2), formulation of grid code (Output 1.3);</li> <li>• Component 2: Provision of workshop venues</li> <li>• Component 3: Specific RE resource assessment (Output 3.1; feasibility studies of RE technologies (Output 3.2); support for RE demo implementation (Output 3.4); replication plans for RE projects (Output 3.5)</li> <li>• Purchase and installation of more than 50kW of solar-PV panels for installation on rooftops of government buildings</li> <li>• Purchase and installation of more than 65kW of solar PV panels for installation</li> </ul>

		<p>on rooftops of the terminal and other airport buildings;</p> <ul style="list-style-type: none"> <li>• Purchase and installation of 1 – 10kW solar charging stations and the procurement of one HEV or EV.</li> <li>• Procurement and installation of more than USD 1.0 million of equipment required to stabilize the national grid when taking in variable renewable energy inputs and its capacity to efficiently deliver electricity to end-users.</li> </ul>
<b>Private Sector</b>	0.60 million	<ul style="list-style-type: none"> <li>• For rooftop solar-PV installations on private property anticipated to be 150 kW by EOP</li> <li>• Private property owners will be identified during the course of Project.</li> </ul>
<b>TOTAL</b>	<b>89.625 million</b>	

Promoting Access to Clean Energy Services in Saint Vincent and the Grenadines has conducted several activities over the duration of its three (3) year implementation. These activities have all incurred several expenses, some of which have been offered in kind by the Government of Saint Vincent and the Grenadines (GoSVG). Alongside the number of activity expenses, the Government has also offered support toward operational expenses for the PACES Project.

The table below includes a comprehensive list of all in-kind contributions rendered by the Government of Saint Vincent and the Grenadines to the PACES Project. No cost has been budgeted for these expenses but has been seen as in-kind contribution and would have had a financial expenditure had the item bin sources outside of Government.

**VENUE**

The PACES Project has conducted several activities that would have all needed a location. Below is a list of activities that were held in a Government facility;

- ✓ Electric Vehicle Policy verification meeting – May 30, 2018, Foreign Affairs Conference Room
- ✓ Readiness Assessment workshop – January 18-19, 2017, Foreign Affairs Conference Room
- ✓ Lower Level teacher RE workshop – January 16- 17, 2017, Foreign Affairs Conference Room
- ✓ All PSC meetings – Petro Caribe Conference Room, Telecom Conference Room, VINLEC Conference Room,
- ✓ Electric Vehicle and Charging Station Launch – Administrative Complex yard – April 13, 2016
- ✓ Community Consultations – July 25- 27, 2016, North Union, Chateaubelair, Sandy Bay and Biabou Learning Resource Centres.
- ✓ Electric Mobility Conference – May 30 – June 3, 2016, Heritage Square.
- ✓ Roving Exhibition – Heritage Square
- ✓ Solar PV maintenance and operations training held at the Argyle International Airport Conference Room.

### **TRANSPORTATION**

Transportation remains to be a challenge for the project. Despite this, there have been few instances of assistance offered by the Government upon availability of vehicles and a driver.

- ✓ Office attendant to take out mail
- ✓ Transport students to the VINLEC hydro and solar plants at Cumberland and Lowmans Leeward.
- ✓ The Ministry of Transport and Works has assisted as well with transportation for the following;
  - Solar PV training participants to visit the Cane Hall and Lowmans Leeward solar pv plants
  - St. Vincent and the Grenadines Community College (SVGCC) trip to the PACES solar pv installation at the Argyle International Airport.
  - Transportation to the Belle Isle Correctional Facility for the bio-gas digester training.
- ✓ Telecom assisted in the provision of transportation when the PACES Project was filming the thirty-minute documentary and several other activities.

### **OTHER CO-FINANCING**

Co-financing was also offered in the form of support by VINLEC through technical assistance and support by sending two employees to the CARILEC solar pv training that was paid by them.

### **CUSTOMS DUTIES**

For several of the installations and purchases incurred by the project for items such as; the installation of the 50kW Solar PV system, purchase of an electric vehicle and installation of a charging station, installation of the 155kW at the Argyle International Airport, the bio- gas equipment and the panel and other equipment for the charging station at the Argyle International Airport there were several duties waived. These were inclusive of the custom service charge, import taxes and storage costs that are enforced by the Government of Saint Vincent and the Grenadines.

The support offered by the Government has been tremendous as they have always ensured that the custom waiving process has been expedited accordingly.

### **ADMINISTRATIVE / OPERATIONAL EXPENSES**

The Government has co-financed and provided office space for the Project Team. This is inclusive of the provision of print material, Wi-Fi and all office equipment. The space that is currently made available to the two-member team is shared with the Energy Unit Officers of the Energy Unit and the fixed cost of an estimated \$3,500 XCD is paid monthly by the Government of Saint Vincent and the Grenadines. If we were to project an overall cost for rental of office space over the lifetime of the project we would have incurred about \$126,000 XCD.

### **AVAILABILITY OF PROJECT DIRECTOR**

The Project Director who is assigned to the PACES Project is a post that is not payable. As such, it can be noted that if there were to be an associate of cost for a salary to be paid to the Director then it can be envisioned at a total of about over \$10,000 XCD monthly. This will then lead to a cost of about over \$360,000 XCD.

All in all, the Government has offered a great deal of assistance to the project and because of their interventions and support the Project has been able to implement a number of cost required activities successfully.



## Annex 5. Evaluation Matrix

Evaluative Criteria Questions	Indicators	Sources	Methodology
<b>Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?</b>			
<ul style="list-style-type: none"> <li>Does the project relate to the GEF Climate Change focal area and has it been designed to deliver global environmental benefits in line with relevant international climate change objectives?</li> </ul>	<ul style="list-style-type: none"> <li>The project includes the relevant GEF outcomes, outputs and indicators</li> <li>The project makes explicit links with global climate action goals (e.g. SE4ALL)</li> </ul>	<ul style="list-style-type: none"> <li>Project Document</li> <li>GEF 5 Focal Area Strategies</li> <li>PIF</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>Is the project aligned to National development objectives, broadly, and to national energy transition priorities specifically?</li> </ul>	<ul style="list-style-type: none"> <li>The project design includes explicit links (indicators, outputs, outcomes) that are linked to the national development policy/national energy policy.</li> </ul>	<ul style="list-style-type: none"> <li>Project Document</li> <li>National development strategy, energy policy, etc.</li> <li>PIF</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>Is the project relevant to stated regional development objectives as defined by CARICOM, OECS and other regional frameworks?</li> </ul>	<ul style="list-style-type: none"> <li>Explicit links are made within the project to regional development policies, action plans and associated initiatives such as the CARICOM Energy Policy.</li> </ul>	<ul style="list-style-type: none"> <li>Project Document</li> <li>National Development Strategy, NES, NEAP, etc.</li> <li>PIF</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>Is the project's Theory of Change relevant to addressing the development challenge(s) identified?</li> </ul>	<ul style="list-style-type: none"> <li>The Theory of Change clearly indicates how project interventions and projected results will contribute</li> </ul>	<ul style="list-style-type: none"> <li>Project Document</li> <li>PIF</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>

	to the reduction of the three major barriers to low carbon development.		
<ul style="list-style-type: none"> <li>• Is the project's results framework relevant to the development challenges and are results at the appropriate level?</li> </ul>	<ul style="list-style-type: none"> <li>• The project results framework adequately measures impact</li> <li>• The project indicators are SMART</li> <li>• The results framework is comprehensive and demonstrates systematic links to the theory of change</li> </ul>	<ul style="list-style-type: none"> <li>• Project Document</li> <li>• PIF</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>• Is the project appropriately aligned with relevant UN system priorities, including thematic objectives at the national/regional and international levels?</li> </ul>	<ul style="list-style-type: none"> <li>• The project's results framework includes relevant thematic outcomes and indicators from the UNDP Strategic Plan, the UNDAF, UNDP CPD and other relevant corporate objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Project Document</li> <li>• UNDP CPD, UNDAF, SP</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>• Have the relevant stakeholders been adequately identified and have their views, needs and rights been considered during design and implementation?</li> </ul>	<ul style="list-style-type: none"> <li>• The stakeholder mapping and associated engagement plan includes all relevant stakeholders and appropriate modalities for engagement.</li> <li>• Planning and implementation have been participatory and inclusive</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder mapping/engagement plan report</li> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> <li>• Stakeholder Consultation Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Stakeholder Interviews</li> </ul>
<ul style="list-style-type: none"> <li>• Have the interventions of the project been adequately considered in the context of other development activities being undertaken in the same or related thematic area?</li> </ul>	<ul style="list-style-type: none"> <li>• A Partnership framework has been developed that incorporates parallel initiatives, key partners and identifies complementarities</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	

<ul style="list-style-type: none"> <li>• Have relevant lessons learned from previous projects informed the design, implementation, risk management and monitoring of the project?</li> </ul>	<ul style="list-style-type: none"> <li>• Lessons learned are explicitly identified and integrated into all aspects of the Project Document</li> </ul>	<ul style="list-style-type: none"> <li>• Project Document</li> <li>• PIF</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?</b>			
<ul style="list-style-type: none"> <li>• Has the project achieved its output and outcome level objectives?</li> </ul>	<ul style="list-style-type: none"> <li>• The project has met or exceeded the output and outcome indicator end-of-project targets</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> <li>• Monitoring Reports</li> <li>• Beneficiary testimony</li> <li>• Site visit/field reports</li> <li>• Pilot Data Analysis/Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> <li>• Site visits</li> </ul>
<ul style="list-style-type: none"> <li>• Were lessons learned captured and integrated into project planning and decision-making?</li> </ul>	<ul style="list-style-type: none"> <li>• Lessons learned have been captured periodically and/or at project end</li> </ul>	<ul style="list-style-type: none"> <li>• Steering Committee Meeting Minutes</li> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> </ul>
<ul style="list-style-type: none"> <li>• How well were risks, assumptions and impact drivers being managed?</li> </ul>	<ul style="list-style-type: none"> <li>• A clearly defined risk identification, categorization and mitigation strategy (updated risk log in ATLAS)</li> </ul>	<ul style="list-style-type: none"> <li>• ATLAS Risk Log</li> <li>• M&amp;E Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> </ul>

<ul style="list-style-type: none"> <li>• Were relevant counterparts from government and civil society involved in project implementation, including as part of the project steering committee?</li> </ul>	<ul style="list-style-type: none"> <li>• The steering committee participation included representatives from key institutions, including VINLEC, Energy Unit, Transport, Physical Planning, Private Sector (sustainable finance)</li> </ul>	<ul style="list-style-type: none"> <li>• Steering Committee Meeting Minutes</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Has the project contributed directly to any changes in legislation or policy in line with the project's objectives?</li> </ul>	<ul style="list-style-type: none"> <li>• Draft legislation has been developed or enacted to catalyse the reduction of barriers to the increased penetration of renewable energy/energy efficient technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Draft legislation</li> <li>• Policy Documents</li> <li>• Action/Implementation Plans</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Is there evidence that the project outcomes have contributed to better preparations to cope with natural disasters.</li> </ul>	<ul style="list-style-type: none"> <li>• The project has directly contributed to reductions in one or more vulnerabilities associated with natural disasters</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> <li>• Stakeholder/beneficiary testimony</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> </ul>
<ul style="list-style-type: none"> <li>• Has the project carefully considered the thematic issues related to human rights? In particular, has the project sought to and actively pursued equality of access to clean energy services and opportunities for women and men (i.e. project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• A gender mainstreaming plan has been completed</li> <li>• The project results framework has incorporated gender equality considerations, as relevant.</li> <li>• Multi-dimensional poverty reduction is an explicit objective</li> <li>• The project prioritized the most vulnerable as key beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>• Gender Mainstreaming Plan</li> <li>• Project Document</li> <li>• Stakeholder analysis and engagement plan</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> </ul>

• Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?

<ul style="list-style-type: none"> <li>• Did the project adjust dynamically to reflect changing national priorities/external evaluations during implementation to ensure it remained relevant?</li> </ul>	<ul style="list-style-type: none"> <li>• The project demonstrated adaptive management and changes were integrated into project planning and implementation through adjustments to annual work plans, budgets and activities</li> <li>• Changes to AWP/Budget were made based on mid-term or other external evaluation</li> <li>• Any changes to the project’s planned activities were approved by the Steering Committee</li> <li>• Any substantive changes (outcome-level changes) approved by the Steering Committee and donor, as required</li> </ul>	<ul style="list-style-type: none"> <li>• Annual Work Plans</li> <li>• Steering Committee Meeting Reports</li> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> <li>• Stakeholder/beneficiary testimony</li> <li>• Revised Project Results Framework</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> </ul>
<ul style="list-style-type: none"> <li>• To what extent were the Project results delivered with the greatest value for money?</li> </ul>	<ul style="list-style-type: none"> <li>• Value for money analyses, requests for information, market surveys and other market intelligence undertaken for key procurements.</li> <li>• Procurement is done on a competitive basis, where relevant.</li> </ul>	<ul style="list-style-type: none"> <li>• VFM, RFI, Market Surveys</li> <li>• Procurement Evaluation Documents</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff and government stakeholders</li> </ul>
<ul style="list-style-type: none"> <li>• Was co-financing adequately estimated during project design (sources, type, value, relevance), tracked during implementation and what were the reasons for any differences between expected and realised co-financing?</li> </ul>	<ul style="list-style-type: none"> <li>• Co-financing was realized in keeping with original estimates</li> <li>• Co-financing was tracked continuously throughout the project lifecycle and deviations identified and alternative sources identified</li> </ul>	<ul style="list-style-type: none"> <li>• Annual Work Plans</li> <li>• Steering Committee Meeting Reports</li> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, stakeholders and beneficiaries</li> </ul>

	<ul style="list-style-type: none"> <li>• Co-financiers were actively engaged throughout project implementation</li> </ul>		
<ul style="list-style-type: none"> <li>• Was the level of implementation support provided by UNDP adequate and in keeping with the implementation modality and any related agreements (i.e. LOA)?</li> </ul>	<ul style="list-style-type: none"> <li>• Technical support to the Executing Agency and project team were timely and of acceptable quality.</li> <li>• Management inputs and processes, including budgeting and procurement, were adequate</li> </ul>	<ul style="list-style-type: none"> <li>• LOA (s)/Cooperation Agreement(s)</li> <li>• UNDP project support documents (emails, procurement/recruitment documents)</li> <li>• Quarterly Reports</li> <li>• Annual Reports (PIR)</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff, UNDP personnel</li> </ul>
<ul style="list-style-type: none"> <li>• Have the capacities of the executing institution(s) and counterparts been properly considered when the project was designed?</li> </ul>	<ul style="list-style-type: none"> <li>• An ex-ante analysis was undertaken of the internal control framework and internal capacities of the IP</li> <li>• An ex-ante analysis was undertaken of key partners with explicit responsibilities for implementation of project funds</li> <li>• The cash transfer modality and implementation modality appropriately reflected the findings of any ex-ante analyses</li> </ul>	<ul style="list-style-type: none"> <li>• HACT Assessment(s)</li> <li>• Capacity Assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>• Has the M&amp;E plan been well-formulated, and has it served as an effective tool to support project implementation.</li> </ul>	<ul style="list-style-type: none"> <li>• The M&amp;E plan has an adequate budget and was adequately funded</li> </ul>	<ul style="list-style-type: none"> <li>• Project Document</li> <li>• M&amp;E Plan</li> <li>• AWP</li> <li>• FACE forms</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff and government stakeholders</li> </ul>

	<ul style="list-style-type: none"> <li>• The monitoring indicators from the project document were adequate for measuring progress and performance</li> <li>• The logical framework was used during implementation as a management and M&amp;E tool</li> <li>• Compliance with the financial and narrative reporting requirements (timeliness and quality)</li> <li>• Monitoring and reporting has been at both the activity and results levels</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly Narrative Reports</li> <li>• Site visit reports</li> </ul>	
<ul style="list-style-type: none"> <li>• Has the project adequately used relevant national systems (procurement, recruitment, payments) for project implementation where possible?</li> </ul>	<ul style="list-style-type: none"> <li>• Use of national systems was in keeping with relevant national requirements and internal control frameworks</li> <li>• Management of financial resources has been in line with accounting best practice</li> <li>• Management of project assets has been in line with accounting best practice</li> </ul>	<ul style="list-style-type: none"> <li>• National Financial Management Regulations</li> <li>• Procurement/Recruitment reports</li> <li>• FACE forms</li> <li>• CDRs</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> <li>• Interviews with project staff and government stakeholders</li> </ul>
<ul style="list-style-type: none"> <li>• Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?</li> </ul>			
<ul style="list-style-type: none"> <li>• Are there financial risks that may jeopardize the sustainability of project outcomes?</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• The exit strategy includes explicit interventions to ensure financial sustainability of relevant activities</li> </ul>	<ul style="list-style-type: none"> <li>• Project Exit Strategy</li> <li>• Risk Log</li> </ul>	<ul style="list-style-type: none"> <li>• Desk Review of Documents</li> </ul>

<ul style="list-style-type: none"> <li>Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits?</li> </ul>	<ul style="list-style-type: none"> <li>The exit strategy identifies relevant socio-political risks and includes explicit interventions to mitigate same</li> </ul>	<ul style="list-style-type: none"> <li>Project Exit Strategy</li> <li>Risk Log</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>Have key stakeholders identified their interest in project benefits beyond project-end and accepted responsibility for ensuring that project benefits continue to flow?</li> </ul>	<ul style="list-style-type: none"> <li>Key stakeholders are assigned specific, agreed roles and responsibilities outlined in the exit strategy</li> <li>MOU(s) exist for on-going monitoring, maintenance and oversight of phased down or phased over activities</li> </ul>	<ul style="list-style-type: none"> <li>Project Exit Strategy</li> <li>Risk Log</li> <li>MOU(s)</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<ul style="list-style-type: none"> <li>Are there ongoing activities that may pose an environmental threat to the sustainability of project outcomes?</li> </ul>	<ul style="list-style-type: none"> <li>The exit strategy identifies relevant environmental risks and includes explicit interventions to mitigate same</li> </ul>	<ul style="list-style-type: none"> <li>Project Exit Strategy</li> <li>Risk Log</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> </ul>
<b>Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?</b>			
<ul style="list-style-type: none"> <li>Are there verifiable improvements in ecological status, or reductions in ecological stress, that can be linked directly to project interventions?</li> </ul>	<ul style="list-style-type: none"> <li>The project has contributed directly to improved ecological conditions, including through reduced GHG emissions for energy generation and transportation</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly Reports</li> <li>Annual Reports (PIR)</li> <li>Monitoring Reports</li> <li>Pilot Data Analysis/Reports</li> </ul>	<ul style="list-style-type: none"> <li>Desk Review of Documents</li> <li>Site visits</li> </ul>