REPORT

FOR THE TERMINAL EVALUATION (TE) OF THE PROJECT

THE TEN ISLAND CHALLENGE: DE-RISKING THE TRANSITION OF THE CARIBBEAN FROM FOSSIL FUELS TO RENEWABLES

ATLAS AWARD ID: 00089334

PROJECT ID: 00095631

PIMS #: 5526

INTERNATIONAL EVALUATOR:

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OCTOBER 4 2019

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I. OPENING PAGE

Title of UNDP supported GEF financed project:

The Ten Island Challenge: De-Risking the Transition of The Caribbean From Fossil Fuels to Renewables

UNDP and GEF project ID#s.:

GEF Project ID: 9112

UNDP Project ID: PIMS 5526 / 00095631

Evaluation time frame and date of evaluation report:
July – September 2019 (timeframe) / September 2019 (date of report)

Region included in the project: Latin America and the Caribbean (Focalizing in Bahamas; Belize; Grenada; Saint Lucia; and Saint Vincent and the Grenadines)

GEF Focal Area: Climate Change

Implementing Partner: Rocky Mountain Institute/Carbon War Room

Evaluator: Maria Onestini

ACKNOWLEDGEMENTS

The evaluator would like to acknowledge and thank all who cordially shared their time, information, and inputs for the interviews and consultations that took place as part of the evaluation process.

DISCLAIMER

This document represents the analysis of the author and does not necessarily reflect the views and opinions of the Project, governments or institutions involved in the Project, the United Nations Development Programme, GEF, nor any other person or UN Agency.

II. EXECUTIVE SUMMARY

PROJECT SUMMARY TABLE

Project Title:	Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables			
GEF Project ID:	9112		*at endorsement (Million US$)*	*at completion (Million US$)*[1]
UNDP Project ID:	00095631	GEF financing:	1,826,484	1,826,484
Country:	Regional with a focus on Bahamas, Belize, Grenada, Saint Lucia, and Saint Vincent and the Grenadines	IA/EA own:	4,550,000	4,550,000
Region:	RBLAC	Government:		
Focal Area:	Climate Change	Other:	300,000,000	300,000,000
FA Objectives, (OP/SP):	SP 1. Promoting access to clean and affordable energy services SP 2. Promoting low emission and climate resilient urban and transport infrastructure (CCM Program 3)	Total co-financing:	304,550,000	304,550,000
Executing Agency:	UNDP	Total Project Cost:	306,376,484	306,376,484
Other Partners involved:	Rocky Mountain Institute/Carbon War Room	ProDoc Signature (date project began):		15 March 2016
		(Operational) Closing Date:	Proposed: 31 December 2018	Actual: 30 June 2019[2]

[1] Sources: PIR 2019.
[2] Sources: PIR 2019; Terms of Reference.

SUMMARY PROJECT DESCRIPTION

The *Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables* had a planned implementation period of three years with an end date of 31 December 2018[3]. Actual finalization was on 30 June 2019. It had a planned project cost of USD 306,376,484. Planned GEF financing was t 1,826,484 USD and UNDP proposed co-financing was USD 200,000. The rest of the funding was provided by the following sources: Overseas Private Investment Corporation (OPIC) 300,000,000; Carbon War Room (CWR) USD 3,000,000; Rocky Mountain Institute (RMI) 1,350,000.

Given that most Caribbean islands and several non-island Caribbean countries need to import most of the oil used for electricity generation, these countries are exposed to the volatility of international markets as well as incur in great fuel costs to cover the countries' electricity needs. While several renewable sources are amply available, the region does not tap into these resources to great degree. The project's specific objective was to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and towards energy efficiency as well as to establish a blueprint in this matter for other Small Island Developing States (SIDS). It was expected that this would be achieved through a series of outputs, as indicated below.

Outcome 1. Policy De-risking Measures:	Island-wide de-risked enabling environment for low GHG development through the demonstration of innovative policy tools
Outcome 2. Institutional and Technical Capacity:	Strengthened island capacity for integrated low GHG technical and institutional stakeholder planning and coordination
Outcome 3. Investment Projects and Financial Mechanisms:	Catalysed island funding for low GHG technology deployment.

The project evaluated (i.e. TIC) forms part of a wider initiative – the Island's Energy Programme – which is funded by various other non-GEF sources and implemented by RMI/CWR and other partners across the Caribbean. It is also associated at several levels with other similar projects.

The GEF grant was planned to cover a series of specific interventions in the Bahamas, Belize, Grenada, Saint Lucia, and Saint Vincent and the Grenadines. The issues that the Project sought to specifically address are a variety of matters related to energy in the Caribbean. The most salient one being global environmental benefits (i.e. greenhouse gas emissions avoided) while reducing Caribbean countries' dependency on oil. GEF-supported aspects of the initiative had the United Nations Development Programme (UNDP) as its Executing Agency and the Carbon War Room/Rocky Mountain Institute as Implementing Entity/Responsible Partners.

[3] Source: Project Document. Information of start date and therefore planned ending date vary between several documents. The information indicated here is indicated in the ProDoc.

Overall, it was expected that the Project would aid in accelerating the transition of Caribbean nations' economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency and establish a blueprint for other small island developing states. This was expected to be achieved though the implementation of policy tools for low GHG development, enhancing institutional and technical capacity as well through the implementation of low GHG technologies.

EVALUATION RATING TABLE

Evaluation Ratings: [4]			
1. Monitoring and Evaluation	Rating	2. IA & EA Execution	Rating
M&E design at entry	MU	Quality of UNDP Implementation - Implementing Agency	S
M&E Plan Implementation	MS	Quality of Execution - Executing Agency	S
Overall quality of M&E	MU	Overall quality of Implementation / Execution	S
3. Assessment of Outcomes	Rating	4. Sustainability	Rating
Relevance	R	Financial resources	ML
Effectiveness	MS	Socio-political	ML
Efficiency	S	Institutional framework and governance	ML
Overall Project Outcome Rating	MS	Environmental	ML
		Overall likelihood of sustainability	ML

Ratings for relevance, performance criteria and sustainability are found in annexes (Annex 4: Ratings (relevance, performance criteria, sustainability and impact) and below.

Note: Accounts of these ratings are imbedded in this report's narrative in each of the pertaining sections.

[4] *Relevance Ratings:* R Relevant / NR Not relevant.

Performance criteria ratings:

Highly satisfactory (HS) No shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Satisfactory (S) Minor shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Moderately Satisfactory (MS) Moderate shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Moderately Unsatisfactory (MU) Significant shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Unsatisfactory (U) Major shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Highly Unsatisfactory (HU) Severe shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

Sustainability ratings:

Likely (L) Negligible risks to sustainability, with key outcomes expected to continue into the foreseeable future

Moderately Likely (ML) Moderate risks, but expectations that at least some outcomes will be sustained

Moderately Unlikely (MU) Substantial risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on

Unlikely (U) Severe risk that project outcomes as well as key outputs will not be sustained

Highly Unlikely (HU) Expectation that few if any outputs or activities will continue after project closure

SUMMARY OF CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

Summary Conclusions

Sustainable energy (in the context of this initiative), primarily means economically viable renewable energy and energy efficiency ventures that displace fossil fuel-based electricity. It is within this definition that Project *the Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables* operated in the Caribbean in the last several years. The project addressed several barriers (regulatory, institutional/technical, and market barriers) faced by countries in the region for transitioning to renewable energy.

The project has had various degrees of success in achieving each of these outcomes. Overall, it had better performance in renewable energy issues than in energy efficiency matters. For Outcome 1, plans and policy tools have been drawn, yet the actual implementation of these is still has not occurred in all cases at the time of the evaluation, perhaps due to the fact that they were just achieved at the end of the implementation process. It is understandable that a Project (in particular a project implemented through a non-governmental organization based outside of project execution region) does not implement policy, yet this draws attention to the need of working closely and jointly with those partners that do or would implement such tools, developing mechanisms for this sort of implementation. This is particularly the case when a project is not implemented by a local/national state actor and the leverage for implementation is ultimately not there (as was the case with this intervention). The Project played a pivotal role in brokering dialogue between parties that can be considered divergent in their outlook on renewable energy.

Outcome 2 mainly entailed the creation of a platform or community of practice with the aim of creating or fostering individual and institutional capacity. The process for seeking this result were learning events and webinars. This has been a very positive initiative for piloting such an effort in the region. Although uptake, effect and actual use of this technical capacity development has not been captured to date, there are ample opportunities for the regional partners in the Caribbean to upscale, refine, augment and replicate this sort of platform in the near future in order to generate and transfer capacity with regional, national and local actors.

Outcome 3, lastly, is one of more visible outcomes associated to the TIC Project and the one that links to measurable impact in terms of global environmental benefits (reduction in emissions) as well as in terms of electricity cost reductions. It also has a high catalytic potential due to these results. Through the aid in mobilization of funds and through work in technical backstopping, the intervention supported the setting up solar energy projects. This collaboration with national-level partners (utilities, governments) has brought about the clearest impacts, not only in terms of global environmental benefits but also in developmental benefits in those nations where renewable energy projects have been built. Conclusions can be drawn as to the degree of success in some countries and not in others in relation to the actual establishment of renewable energy installations. The degree of maturity of the renewable energy discussion and buy-in at the national level between the different parties, as well as agreement regarding the need to move away from fossil fuels is one of the factors that has aided implementation. The

cost-benefit of the shift to renewable energy versus more traditional fossil fuel sources is also a factor that has either hindered or aided results as the case may be. Lastly, if there is inherent conflict in the electricity field between different stakeholders is indicative that there will be little or no results. Therefore, it is a question to analyse as to the existing situations regarding how ready a nation is to transition to renewable as a factor of a project success.

Project design showed a series of failings that manifested themselves in implementation and in monitoring/reporting. To begin with, design was not as robust as necessary at the inception phase. First, the convoluted design where many areas and countries that are outside of the GEF-funded UNDP-implemented project are included as an integral part of the initiative was very unclear and contributed to a series of misconceptions and misunderstanding, even with several of the national-level partners. Second, the lack of robustness in design also manifested in the overambitious and unclear outcome indicators. Furthermore, there was no profound analysis of the multi-layered issues that go together with transitions to renewable energy in the Project's target countries. For instance, there was no robust analysis – of risks, assumptions, national alignment with renewable energy options – as well as broader development issues. Implementation through a non-governmental organization not based in the target region has proved in this case to have several positive aspects, in particular for what can be considered pilot interventions in the field. Although this implementation modality cannot be extrapolated to all sorts of projects and interventions. There have been some positive aspects to implementing in this manner, for instance, efficiency in delivery, a programmatic approach to implementation, ability to broker processes with a series of diverse stakeholders, and the capacity to leverage funding have been constructive assets of this implementation modality with CWR/RMI.

On the other hand, however, there were several issues with this sort of implementation modality. Several of the matters are related to questions such as alignment with national policies and outlooks, understanding of some country's developmental and energy issues, fomenting appropriation and sustainability so that national and regional partners can uptake achievements and carry on, as well as communication and visibility of other stakeholders besides the implementing partner. Several of the implementing issues can also be linked to design. At design it was not overly specified how this modality would work, how this unique arrangement will report, what is the implementing agency's leverage, and even the specifics of decision-making process were not clearly elaborated.

The Project concludes with several key achievements, that are translated into effects and positive impacts. As a pilot it leaves not only products and processes, but also a series of lessons to be learned. Furthermore, the accomplishments have a very high replication and upscaling value and can prove to be catalytic, not only in the Caribbean region but in many developing countries contexts.

Summary Lessons Learned

There are a series of learned lessons that can be assimilated in the future for enhanced project planning and implementation. These lessons are listed below, and they are linked to proactive recommendations in the next section of this report.

- Design robustness, or lack of, has an indelible impact on implementation and monitoring.
- If indicators are not robust, applicable and achievable, then implementation and monitoring could be negatively affected.
- Throughout implementation, opportunities for adjustments are essential (adjustments to indicators for adaptive management, etc.) in order to properly reflect changes in exogenous conditions or to adjust for over ambitiousness.
- When innovative implementing modalities are applied, these should be accompanied by proper architecture and guidelines on how this implementation would take place from design onward, how reporting is to take place (to whom, when, etc.) and how the decision-making process and assurance are carried out.
- Gender equality promotion does not occur unless a specific gender approach that addresses fully the different needs of men or women is developed early on in design and in the implementation process.
- The usefulness of an exit and sustainability strategy is related not only to content but also to when it is drawn and carried out. In order for an exit strategy to be appropriated by the relevant parties which will implement all or some of the strategy's options, an exit/sustainability strategy needs to be drawn and carried out at a proper time and not at the very end of a project.

Summary Recommendations

- Design, especially of complex interventions, should contain in-depth knowledge of the areas and countries where interventions will take place, not only of the subject per se of the project being implemented, but also of the development context, political framework as well as assumptions and risks of the intervention.
- In order to enhance stakeholder engagement in implementation, and therefore impel improved results with a strong ownership potential, there should be a careful stakeholder analysis at design.
- Outcome indicators should be robust, yet they should also be applicable and achievable within the context of implementation as well as realistic in terms of a project's resources and implementation time.
- There should be opportunities for the adjustment and reformulation of indicators and metrics package throughout the implementation process as a means for adaptive management.
- When these opportunities are not presented compellingly, UNDP should assert the need for this to take place in order to improve implementation.

- Projects such as this one, with inherent complexities, pilot projects and interventions testing innovative implementation modalities should have a mid-term review, not only to give transparency to the achievements up to the midpoint assessment, but also to act as a catalysing factor to adjust whatever needs to be adjusted at that point.
- Projects that instrument innovative sorts of implementation modalities should have very clear guidelines from the onset on all matters related to implementation.
- Particularly when implemented by entities outside a region or outside a country, staffing should include national project coordinators, in order to support the implementation as a whole, attend to national implementation, and to anchor the project at the national level.
- When training activities are designed, uptake and use (that is, monitoring of the application of knowledge acquired) as well as actual capacity built should be measured in order to understand the effects of these activities and to promote improvements and upscaling in the future.
- Multi-country projects should have mechanisms for horizontal exchanges between the countries involved.
- Risks within a project should not be underestimated, and a risk management framework should be drawn at design and reviewed continuously. Once properly established, risks should be continuously monitored in order to promote whatever mitigation measures or adaptive management needs to be implemented.
- Development projects such as this should have as its primary prospect to generate durable capacity at the national/regional levels.
- In order for projects to promote a gender equality approach, a strategy (that is an action plan based on gender analysis) should be set that addresses fully the different needs of men and women.
- Exit and sustainability plans should be drawn earlier than at project finalization.
- Projects should have a clear communication strategy.

III. ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
APR	Annual Progress Report
AWP	Annual Work Plan
BAU	Business-as-usual
BMUB	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany
BPoA	Barbados Programme of Action
BTOR	Back to Office Report
CARICOM	Caribbean Community Secretariat
CARILEC	Caribbean Electric Utility Services Corporation
CCCCC	Caribbean Community Climate Change Centre
CCM	climate change mitigation
CIPORE	Caribbean Information Platform on Renewable Energy
CDB	Caribbean Development Bank
CEIS	Caribbean Energy Information System
CO_2	carbon dioxide
CoP	Community of Practice
COP	(UNFCCC) Conference of the Parties
CPAP	Country Programme Action Plan
CREF	Caribbean Renewable Energy Forum
DOE	(US) Department of Energy
DPC	Direct Project Cost
ECERA	Eastern Caribbean Energy Regulatory Authority
ECPA	Energy Climate Partnership of the Americas
EE	energy efficiency
EIA	Environmental Impact Assessment
EOP	End of Project
ERBM	Enhanced Results-Based Management
ERC	UNDP Evaluation Resource Center
ESCO	energy service company or energy savings company
EU	European Union
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gases
GMS	General Management Support
GoB	Government of Barbados
GWh	Gigawatt-hour
HACT	Harmonized Approach to Cash Transfer
IDB	Inter-American Development Bank
IEA	International Energy Agency
IFIs	International Financial Institutions
IRENA	International Renewable Energy Agency

Acronym	Meaning
KM	knowledge management
kWh	Kilowatt-hour
LAC	Latin America and the Caribbean
LDCF	Least Developed Country Fund
M&E	Monitoring and Evaluation
MSI	Mauritius Strategy for the further Implementation of the BPoA
MWh	Megawatt-hour
NAMA	Nationally Appropriate Mitigation Actions
NGOs	Non-governmental organizations
O&M	Operation and maintenance
OAS	Organization of American States
OECS	Organization of Eastern Caribbean States
OFP	Operational Focal Point
OPIC	Overseas Private Investment Corporation
PAC	Project Appraisal Committee
PB	Project Board
PIF	Project Identification Form
PIR	Project Implementation Report
PMC	Project management costs
PMU	Project Management Unit
PPA	Power purchase agreement
ProDoc	UNDP Project Document
PV	Photovoltaic
QPR	Quarterly Progress Report
RCMs	Resource Conservations Measures
RCU	Regional Coordinating Unit
RE	Renewable energy
RET	Renewable energy technology
RFP	Request for Proposals
RMI	Rocky Mountain Institute
S.A.M.O. A	SIDS Accelerated Modalities of Action
SBAA	Standard Basic Assistance Agreement
SCCF	Special Climate Change Fund
SE4ALL	Sustainable Energy for All Initiative
SIDS	Small island developing states
SIDS-DOCK	SIDS sustainable energy initiative – Island Energy for Island Life
SRO	UNDP's Sub Regional Office for Barbados and the OECS
TIC	Ten Island Challenge
TOR	Terms of Reference
UNCSD	United Nations Conference on Sustainable Development
UNDP	United Nations Development Programme
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme

Acronym	Meaning
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
CWR	Carbon War Room
RMI	Rocky Mountain Institute

1. INTRODUCTION

PURPOSE OF THE EVALUATION

The varied purposes of evaluation exercises include monitoring results as well as assessing effects/impacts and promoting accountability. This evaluation centres, therefore, upon valuating the outcomes, outputs, products, and processes achieved by the *"The Ten Island Challenge: De-Risking the Transition of The Caribbean From Fossil Fuels to Renewables"*[5] Project. The specific objectives of the evaluation were to determine if and how project results were achieved, and to draw useful lessons that can both improve the sustainability of benefits from this project as well as to aid in the overall enhancement of UNDP programming. Lastly, this exercise follows general objectives of these sorts of evaluations which have as an overall purpose to assemble lessons learned and best practices to aid projects' processes in the future.

SCOPE AND METHODOLOGY

This final evaluation has primarily focused on assessing the effectiveness, efficiency, sustainability, and relevance of the project considering the accomplished outcomes, objectives, and effects. It includes the following scope:

- Assess progress towards achieving project objectives and outcomes as specified in the Project Document.
- Assess signs of project success or failure.
- Review the project's strategy considering its sustainability risks.

The evaluation has focused upon the outcomes, outputs, products and processes achieved or with a perspective of being achieved. The specific objectives of the evaluation were to determine if and how project results were achieved, and to draw useful lessons that can both improve the sustainability of benefits from this project as well as aid in the overall enhancement of UNDP/GEF future programming. The varied purposes of evaluation exercises include monitoring results as well as effects/impacts and promote accountability. Lastly, this assessment follows general objectives of these sorts of evaluations which have as a purpose assembling lessons learned and best practices to aid projects' processes in the future.

The approach for the evaluation of the *"The Ten Island Challenge: De-Risking The Transition Of The Caribbean From Fossil Fuels To Renewables"* has been determined mainly by the Terms of Reference (ToR) (see Annex 1: Terms of Reference) for this assignment and it follows methods and approach as stated in UNDP guidelines and manuals, relevant tools, and other relevant UNDP guidance materials, including the *UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects* and *UNDP's Handbook on Planning, Monitoring and Evaluating for Development Results*. The analysis entails evaluating distinct stages and aspects of the project including design and formulation, implementation, results, and the involvement of stakeholders in the project's processes and activities. It has been carried out

[5] Also known as the TIC project.

following a participatory and consultative approach ensuring close engagement with governments' counterparts, in particular with the UNDP Barbados and the OECS, project team, and other key stakeholders.

The time scope of the final evaluation is for the whole project as such, including its planned implementation period together with the extension period granted. It is noteworthy that the findings, rankings, lessons learned, and best practices respond to analysis of the project as a whole. That is, the scope of this evaluation is the whole project.

To carry out this evaluation exercise several data collection tools for analysing information from the principles of results-based evaluation (including relevance, ownership, efficiency and effectiveness, sustainability) were used. Following UNDP/GEF guidelines, the relevant areas of the project were evaluated according to performance criteria and prospects of sustainability with ratings as summarized in the tables found in Annexes (Annex 4: Ratings for relevance, performance criteria, sustainability and impact). The tools chosen for the evaluation, with a mixture of primary and secondary data as well as a combination of quantitative and qualitative material, were selected to provide a spectrum of information and to validate findings. These methods allowed for in-depth exploration and yielded information that facilitated understanding of observed changes in outcomes and outputs (both intended and unintended) and the factors that contributed to the achievements or lack of accomplishments.

Regarding specific methodologies to gather assessment information, the following tools and methods were used:

- *Document analysis*. In depth analysis of documentation was carried out. The analysis examined documents prepared during the planning and implementation phases of the project. A list of documents consulted is found in annexes (Annex 3: List of consulted documents and online resources.).
- *Key informant interviews/Individual and group discussions*: Interviews were implemented through a series of open and semi-open questions raised to stakeholders directly and indirectly involved with the Project. Key actors (stakeholders) were defined as UN officials, governmental actors, strategic partners of civil society/NGOs/beneficiary groups, and local actors. The interviews were carried in person during the evaluation mission as well as via internet before and during the mission. They were either individual interviews or group discussions. Stakeholders to interview were chosen to be the key actors from every single cluster of organizations directly and tangentially involved in the Project. The array of stakeholders, therefore, was a representative sample of actors involved from organizations such as the implementing institution, national government representatives, and UNDP staff. In order to access those stakeholders not based in the countries visited during the mission (i.e. Saint Lucia and Saint Vincent and the Grenadines), a succession of online interviews was held. Stakeholders consulted are found in annexes with mission information (Annex 2: Itinerary/Mission and Meetings held as part of the Evaluation Process).

- *Site visits:* Following directives in the terms of reference, project site visits were planned. One to Saint Lucia's 3 MW solar PV project near Hewonarra International Airport; and another to Saint Vincent and the Grenadines' 500 kW solar PV project at Argyle International airport. Regrettably, due to logistic issues, the project site visit in Saint Lucia was not carried-out.

A first tool developed for this process was an evaluation matrix. This matrix guided the data collection process and, as the evaluation proceeded, the matrix was used to collect and display data obtained from various sources that relate to relevant evaluation criteria and questions. This tool was developed not only as a guide for systematizing data collection but also to make the evaluation process transparent. The matrix contains Evaluative Criteria Questions (that is questions and sub questions related to each of the evaluation criteria enclosed in the evaluation); Indicators; Sources; and Methodology.

As it occurs in most of these sorts of evaluations, there are a series of limitations. Although the evaluability was fair given access to inputs (from stakeholders through interview processes as well as from documentation this evaluation had access to), some limitations can be identified. The main limitation identified is the inherent constraint of time and resources which presented limits to the process, specifically in the number of visits that could be carried out in all of the nations involved in the intervention. Yet, the evaluation engaged in dialogue even with those countries that were not the countries chosen to visit. There were some issues regarding the availability of personnel for site visits as well as several shifts in government personnel out that resulted in delays and difficulties to engage with them as to get specific comments on project implementation. In due time, personnel were reached and this did not affect the overall evaluability of the Project. Furthermore, due to logistical issues, it was not possible to organize a pilot site visit in Saint Lucia, although during the mission as well as after the evaluation engaged with relevant stakeholders who were an integral part of this pilot site implementation. During the mission Hurricane Dorian befell upon Bahamas, and that curtailed access to stakeholders in that country at the time.

A nine-day mission took place, including international travel time, mainly maintaining meetings and interviews with relevant stakeholders at the national and local levels, national government representatives, as well review of materials with key stakeholders in both Saint Lucia and in Saint Vincent and the Grenadines. A Mission and Meetings Agenda is found in annexes (Annex 2: Itinerary/Mission and Meetings held as part of the Evaluation Process).

STRUCTURE OF THE EVALUATION REPORT

This evaluation report is structured beginning with an executive summary, an introduction and an evaluation scope and methodology section. A second section contains an overall project description within a developmental context, including an account of the problems the project sought to address, as well as its initial objectives. Furthermore, indicators and main stakeholders involved in the projects are described, as well as what were the expected results. Essentially, this segment of the report deals with the design stage and design concept of the project. A third core section of this report deals fundamentally with the evaluation findings, analytically observing the results framework and its reform, as well as linkages with other projects and interventions in the sector. Furthermore, this segment also deals with findings relating to the actual implementation of the project, including strategic issues such as adaptive management and partnership agreements, and monitoring. This third section concludes with findings on project overall results and findings related to the criteria established for evaluations such as relevance, effectiveness and efficiency, ownership at the national level, mainstreaming and sustainability. A fourth core section of the present report entails overall conclusions as well as forward looking issues and recommendations. Lastly, an annex section includes project and evaluation support documentation.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

PROJECT START AND DURATION

The Project has had a planned implementation period of three years. The actual finalization was on 30 June 2019 given that the project was granted a six-month extension. It had a total planned project cost of USD 306,376,484. Planned GEF financing was to be USD 1,826,484 and UNDP proposed co-financing was USD 200,000. The rest of the funding was to be provided by the following sources[6] Overseas Private Investment Corporation (OPIC) 300,000,000; Carbon War Room (CWR) USD 3,000,000; Rocky Mountain Institute (RMI) USD 1,350,000.[7]

INTRODUCTION AND PROBLEMS THAT PROJECT SOUGHT TO ADDRESS

Given that most Caribbean islands and several non-island Caribbean countries need to import most of the oil used for electricity generation, these countries are exposed to the volatility of international markets as well as incur in great fuel costs to cover the countries' electricity needs. While several renewable sources are amply available, the region does not tap into these resources to great degree.

The project's specific objective was to accelerate the transition of Caribbean island economies from a heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency as well as to establish a blueprint in this matter for other Small Island Developing States (SIDS). It was expected that this would be achieved through a series of outputs and related outcomes as indicated in the chart below.

Outcome 1. Policy De-risking Measures:	Island-wide de-risked enabling environment for low GHG development through the demonstration of innovative policy tools
Output 1.1 Clean energy action plans to meet Ten Island Challenge targets in the Caribbean developed:	▪ Goals and vision statements for each island participant with commitments and resources to meet them ▪ Renewable energy and energy efficiency strategies and assessments on selected islands with specific targets that are inclusive, gender responsive and human rights-based and include recommendations for clean energy livelihoods initiatives
Output 1.2 Policy de-risking analysis and guidance for Ten Island Challenge countries in the Caribbean provided:	▪ Use of de-risking tools to low carbon energy technologies in the Caribbean context ▪ Model twelve possible Resource Conservations Measures (RCMs) for health centers ▪ Regional guide development (including support for grid integration and energy efficiency in hospitals) ▪ Transformation of the market and regulatory framework to demonstrate effective grid integration or renewable energy resources across the Caribbean

[6] Actual funding and co – funding information is found in the implementation section of this report. Source: Project Document.

[7] The latter two organizations (CWR and RMI) merged during project implementation.

Outcome 2. Institutional and Technical Capacity:	Strengthened island capacity for integrated low GHG technical and institutional stakeholder planning and coordination
Output 2.1 Caribbean platforms for clean energy technology research, development, transfer and adoption enabled:	▪ Caribbean Energy Transition Community of Practice for government officials, utility and other networking and coordination bodies (e.g. CARILEC, CARICOM, CDB, CCCCC) As part of the COP, a network of young leaders will be created to identify and nurture youth to transition and lead the clean energy sustainable development agenda in the Caribbean ▪ The virtual Caribbean energy transition platform will host a number of project related templates including standard Purchasing Power Agreement templates, Standard Engineering, Procurement and Construction contract templates, checklists for bankability, etc. This Community of Practice will support a pipeline of bankable projects that are eligible for financing ▪ Gender responsive mechanisms will be put in place to support technology transfer through consultation with an inclusive stakeholder base
Output 2.2 Skills and expertise in island-wide clean energy investment de-risking and market transformation built:	▪ Gender responsive regional workshops and capacity building for knowledge-sharing and lessons learnt ▪ Follow-up tools, guidance and materials to measure and ensure the impact of capacity interventions
Outcome 3. Investment Projects and Financial Mechanisms:	Catalysed island funding for low GHG technology deployment.
Output 3.1 Caribbean energy resource capacity established:	▪ Ten Island Challenge-wide gender responsive renewable energy assessments, feasibilities and analyses. Resource technical, economic and financial potential
Output 3.2 Clean energy island-wide investments leveraged:	▪ De-risked equity/lending structures and other financing mechanisms to deliver on Caribbean clean energy targets ▪ Feasible investment project pipeline (400 MW) across Ten Island Challenge participant countries applying the Islands Playbook ▪ Plans for clean energy operation and maintenance in place ▪ Goals and vision statements for each island participant that outlines the overall goal for the island (X% of renewable energy by Year Y) with a commitment of staff and other resources needed to meet that commitment (Phase 1 and 2 of Islands Playbook). ▪ Development of investments that take account of the varying needs of rural communities and marginalized groups.

The project evaluated (i.e. TIC) is part of a wider initiative – the Island's Energy Programme – which is funded by various other non-GEF sources and implemented by RMI/CWR and other partners across the Caribbean. It is also associated at several levels with other similar projects. The GEF grant was planned to cover a series of specific interventions in the Bahamas, Belize, Grenada, Saint Lucia, and Saint Vincent and the Grenadines. This Terminal Evaluation focuses only on those components of the programme that are funded and supported by the GEF grant.

The issues that the Project sought to specifically address are a variety of matters related to energy in the Caribbean. The most salient one being global environmental benefits (i.e. greenhouse gas emissions avoided) while reducing Caribbean countries' dependency on oil.

GEF-supported aspects of the initiative had the United Nations Development Programme (UNDP) as its Executing Agency and the Carbon War Room/Rocky Mountain Institute as Implementing Entity/Responsible Partners.

IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT

The immediate aim of the Project was to achieve low-emission and climate-resilient objectives. These were to be achieved by accelerating the transition of Caribbean economies from heavy dependence on fossil fuels to a diverse platform of renewable energy sources.

BASELINE INDICATORS ESTABLISHED

Baseline indicators for the Project Objective and each of the three expected project outcomes were established in the Project Document (ProDoc). These are found in the chart below.

	Indicator	**Baseline**
Project Objective: To accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of RE/EE	▪ Number of countries signed on the Ten Island Challenge ▪ CO_2 emission reductions/year ▪ % share of RE in the power generation mix of TIC countries	▪ 0 ▪ 0 ▪ 1-7%[8]
Outcome 1: <u>Policy De-risking Measures</u> Island-wide de-risked enabling environment for low GHG development through innovative policy tools	• Number of RE/EE strategies and assessments with specific targets • Number of countries where implementation of comprehensive measures (plans, strategies, policies, programmes and budgets) to achieve low-emission and climate-resilient development objectives have improved (SP 1.4.2) • Number of islands applying the de-risking method, resource conservation measures and Ten Island Challenge tools • Number of Resource Conservation Measures (RCMs) modelled for health centres	• 0 • 0 • 0 • 0

[8] Source: IRENA. Figures range across islands from 1% in Bahamas, to 7% in Grenada

	Indicator	Baseline
Outcome 2: Institutional and Technical Capacity Strengthened island capacity for integrated low GHG technical and operational planning and coordination	• Number of stakeholder partnerships active in Ten Island Challenge KM platforms disaggregated by sex, by age and by rural and urban • Number of local counterparts with improved capacity to partake in RE/EE developments disaggregated by sex, by age and by rural and urban	• 0 • 10-50
Outcome 3: Investment Projects and Financial Mechanisms Catalyzed island funding for low GHG technology deployment	• Installed RE capacity through Ten Island Challenge • Number of jobs and livelihoods/beneficiaries from Ten Island Challenge, disaggregated by sector and sub-sector, by sex, age, and excluded groups and by wage category were available and by rural and urban • Capital mobilised following support by Ten Island Challenge • Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women (SP1.5.1)	• 0 • 0 • $3million • 0

The baseline indicators were largely fitting to establish a reference point and be able to measure achievement, for the most part. Indicators originating from standard tools in these sorts of projects were used.

MAIN STAKEHOLDERS IDENTIFIED AT THE DESIGN LEVEL

At the design level, a series of specific main stakeholder groups were identified. These were, at the time of project development, as follows:

	National	External
Primary	Government decision makers Utility executives Influencers and local champions Universities	Financiers and investors Multinational renewable energy and energy efficiency companies
Secondary	Citizens Incumbent utility employees Local businesses, including developers Private sector - Hotels and other local tourism businesses Church groups Grassroots groups	Commercial vendors and consultants Regional media Multilaterals Tourism industry corporate HQ (cruise companies, large hotel chains etc.) Energy NGOs, non-profits

	National	External
	Local media	
Tertiary	Energy sector labour force	Foreign governments and other donors Replicators Caribbean diaspora Small island nations' governments Tourists

Albeit a list of groups and stakeholders were identified at design, their real capacities, characteristics, commitments to the Project, abilities or willingness to participate in the project, the relation and/or conflict between different sorts of stakeholders, as well other such issues were not fully analysed, nor included as thoroughly or as deliberately as needed in the stakeholder analysis and mapping. This, in turn, had an impact on the implementation of the project, which will be seen in the implementation section of this report.

EXPECTED RESULTS

Overall, it was expected that the Project would aid in accelerating the transition of Caribbean nations' economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency and establish a blueprint for other small island developing states. This was expected to be achieved though the implementation of policy tools for low GHG development, enhancing institutional and technical capacity, as well through the implementation of low GHG technologies.

3. FINDINGS

3.1 PROJECT DESIGN/FORMULATION

ANALYSIS OF LFA/RESULTS FRAMEWORK (PROJECT LOGIC /STRATEGY; INDICATORS)

As all projects of this sort, a key aspect of its design is the inception log frame/results framework which includes project strategy and the intervention's logic as well as baseline and target indicators. The TIC initiative's logic and strategy at the design and formulation level was fitting. The formulation documents effectively identify the key issues, threats, and other matters that hinder adequate transition to renewable energy in the Caribbean. The results framework, therefore, bases its logic and strategy upon identified threats and barriers.

THREATS, BARRIERS, AND UNDERLYING CAUSES SUSTAINING PROJECT LOGIC/STRATEGY

The threats as well as underlying causes that hinder an adequate transition to renewable energy in the Caribbean were properly identified at design. The Project Document identifies three types of barriers (1) regulatory policy/legal (such as limited capacity to generate and enforce nation-wide clean energy policies and regulations); (2) institutional/technical (for instance, lack of coordination and expertise for the adoption of nation-wide clean energy technologies; as well as (3) market/financial (such as operational risk perception affecting credit, market and other nation-wide clean energy financing).

The Project's logic and strategy therefore was to confront these issues through specific outputs and expected outcomes that would, plausibly, deal with identified threats and barriers. Therefore, in terms of overall logic and strategy the design responded to an adequate rationale and it was designed as a strategic intervention.

LOG FRAME AND INDICATORS

Although the overall logic and strategy is adequate, design suitability weakens -however- when analysing the log frame, target indicators, as well as context in general. First of all, the log frame (a full copy of which is found in Annexes — Annex 5: Project Results Framework) goes far beyond the GEF-funded UNDP-Implemented project.[9] For instance, its achievement indicators encompass far more than the five countries where the GEF-funded UNDP-Implemented project is to take place and focus on (i.e. Bahamas, Belize, Grenada, Saint Lucia, as well as Saint Vincent and the Grenadines). Therefore, many of the targets are not specific to the project itself, overambitious, and are consequently not achievable and unrealistic. This, in turn, created misunderstandings vis-à-vis reporting.[10]

[9] According to the IP this was the result of UNDP guidance, i.e. that the indicators would represent pan-Caribbean potential and not be restricted to the participating countries.

[10] Indicators' analysis follows the SMART approach: S: specific; M: measurable; A: achievable; R: relevant; T: time-bound.

While IP attempted a reformulation of the log frame target indicators, this was not accepted by UNDP-GEF since they were connected to the Project's main objective. It was recommended, as an alternative, that the indicators be maintained and, instead, reporting should be disaggregated to identify the incremental impact of GEF resources. Therefore, the Project had to reconcile the misconstruing of indicators at design with differential reporting of indicators. Although, it was indicated that there should be reporting of desegregated data for targets this arrangement did not fully incorporate accurate indicator reporting given the complexity inherent in the intervention. Furthermore, due to the fact that the intervention was much broader than the Project, a number of funders were involved creating a very intricate architecture for the initiative. Therefore, reporting achieved indicators *as a direct result of the project*[11] proved to be complex and problematic at times.

The end-of-project indicators, for example in Outcome 3, are related to the funding to be catalysed for low GHG technology deployment and its related GHG reduction were very ambitious targets. This notwithstanding, these end-of-project impact indicators were well defined vis-à-vis impact, such as GHG emission reduction and their impact upon global environmental benefits related to climate change. That is, although the scope is undeniably overly ambitious, these indicators are specific and relevant by linking low GHG technology deployment with climate change mitigation.

When doing a SMART analysis of end-of-project target indicators, it can be said that they fulfil several of these parameters. For instance, they are specific (S) since they clearly communicate a description of a future condition and are measurable (M) since they are presented with metrics. They are relevant (R) since they aligned with a development framework and time bound (T) given that they are expected to be achieved by the end of the intervention. Yet, and as will be seen in the implementation sections of this report, many of the indicators are overly ambitious and not within the capacity of the partners to achieve (i.e. not achievable -A-).

DESIGN FORMULATION

Design formulation was not as robust as desirable for a project of this type. Key stakeholders have indicated that the inception/design phase was not robust, which is an analysis that this evaluation shares. Issues such as the relevancy of indicators as seen above, and others which will be expanded upon further in this report, attest to this issue.

Although a potential stakeholder list was drawn up, the design does not thoroughly include an analysis and mapping of engagement. Albeit a list of groups and stakeholders were identified at design, their real capacities, characteristics, commitments to the Project, abilities or willingness to participate in the project, the relation and/or conflict between different sorts of stakeholders, as well other such issues were not analysed, nor included as thoroughly or as deliberately as needed in the stakeholder analysis.

Furthermore, there is no full development in design of comprehensive background intelligence and information on the conditions, political settings, and readiness for transitioning

[11] That is, the GEF-Funded UNDP-Implemented Project.

from fossil fuels to renewable sources differentiated for each of the five target countries.[12] This, in turn, has had a consequence upon which countries faced the greatest challenges and which had the greatest achievements throughout implementation, either by delaying achievements (e.g. Bahamas) or by not being able to implement national activities/products (e.g. Grenada).[13]

Being that climate change and renewable energies are such significant topics in the target countries, as expected there are a myriad of development activities dealing with renewable energies in the five target countries. Some were acknowledged at design. For instance, there are specific remarks at design indicating that the 10 Island Challenge project will complement or build upon existing activities across the region, such as the GEF-funded UNDP-implemented PACES project in St. Vincent and the Grenadines, as well as the regional renewable energy and energy efficiency activities under the Caribbean Energy Efficiency Lighting Project and Japan-Caribbean Climate Change Partnership. However, there is no full mapping of initiatives, nor a partnership framework drawn to integrate parallel initiatives and identify complementarities or conflicts between and among these and other similar development projects.

The design documents explicitly indicate that lessons learned have informed the planning process. For instance, it is indicated that "Ongoing work builds on the lessons learned and progress made in the regional space by identifying upscaling and complementary opportunities with projects such as the Promoting Access to Clean Energy Systems (PACES) and the Disaster Risk and Energy Access Management (DREAM)".

Moreover, project design goes further into indicating potential collaborating arrangements with other actors in the region (besides CWR/RMI and its own partners). For instance, it is indicated that the TIC project would liaise with GIZ, through BMUB (Germany), in Grenada, given that UNDP is already linked to a Programme on Integrated Climate Change Adaptation Strategies (ICCAS) in that country. Also, in Grenada, government was — at the time of design — working with UNDP's SRO for its National Appropriate Mitigation Action plans for support to "convert government buildings to solar", potentially indicating a probable collaboration between projects.

Furthermore, UNDP supported and supports energy access as well as climate change mitigation and adaptation work at the regional level and at the country level in the Caribbean. These projects and processes set the base for potential integration and to avoid duplication with activities supported by other agencies within the UN system as well as with other donors. Although the potential for collaboration is indicated, what specific lessons learned from these interventions have been incorporated is not explicitly identified nor are they integrated into all aspects of the Project Document.

[1212] Bahamas; Belize; Grenada; Saint Lucia; Saint Vincent and the Grenadines.

[13] As indicated by the Project in its final report "The main challenge seen throughout the project was delays in achieving alignment among key stakeholders, particularly in The Bahamas and in Grenada. In The Bahamas, alignment was achieved in the final year of the project, leading to successful implementation of renewable energy projects and assessments to support a successful energy transition. However, in Grenada, the program was never able to get traction due to the fact that the government and private utility are in the midst of arbitration."

Regarding planning process and the resulting design, several key stakeholders pointed out a series of issues. First of all, it was deemed that the design did not accurately consider political and policy issues in several of the target countries. This in turn had impacts on delaying in the achievement of outputs (for instance in Bahamas) or in failing to carry-out any national activities at all at the national level (for instance in Grenada).

Also, stakeholders indicated that the design concentrated upon environmental issues deviating from an integrated analysis of development issues that are closely related not only to climate change mitigation but also to development per se, energy access, etc., in the target countries.

The project did not have an explicit Theory of Change. At least it did not carry out an explicit exercise at design (of an instrument defined as a Theory of Change) where it is indicated how and by what means would the project interventions and potential results contribute to the reduction of the barriers to low carbon development. Implicitly, however, design tacitly attempts to generate a change by indicating that the project "will demonstrate how renewable energy projects, supported through regional networking and capacity building exercises, can demonstrably change the energy resource mix of an entire country."[14]

ASSUMPTIONS AND RISKS

At the design stage, a series of assumptions were identified in the Project Log Frame.

[14] Source: Project Document

Table 1: Assumptions as stated in Project Document's Log frame

	Assumptions
Project Objective: To accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of RE/EE	▪ Economic growth across islands will continue ▪ Island-wide government support for renewables development and utilization will not change
Outcome 1: Policy De-risking Measures Island-wide de-risked enabling environment for low GHG development through innovative policy tools	• Island-wide support for policy reform to promote RE continues • Technical capacity to apply tools does not delay adoption of RE policy measures
Outcome 2: Institutional and Technical Capacity Strengthened island capacity for integrated low GHG technical and operational planning and coordination	• Local and regional stakeholders continue to be engaged during the various phases of the Ten Island Challenge
Outcome 3: Investment Projects and Financial Mechanisms Catalyzed island funding for low GHG technology deployment	• Sufficient annual replenishment of RE development funds • Capacity of government does not substantially delay approval of RE policies and RE projects

In retrospect, the assumptions were correct in most cases for most countries (as will be seen in the sections strictly dealing with implementation). Therefore, in the cases where the assumptions unfolded correctly, this impacted positively on the overall achievement of targets.

The design also included a risk analysis. The analysis (see table below[15]) included not only identifying the risk *per se*, it also included an assessment as to its likelihood of occurring and possible mitigation actions.

[15] Source: PIF.

Risks	Likely	Remedial actions
1. Change in political party and commitment to the renewable agenda changes	Low	Due to the high cost of electricity experienced in Caribbean countries and excellent renewable resource, there is strong political will from all political stakeholders in participating Caribbean countries. However, in order to mitigate a change in political priority, the project will have a direct impact on the policy and regulatory framework to ensure the appropriate policies are in place to accelerate commercial and utility scale renewable deployment, which will in turn mitigate the risk to medium term and long-term renewable deployment.
2. Lack of coordination amongst various stakeholders and partners with various sustainable energy roles and responsibilities in participating countries	Medium	The project will ensure the coordination and integration of support to sustainable energy objectives, in line with each respective countries low carbon development strategies – including National Adaptation Plans of Action (NAPA) where relevant, Strategic Programs for Climate Resilience in participating Pilot Program for Climate Resilience countries, first and second communications to the UNFCCC. In addition, the CWR will work directly with relevant bi-lateral and multi-lateral organizations active in the sustainable energy space to ensure programmatic coordination. National level coordination will be ensured through the adoption of the playbook by other donor partners, which was agreed to in the Sustainable Energy Donor Working Group comprised of all donor partners and regional institutions involved in sustainable energy in the Caribbean.
3. Limited public sector uptake after EE lighting / appliance solar PV grant-funded pilot demonstrations take place	Low	The costs and risks associated with the proposed EE lighting/appliance and solar PV infrastructure will be shared between the project, the Government and the private developers who are expected to engage with, and invest in, this project. The project's market transformation approach will primarily focus on addressing the policy de-risking concerns the government may have before committing to investment programs. But the expected energy savings considering government hefty electricity bills provide a strong indication that further public investment will be catalysed after the pilots.
4. Non approval of expected fiscal, economic and financial incentives to address the first-cost concerns behind EE lighting / appliance and solar PV procurement	Medium	Access to cleaner energy sources has been placed high enough in the respective governments agenda, given the high tariffs experienced in participating countries, which are later on passed to municipalities and island communities. Therefore, budgetary allocations will be closely monitored to ensure provision is made to support planned energy-efficient lighting/appliance and solar PV investments, with the direct engagement of the Ministry of Finance.
5. Low capacity and awareness to support project identification, development and start-up implementation (e.g. proposal development, tendering, oversight)	Low	Actions will be proposed to ensure above-mentioned government entities and the private sector fully participate in the capacity development interventions, with the required technical and policy oversight of the project and UNDP. Project identification will be supported by Homer Energy hybrid modeling software – the industry standard, and project development and procurement will be directly supported by DNV GL – in close collaboration with the utility. All procurements will be open and competitive with and CWR and DNV GL will participate in the evaluation of technical proposals to ensure transparency in the process. In addition, local private sector will be directly engaged in project implementation; and, the project communication strategy will target all other stakeholders, so they visualize the benefits of the EE lighting/appliances and solar PV installations.
6. Climate variability in the Caribbean exacerbating extreme weather events, such as hurricanes, severe storms and other patterns leading to infrastructure disruption	High	The climate resilience of the proposed wind, solar and energy storage interventions will be addressed by ensuring that the design and installation of the systems places emphasis on their ability to withstand extreme conditions. Project implementation will also target public buildings and infrastructure expected to be used as shelter during extreme weather events (e.g. hurricanes, cyclones, storms), as electricity cost savings from any disaster risk response will free up public expenditure space to address other basic needs (e.g. water, food, health).

Some of the risks identified are reasonably well defined. For instance, the risks associated to political changes ("Change in political party and commitment to the renewable agenda

changes") are defined as low. This is due to the fact that energy costs in the Caribbean region are so high that changing to an energy matrix that includes lower cost alternatives such as renewable energy is not a matter that would be affected by political sways. Other risk factors are correctly identified, such as the high risk that climate variability in the Caribbean resulting in exacerbated extreme weather events (such as hurricanes, severe storms, and other weather patterns) can lead to infrastructure disruption. Yet the mitigating measures proposed are not attuned to the magnitude of the problem. As will be seen in the sustainability section of this report, solar farms which were implemented with the aid of the Project are currently planned to withstand lesser hurricane categories than the ones being experienced in the region. Therefore, the mitigating measure drawn in the risk analysis falls short of being a true remedial action for the investments to withstand current weather conditions and include climate-proofing as much as possible.

Lastly, it is the risk that was not foreseen in the analysis that had a major impact. Risk analysis did not foresee the lack of engagement of countries and lack of alignment of the countries with the project's processes, partly due to the design process being fully unaware of the extent of local situations. This was clearest in the case of Grenada. In Grenada, the program was never able to obtain national adhesion to the Project given that government and the utility are in the midst of a conflict for several years.[16]

LESSONS FROM OTHER RELEVANT PROJECTS (SAME FOCAL AREA) INCORPORATED INTO PROJECT DESIGN

Project design indicates that lessons from other relevant projects in the same focal area would be applied (for instance "applying best practices and lessons learned underpins the focus of this execution strategy, with the intention of providing replicable models for other islands and isolated economies"). Nevertheless, these are not specified at design level.

Also, it is indicated that "The 10 Island Challenge will complement or build on existing activities across the region, including the GEF-funded PACES project in St. Vincent and the Grenadines, as well as the regional RE and EE activities under the Caribbean Energy Efficiency Lighting Project and Japan-Caribbean Climate Change Partnership." Overall, therefore, the Project had a series of experiences and projects to draw upon for its design and implementation and the aim to build upon lessons is expressed, albeit it is not made explicit in the project design which or what lessons would be incorporated in the Project.

PLANNED STAKEHOLDER PARTICIPATION

At the design stage a general list of potential stakeholders was drawn. The design document indicates that stakeholders (agglutinated in what the design regards as communities) would be involved in the different stages of project implementation and application. It is

[16] Which led to a request for international arbitration in 2017.

indicated that, once project starts, a community stakeholder mapping and engagement exercise would be developed in order to identify, map and engage with relevant audiences.

REPLICATION APPROACH

At the design level, the replication approach has been very much a continual and solid aim of the project, both tacitly and explicitly. Explicitly even the objective of the Project itself establishes, from inception, that a replication approach should and would be interweaved in project implementation and as a demonstration of achievements ("…Ten Island Challenge (TIC) is to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency, *thereby establishing a blueprint for other isolated economies*."). Although no explicit replication strategy is presented at design, there is a stated aim to upscale, replicate or expand outcomes and outputs, both during project implementation as well as in follow-up.

UNDP COMPARATIVE ADVANTAGE

In particular as it relates to GEF – funded projects, UNDP's comparative advantage is associated to the agency's global network of country offices, its experience in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation. UNDP's comparative advantage as a GEF implementing agency also relates to the subject of the Ten Island Challenge Project. For instance, UNDP's focus on access to sustainable energy services as a priority area brings together energy access and climate change concerns. Priorities within this area include, explicitly and as related to TIC's overt and implicit aims, strengthening national policy frameworks for poverty reduction and sustainable development; promoting clean energy technology (that is, low GHG emitting, renewable energy and energy efficient technologies) for sustainable development; as well as increased access to financing for sustainable energy.[17] However, design did not specifically indicate what UNDP's comparative advantage would be in the context of the Project.

MANAGEMENT ARRANGEMENTS[18]

The management arrangements for this project were fairly unique. The project was executed under UNDP's NGO implementation modality and implemented by Rocky Mountain Institute (RMI)/Carbon War Room (CWR), in partnership with the U.S. Department of Energy (US DOE). Therefore, this was not a typical DIM nor NIM implemented project since it was executed through a non-government entity. Furthermore, the organization – although it had links to the region — was based outside the Caribbean.

[17] Global Environment Facility. GEF/C.31/5 May 15, 2007. GEF Council June 12-15, 2007. Agenda Item 11. COMPARATIVE ADVANTAGES OF THE GEF AGENCIES.

[18] For an organigram on the execution arrangements, please refer to the section IMPLEMENTING PARTNER AND UNDP IMPLEMENTATION / EXECUTION COORDINATION, AND OPERATIONAL ISSUES of this report, given that – formally—management arrangements did not change throughout Project execution.

The design also provided some guidelines for the functioning of management arrangements. Given that UNDP had ultimate accountability for the project results, some indications were drawn-up as to this agency's oversight over different aspects of implementation (management arrangements, annual work planning and in-situ monitoring, financial and results management, evaluation, etc.). Also, an outline is drawn in the Project Document as to the project guidance mechanisms to be in place to oversee implementation (such as a project board) as well as for how the project management and implementation team would function.

3.2 PROJECT IMPLEMENTATION

ADAPTIVE MANAGEMENT (CHANGES TO THE PROJECT DESIGN AND PROJECT OUTPUTS DURING IMPLEMENTATION)

Adaptive management is defined as the project's ability to adapt to changes to the project design (project objective, outcomes, or outputs) during implementation resulting from: (a) original objectives that were not sufficiently articulated; (b) exogenous conditions that changed, due to which change was needed; (c) the project's restructuring because the original expectations were overambitious; or (d) the project's restructuring because of a lack of progress[19].

If this definition is followed for the TIC project, then it can be said that adaptive management was not carried out in full force. This in particular when it was understood that the expected output and outcome indicators were overly ambitious and unachievable in the context of the intervention. That is, there were no changes in log frame, reforming the expected output indicators to induce more achievable results.[20]

However, in some cases local project partners in the different countries have implemented adaptive measures in order to adapt outputs to their context or necessities. For instance, there were some technical alterations to the solar panels and projects to adapt them to local conditions. Furthermore, since contractors and providers were from different countries, the local partners also adapted the technology in order for it to function in a more harmonised manner.

PARTNERSHIP ARRANGEMENTS (WITH RELEVANT STAKEHOLDERS INVOLVED IN THE COUNTRY/REGION)

As established in the Project Document and at inception, a broad framework for stakeholder analysis was carried out at Project design. The main partnership arrangements with relevant stakeholders to be involved was established. The implementation of project activities engaged with several key actors, fairly following the planned framework for stakeholder analysis.

[19] Source: Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects. UNDP and GEF. 2014.

[20] This matter will also be taken up further along in the report where issues of reporting and monitoring are described.

The engagement with stakeholders, such as government agencies and electrical companies (national) in the countries where the Project carried out activities was active. The Project engaged also with regional institutions that deal with electricity issues.

The extent and quality of engagement with stakeholders also varied country-by-country and the level of engagement was satisfactory in some countries while not in others. Also, the level and quality of engagement varied depending on the stakeholder. For instance, government stakeholders in most countries engaged more closely with the Project than utilities in some countries. Furthermore, it has been indicated that having a project implemented by an outside entity aided in bringing different actors together (for instance in structured stakeholder engagement when debating plans). This was particularly the case when the Project acknowledged that the processes were facilitated by it, yet results, plans, outcomes, etc., were owned by the country and needed to reflect country's needs and decisions.

FEEDBACK FROM MONITORING AND EVALUATION ACTIVITIES USED FOR ADAPTIVE MANAGEMENT

Imbedded in design there was a Monitoring and Evaluation (M&E) plan, this included a series of standard activities. Although the M&E plan did include a final evaluation (i.e. the present assessment) it did not include a mid-term review. This has proven to be a defect in design given that there was no clear mid-point opportunity to provide feedback on activities and design (including metrics) nor to enable conditions for adaptive management. Audits were carried out in a compliant manner, yet these concentrated upon financial issues and not implementation and other evaluation type of exercise.

The Project underwent a series of quality assurance analysis in order to provide a guarantee that there existed an adequate operational and internal control systems to ensure that the project was properly managed in accordance with the policies and procedures of UNDP. The quality assurance analysis had as its overall aim guaranteeing the achievement of its objectives with due regard for economy and efficiency.

Although project implementing partners attempted a reformulation of the log frame target indicators, albeit rather late in the implementation process, UNDP-GEF[21] recommended that the indicators be maintained. It was recommended that, instead, reporting should be disaggregated to identify the incremental impact of GEF resources. In part this was due to communication issues between the different partners as to what, when or how components of the project could be altered in order to have adaptive management.

PROJECT FINANCE

The Project's total planned cost was of USD 306,376,484. Planned GEF financing was to be USD 1,826,484 and UNDP proposed co-financing was USD 200,000. The rest of the funding

[21] According to UNDP-GEF, indicators were not questioned. Targets were required to be changed without any justification on baseline change.

was to be provided by the following sources: Overseas Private Investment Corporation (OPIC) USD 300,000,000; Carbon War Room (CWR) USD 3,000,000; Rocky Mountain Institute (RMI) USD 1,350,000.

Actual versus planned financial data for financing and co-financing is provided below in the narrative and in the following table.

Table 2: Project financing and co-financing table[22]

Co-financing (type/source)	GEF (US$)		UNDP own financing (US$)		Governments and Partner Agencies (US$)		Total (US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants (GEF)	1,826,484	1,826,484					1,826,484	1,826,484
Loans/Concessions (US Government - Overseas Private Investment Corporation (OPIC) Carbon War Room (CWR) Rocky Mountain Institute (RMI)					304,550,000	304,550,000	304,550,000	304,550,000
In-kind support (UNDP)			200,000	200,000			200,000	200,000
Totals	1,826,484	1,826,484	200,000	200,000	304,550,000	304,550,000	306,576,484	306,576,484

Co-financing was estimated during project design and this and other financial matters tracked during implementation through periodic audits. Co-financing was realized in keeping with original estimates according to data in several documents.[23] According the last PIR (June 2019) cumulative delivery against total approved amount (as stated in the Project Document) was 94.84% for an amount of USD 1,732,167.[24]

Nonetheless, although financing and co – financing closely follows what was expected at design, there is an overall design failing given that co – financing also supported interventions outside of the actual GEF-Funded UNDP-implemented Project. Given that GEF financing and UNDP co-financing only entailed 0.66 percent of what is deemed as total project costs, this matter skews quite a large part of analysis. This unbalanced approach to funding implies that there are other variables that come in to play when analysing the trajectory from inputs (i.e. GEF funds/co-financing by UNDP) to results (e.g. outputs, products, effects, impacts). The latter cannot be considered to be exclusively attributable to the project given that many of the

[22] The figures presented here are those supplied in the different documents (PIRs, ToRs. etc.), audits, etc.
[23] Sources: PIR 2019, Terms of Reference.
[24] Should be noted that UNDP had a 6-month delay in disbursement due to internal delays.

mechanisms of overall implementation were not leveraged by the GEF/UNDP support. Therefore, (for overall TIC activities) the results and processes respond, also, to leveraging by external stakeholders which may or may not have had the same outlooks as the GEF-supported initiative or may have had other agendas.

Nonetheless, based on the available data (Appendix 7), co-financing realised during the project was approximately $13 million, with a further $166 million expected to be leveraged after project closure.

MONITORING AND EVALUATION: DESIGN AT ENTRY AND IMPLEMENTATION

As stated in the section dealing with adaptive management above, a series of standard activities (such as Inception Workshop and Report, Measurement of Means of Verification of project results, Measurement of Means of Verification for Project Progress on output and implementation, PIRs, progress reports, Audits, etc.) are imbedded in design and are a standard for this sort of project. Although the M&E plan did include a final evaluation (i.e. the present assessment) it did not include a mid-term review at the guidance of UNDP given that it was not mandated. This has proven to be a defect in design given that there was no clear mid-point opportunity to provide feedback on activities and design (including indicators) nor to enable conditions for adaptive management. Design for monitoring and evaluation lacks depth proportionate to the complexity of the Project. Therefore, although not mandated, a mid-term review could have been inserted as a requisite given the regional nature of the project and other factors which added complexity to implementation. The plan for monitoring and evaluation, therefore, was not well-formulated, and therefore could not serve as an effective tool as can be expected to support project implementation. Therefore, at entry, the ranking is *Moderately Unsatisfactory (MU),* given that there were significant shortcomings in the setup of the M&E plan.

The implementation of the Monitoring and Evaluation framework has followed, to a large degree, the M&E plan. Other monitoring tools were also applied as planned. For instance, audits were carried out in a compliant manner, yet these mainly concentrated upon financial issues and not implementation per se.

As stated elsewhere in this report, although late in the implementation process, there was an attempt by project partners to alter end-of-project target indicators. Although the proposed changes were not accepted UNDP-GEF, there was a suggestion to maintain the indicators and report data disaggregated for TIC target countries to identify the incremental impact of GEF resources. The idea to disaggregate reporting was to clarify and differentiate the IP's overarching TIC activities from GEF-funded TIC-specific actions. The rationale was to make clear that the overall targets stated (and not possible to change as related to project main objective) were being undertaken, while GEF was incrementally being used in more restricted sample (less countries, for instance). However, documents dealing with implementation continued to tend to report in most documents for all the targets and other countries throughout the monitoring period.

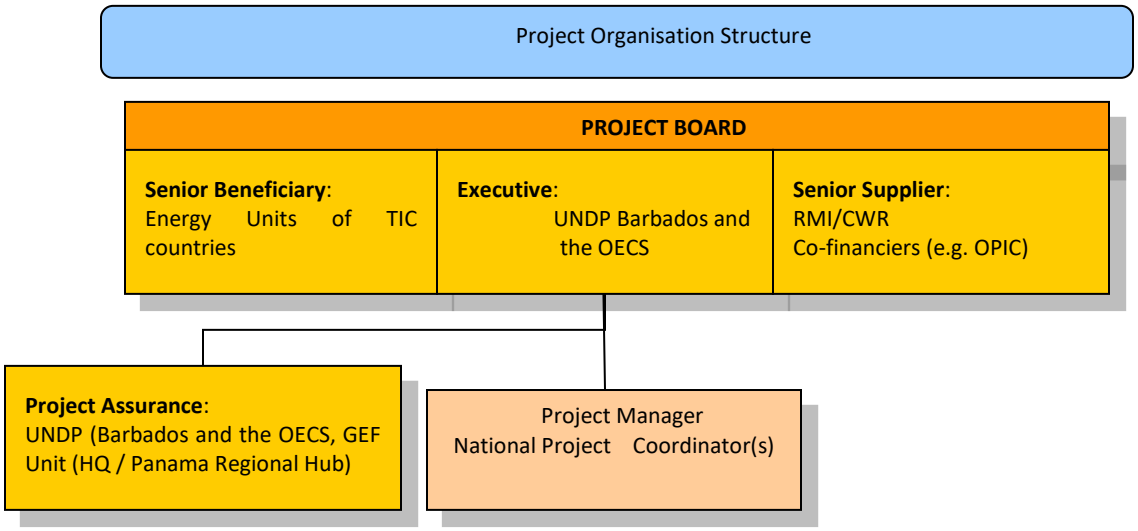
Therefore, the achievement of the monitoring plan at implementation is considered that to have been *Moderately Satisfactory (MS).*

A composite ranking that considers monitoring and evaluation design at entry together with the M&E plan's implementation for the overall quality of M&E is *Moderately Unsatisfactory (MU)*, in particular due to the fact that the entry plan lacked strength and was deficient in several key components.

IMPLEMENTING PARTNER AND UNDP IMPLEMENTATION / EXECUTION COORDINATION, AND OPERATIONAL ISSUES

The Project Document sets up coordination and operational issues as well as proposed management arrangements. Although the management arrangements and oversight structure were fairly standard, they were not overly specified at design. This was an issue that posed some definition problems given that the implementation modality (NGO) with a non-governmental organization outside of the operation region in a multi-country project is highly unusual for a GEF-financed UNDP-implemented intervention. With an imprecise coordination and operational framework in an innovative modality it was rather difficult to coordinate execution to the levels needed.

Following is the project organisational structure proposed at design. It is a rather simplified design which is not corresponding to the complexity of the intervention. This is particularly key if the analysis includes other variables that come into play in the project such as the number of countries involved, the regional actors, and the level of co – funding that the TIC Project was supposed to leverage.



There were a number of guidelines as to how this overseeing and organisational structure would operate and provide project assurance. Yet, again, they were not as specific as necessary for such a type of project. Furthermore, although UNDP's Barbados and the OECS office was part of the Project Board (as well as having a role in project assurance), two of the five countries involved in the TIC initiative are not OECS Member States. Therefore, there were no direct

contacts with relevant stakeholders from Bahamas and Belize with UNDP's Barbados and the OECS office before the intervention, adding complexity and delays.

Project design also established guidelines for a Project Management and Implementation Team with a Project Manager, National Project Coordinators, and Project Support. Regarding National Project Coordinators, they were to be appointed to support the Project Manager in superintending country-based project activities. This was not the case in most countries, however, since the National Project Coordinators were only engaged for Saint Lucia as well for Saint Vincent and the Grenadines. Although there is not enough evidence to establish causality, the countries that had National Project Coordinators with clear and specific mandates were better performing and had the greatest ownership.

Project team reports that UNDP provided support in reporting and financial procedures throughout the implementation process. Yet there were a series of issues and communication problems between the three main actors at the management level (that is, between the IP – CWR/RMI, the funding agency – GEF, and the GEF agency — UNDP's Barbados and the OECS office). The main issue has been the lack of fluid communication and agile responses in reforming the log frame through indicators modifications and therefore weakness in enabling adaptive management. The understanding that these adaptations might take place in order to side-step the Project's over ambitiousness arose late in the implementation process, and there were miscommunications, in particular with UNDP/GEF, as to the operational margin that the project had in this matter.

The modality and the mixed partnerships of the Implementing Partner, in particular with organizations outside of the beneficiary countries, implied distinctive arrangements and unusual overall management structures for implementation and management.

As indicated above, the implementation arrangement with an IP which was an NGO from outside the region, was an implementation modality which brought about strengths and weaknesses related to implementation.

The strengths were several, such as:

- Strong efficiency in implementation and in delivery;
- Achievement of results and/or products within the set implementation timeline constraints and for complex multicounty operation;
- Ability to broker processes and instruments (such as plans, integrated resource management strategies, etc.) between national actors that may have divergent views and agendas;
- Capacity to leverage a great deal of support from other donors and funders for backing implementation processes and for the execution of products;
- Capacity to access a broad spectrum of stakeholders, nationally and internationally.

However, there were other issues which were considered weaknesses in the implementation in relation to management arrangements for implementation with a non-state actor from outside the region. Several of these were:

- Complex multi-country operation that contributed to dispersing implementation efforts.
- Weak understanding of several political and developmental background and issues for several of the countries in the region;
- Weak or tardy promotion of in-country and regional sustainability and uptake;
- Lack of clear communication with local partners as to what agencies and donors were funding which aspects of CWR/RMI interventions in each of the countries, and what this entail vis-à-vis commitments to funders and suppliers.
- Weak visibility of UNDP/GEF.

Therefore, as an amalgamated review, the overall quality of implementation and execution, of the executing agency as well as the quality execution of UNDP is *Satisfactory (S)* since some shortcomings were identified throughout the implementation process as a whole.

3.3 PROJECT RESULTS

OVERALL RESULTS

In terms of expected results, the overall objective of the TIC Project was to accelerate the transition of Caribbean economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency as well as to establish a blueprint in this matter for other Small Island Developing States (SIDS). To a greater or lesser extent this has been achieved for some of the target countries involved in the initiative. Countries performed at different levels depending on the characteristic conditions that each one faces regarding transitions to renewable energy, due to internal policy, as well as due to the level of insertion that renewable energy has in the overall national aims and prospects.

The expected results were articulated through anticipated outcomes and these, in turn, were operationalized through the generation of outputs (products, activities, processes, etc.). The project's final PIR of June 2019 and the Project Terminal Report as well as other similar sources, attest to the fact that products/outputs have been achieved to a large degree in several of the beneficiary countries.

Matrix: End-of-project target indicators and achieved cumulative progress since project start[25]

Objective: To accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of RE/EE		
Description of Indicator	***End of project target level***	***Cumulative progress since project start***
Number of countries signed on the Ten Island Challenge	10	15.
CO2 emission reductions/year	137 ktCO2	9.7 ktCO2
% share of RE in the power generation mix of TIC countries	20-50%	22%
Outcome 1: Island-wide de-risked enabling environment for low GHG development through innovative policy tools		
Description of Indicator	***End of project target level***	***Cumulative progress since project start***
Number of RE/EE strategies and assessments with specific targets	5	3
Number of countries where implementation of comprehensive measures (plans, strategies, policies, programmes and budgets) to achieve low-emission and climate-resilient development objectives have improved (SP 1.4.2)	7	3
Number of islands applying the de-risking method, resource conservation measures and Ten Island Challenge tools	5	3
Number of Resource Conservation Measures (RCMs) modelled for health centres	12	54
Outcome 2: Strengthened island capacity for integrated low GHG technical and operational planning and coordination		
Description of Indicator	***End of project target level***	***Cumulative progress since project start***
Number of stakeholder partnerships active in TIC KM platforms disaggregated by sex, by age and by rural and urban	2	3.
Number of local counterparts with improved capacity to partake in RE/EE developments disaggregated by sex, by age and by rural and urban	300-800	106
Installed RE capacity through Ten Island Challenge	85 MW of installed capacity. 209 MW of committed RE capacity	6.2 MW
Number of jobs and livelihoods/beneficiaries from Ten Island Challenge, disaggregated by sector and sub-sector, by sex, age, and excluded groups and by wage category were available and by rural and urban	700-1,000; 40% women	65 direct jobs with 195 livelihood beneficiaries
Capital mobilised following support by Ten Island Challenge	$63 million	$13.65 million
Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women (SP1.5.1)	4	5.

[25] Source: PIR 2019.

Following are highlights of the achievements as indicated in these reports as per expected outcomes and a general analysis of results concerning the role of the project. Based on the chart above, therefore, the following is a juxtaposition of targets and results that critically analyses attainments at the results level.

Results at the Objective Level: *To accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of RE/EE*

- At completion of the initiative 15 countries signed on to the Ten Island Challenge[26] including the four countries part of the GEF-funded UNDP-Implemented project (Bahamas, Belize, Saint Lucia, Saint Vincent and the Grenadines).
- CO_2 emission reductions/year 9.7 ktCO_2; percentage of share of RE in the power generation mix of TIC countries was achieved at 22%, mainly due to the installation of solar farms in Saint Lucia as well as in Saint Vincent and the Grenadines. However, here as in other segments of this intervention, it should be clear that emission reduction was not a strict direct result of the project (since, as stakeholders have clearly indicated, the investments and implementation was attributable to a great degree to other resources and mechanisms that are outside the purview of the project). Nevertheless, it can be clearly stated that in those two countries the GEF/UNDP intervention aided in obtaining these emissions reductions and in increasing the respective countries share of renewable energy in their energy matrices.

Results at Outcome 1 Level: *Island-wide de-risked enabling environment for low GHG development through innovative policy tools*

- Number of RE/EE strategies and assessments with specific targets/number of countries where implementation of comprehensive measures (plans, strategies, policies, programmes and budgets) to achieve low-emission and climate-resilient development objectives have improved/Number of islands applying the de-risking method, resource conservation measures and Ten Island Challenge tools. Three of the five expected renewable energy transition strategies have been completed (for Belize, Saint Lucia, as well for Saint Vincent and the Grenadines). The strategies include specific targets and recommendations for renewable energy and energy efficiency projects, based on analysis targeted to each country as well as a framework and roadmap for advancing specific renewable energy projects. They await formal national approval for their implementation in some cases. In the Bahamas the project worked with stakeholders to outline a five-year renewable energy plan, based on stakeholder consultations. The role of the Project in these efforts was to provide technical support as well as to broker the

[26] Defined as: Accelerate the transition of Caribbean island economies from fossil fuels to renewable energy resources like wind, solar and geothermal, and energy efficiency measures. Help the participating islands to reduce their heavy dependence on fossil fuels while decreasing the cost of electricity for consumers through optimising the mix of conventional generation, renewable energy, and battery storage in a safe and reliable manner.

debates and discussions between interested parties and national stakeholders (for instance, between different ministries, with utilities companies, etc.).

- Number of Resource Conservation Measures (RCMs) modelled for health centres. In Belize, work was carried out by conducting energy audits at two main hospitals, with conservation measures modelled following the results of the audit. In addition, although not strictly RCM measures modelled, in partnership with the Caribbean Community Climate Change Centre, the program worked to create an energy retrofit guide for Caribbean healthcare facilities, which included modelling of 52 specific resource conservation measures.

Results at Outcome 2 Level: *Strengthened island capacity for integrated low GHG technical and operational planning and coordination*

- Number of stakeholder partnerships active in Ten Island Challenge knowledge management platforms disaggregated by sex, by age and by rural and urban. The Project reports articulation with three networks: CARILEC (the association of Caribbean electric utilities, and partner in the CAREC community and platform); IRENA (the International Renewable Energy Agency); WIRE (the Women in Renewable Energy Network).
- Number of local counterparts with improved capacity to partake in RE/EE developments disaggregated by sex, by age, and by rural and urban. The Project reports that the community of practice engaged with 1100 members of the CARILEC Renewable Energy Community (CAREC), of which 106 were from the beneficiary countries. It has hosted 23 webinars and eight live learning events. It has also hosted the first CAREC Renewable Energy and Smart Grid Conference in September 2018 with over 200 participants. However, this engagement is not calibrated in detail through Project reporting. For instance, it is not measured what engagement truly entailed (that is, active participants, non – duplicative participants in different activities such as webinars and other sessions, or just people who signed up to the platform). Furthermore, this reporting assumes that engagement equals improved capacity, which is not necessarily the case.

Results at Outcome 3 Level: *Catalysed island funding for low GHG technology deployment*

- Installed RE capacity through Ten Island Challenge. Target: 6 MW; Achieved: 6.2 MW: Saint Lucia solar, 4 MW, Bahamas solar, 925 kW, Saint Vincent Solar 500 kW; Saint Vincent (Grenadines) solar and storage microgrid, 100 kW plus 216 kWh; Saint Vincent (Grenadines) solar and storage microgrid, 800 kW plus 600 kWh. The specific role of the project was to prepare technical backstopping, analysis, and other aspects that helped leverage funding and catalyse an enabling environment of these installations. The target indicator for mobilization of resources was 63 million USD, the achieved level was of 13.65 million USD. Although there were expressions at design that there would be a focus on results on how the interventions would benefit underserved communities (for instance, the last

expected output in this outcome indicates this[27]), there were no specific indicators or targets to provide measurements for this matter. The target indicator is indicative of the number of new development partnership that would, ostensibly, benefit underserved communities and women, yet it is a product/process indicator and not a result indicator. Therefore, if this has been a result (i.e. benefits for underserved communities) it was not measured nor captured as specific target indicators.

In summary, therefore, it can be stated that the TIC project delivered a set of outputs and processes in several of the target countries. Following are highlights and some of the most salient outputs at each country level as well as at regional levels of results obtained:

- In *Bahamas* the project supported the drafting a 5-Year Renewable Energy Plan, as well as analysis of energy efficiency issues/energy in public buildings. The latter being one of the few produced concrete analysis and work dealing with energy efficiency and demand issues. Project reports also investments in solar energy in the country.
- In *Belize* the project facilitated the drafting of a consolidated energy plan.
- In *Saint Lucia* and in *Saint Vincent and the Grenadines* the project supported the initiation of solar farms. Furthermore, in each of these countries the Project facilitated the drafting of a national energy transition strategies.
- At a *region-wide* level a community of practice was established called CARILEC Renewable Energy Community (CAREC) in collaboration with CARILEC itself. Approximately ten percent of the members of this community of practice are from the countries targeted by the Project.
- In *Grenada* no results have been reported. This is due to the fact that there were certain risk conditions present in the country that hindered engagement with national-level stakeholders. That is, the Government of Grenada and the utility company were, and continue to be, in a conflict situation.[28] At the time of project implementation, the Government of Grenada and the utility company (GRENLEC) were even part of an international arbitration process. Furthermore, government stakeholders were not responsive about carrying out the energy audit that CWR/RMI proposed since they considered that a previous audit carried out with other stakeholders was still current, and therefore a new one unnecessary.

Regarding Outcome 1 and Outcome 2, it is of note, however, that there was no horizontal interconnection nor exchanges among and between the countries involved. This was even the case between the two countries that implemented solar energy projects and that carried out very

[27] Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women.

[28] Although the request for arbitration over the ownership of the utility was presented in May of 2017 (i.e. during implementation), conflict between the Government of Grenada and the utility company has been burgeoning for quite some time.

similar resource management and energy plans exercises, that are very near to each other geographically, and share many commonalities.

As a summary, it can be said that the TIC Project has been a project that has developed or helped develop products, outputs and outcomes to varying degrees in most of the target countries.

COMMUNICATIONS AND VISIBILITY

A project's external communication not only attends to the visibility of the intervention, it also gives an account of a project's progress and intended impact through communications, outreach and even in some cases through public awareness drives. The TIC project did not have a specific communication strategy and there was no direct nor indirect public information drives as part of the Project. Furthermore, the visibility of the project in relation to UNDP/GEF roles was diluted and in several instances products or processes did not or do not have attribution to the role of GEF or UNDP. The Project did not communicate this strategically, and partners in turn did not perceive this properly. This lack of clarity shaped misconceptions on the part of many stakeholders regarding the Project. For instance, several key stakeholders were not aware until very late in the implementation process that this was a GEF-funded UNDP-implemented project.

RELEVANCE

When analysing relevance for the TIC Project, the scrutiny can be done at two levels. First at the level of needs for countries involved and second at the level of formal aligning of the Project with development plans and UNDP/GEF corporate mandates. The latter relates as to the extent to which a project and its interventions and activities are suited to local and national development priorities and needs as well as programmatic UN priorities. Regarding the former, relevance vis-a-vis the countries' needs, it can be stated that the Project was relevant to a very large degree.

Regarding alignment with regional plans as well as corporate and programmatic UN priorities, the TIC Project is fully aligned with both mandates. As indicated in the Project Document, as well as in other related implementation documents, the Project is aligned with explicit policies as indicated below, current at the time of design and formulation:

- UNDAF/SPD Outcome 1: Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance
- UNDP Strategic Plan 2014-2017 Primary Outcome: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded

- Output 1.4. Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented
- Output 1.5. Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)

- Expected M-CPAP Output(s): Output 6: Improved energy efficiency and the removal of barriers to the introduction and transfer of renewable energy technology facilitated

Furthermore, the Project is aligned with and relevant to regional development as well as environment and climate change objectives as defined by CARICOM, OECS and other regional frameworks. For instance, it is aligned with the "Barbados Declaration" of 2012 which entailed voluntary commitments from Small Island Developing States (SIDS) contributing to the Sustainable Energy for All (SE4ALL) initiative, reiterated at the UNCSD Rio+20 Conference. Moreover, at the country level, Caribbean countries are focusing their long-term sustainable development strategies on the principles of climate risk management and resilience building. In this context, the latter are understood as market transformations based on "adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts".

The Caribbean Community Climate Change Centre (CCCCC) has been designated by CARICOM Heads of Government as the regional coordinating agency for the response to climate change, guided by the Regional Framework for Achieving Development Resilient to Climate Change 2011-2021 and its Implementation Plan. It is likewise a repository for regional climate change information and data. This Centre was also a partner in the implementation of several products associated to the Project in Saint Vincent and the Grenadines, clearly linking therefore the expressed relevance of regional policies with direct implementation.

Another pertinent instrument that encompass the Project's alignment in the region is the CARICOM Regional Energy Policy. It has as its goal the "fundamental transformation of the energy sectors of the Member States of the Community through the provision of secure and sustainable supplies of energy in a manner which minimises energy waste in all sectors, to ensure that all CARICOM citizens have access to modern, clean and reliable energy supplies at affordable and stable prices, and to facilitate the growth of internationally-competitive regional industries towards achieving sustainable development of the Community".

Additionally, the project correlates to the GEF Climate Change focal area which has been designed to deliver global environmental benefits in line with relevant international climate change objectives. The applicable GEF Strategic Objective and Program are GEF-6 CCM-1 Strategic Programs 1 and 2, and the applicable GEF Expected Outcome are Outcomes A, B and C for accelerated adoption of innovative technologies, policy frameworks and financial mechanisms for GHG emission reductions. The applicable relevant GEF Outcome Indicators are: (1) Market penetration of on-grid RE (% from renewables); (2) GHG emissions from electricity generation (tons CO2eq/kWh and $/tons CO2eq); and (3) no. of jobs/beneficiaries. The focal area Objectives, (OP/SP) are two: SP 1. Promoting access to clean and affordable energy services;

and SP 2. Promoting low emission and climate resilient urban and transport infrastructure (CCM Program 3).

Given the relevance of the issue for the countries involved as well as the alignment of the Project with UNDP, GEF, regional and national mandates, the rating for this criterion is *R* (*Relevant*).

EFFECTIVENESS AND EFFICIENCY

Effectiveness and efficiency are two very inter – related concepts in project evaluations. Efficiency is defined as the extent to which results have been delivered with the least costly resources possible. Efficiency is a measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results. The effectiveness of a project is defined as the degree to which the development intervention's objectives were achieved. The valorisation of effectiveness is used as an aggregate for judgment of the merit or worth of an activity, (i.e. the extent to which an intervention has attained, or is expected to attain, its major relevant objectives proficiently in a sustainable fashion and with a positive institutional development impact).

Regarding efficiency, the Project has been efficient in achieving outputs/products and in achieving outcomes and effects/impact in most of the target countries, yet to a varying degree of accomplishment. Also, it has provided value-for-money since it achieved the results within budgets, agreed disbursement, etc., while leveraging investments and in-kind support from sources external to the project per se. The efficiency in this case also relates to the internal control and internal efficiency capacities as well as meeting with the explicit responsibilities of the implementing partner (i.e. CWR/RMI) for the execution of project funds. In terms of efficiency, also, HACT and financial audits were carried out periodically, and successive audits demonstrated financial efficiency in the use of funds. Therefore, the overall ranking of efficiency is *Satisfactory (S).*

The effectiveness, that is, the extent to which the TIC Project has attained its major relevant objectives is also varied. In some countries and for several of the expected outcomes it did, in others it did but to some degree, and in another country it did not. Also, it is problematic to determine the effectiveness of the community of practice (CARLEC). Although the CoP was operative at the product/process level, that is it did carry out webinars/events/etc., the effect or effectiveness of such product/processes and their results has not been captured. Therefore, the overall ranking of efficiency for the *Moderately Satisfactory (MS).*[29]

COUNTRIES' OWNERSHIP

Assessing country ownership for the TIC project is somewhat complex given the actual implementation modality. There are elements that indicate that there was national ownership in most countries (expect Grenada) to a varying degree between countries, however. The different

[29] This assessment is in agreement with the overall rating given to the Project in the final cumulative PIR.

Government's explicit involvement and support of the Project, and the involvement of different institutions that deal with energy, is indicative to some degree of ownership factors in this scope. Yet having been this a project implemented by a non-state actor, and additionally from outside the Caribbean region, on the other hand has curtailed to some degree the country ownership normally derived from this sort of project as well as the potential institutional development impact that such an endeavour could have had.

MAINSTREAMING

Given that UNDP-supported GEF-financed projects are key elements in UNDP country programming, project objectives and outcomes should align with UNDP country programme strategies as well as to GEF-required global environmental benefits. When dealing with mainstreaming, evaluations also explore whether project outcomes are being mainstreamed into national policies.

The TIC Project has help create products, also, that, if implemented, could be attuned with UNDP priorities of improved governance and improving natural resource management (for instance the renewable energy plans developed in several of the countries as well as the energy audits developed in others). Other UNDP priorities, such as sustainable human development, and a gender equality approach were not specified clearly as expected outcomes of the Project. That is, they were not specified strongly as outcomes.

Regarding development, it is noteworthy that although the project focused upon global environmental benefits derived by the reduction of emissions (linked therefore with the Project's major metric of planned success), there were other developmental outcomes that are also related to mainstreaming. For instance, regarding equity, since generation of renewable energy is not oil-dependent, fuel surcharges are not levied nor paid by consumers, making renewable energy more equitable and less costly in countries where electricity is quite expensive. Moreover, as several stakeholders at the national levels of implementation have pointed out, the drive for renewable energy implies that a country is less prone to be affected by the variations and fluctuations of the international oil market and therefore more self-contained in relation to energy generation. Lastly, and this was included as an expected outcome, there has been job creations in the setup of renewable energy endeavours (construction and procurement), albeit a temporary, it is a benefit nonetheless that generated capacity.

Although the Project developed activities related to women in the renewable energy field[30] (and harnessed some data differentiated by gender regarding women's participation in the Project or in the associated networks) the project did not thoroughly consider thematic issues related to gender and energy issues beyond the participation of women in networks, as employees in the field, etc. In particular, the project did not seek nor actively pursue equality of

[30] Articulating with the WIRE network as part of Outcome 2 (i.e. Strengthened island capacity for integrated low GHG technical and operational planning and coordination and specifically measured through output 2.1. "Number of stakeholder partnerships active".)

access to clean energy services, for instance. As the 2019 cumulative PIR indicates, there has been no noticeable contribution to gender equality (GEN0 Atlas Gender Marker Rating).

SUSTAINABILITY

Sustainability of an intervention and its results are examined to determine the likelihood of whether benefits would continue to be accrued after the completion of the project. Sustainability is examined from various perspectives: financial, social, environmental and institutional.

Financial sustainability: Financial risks to sustainability relate to the likelihood of financial and economic resources not being available once the assistance ends. Since financial risks are at the very core of many of the issues related to renewable energy investments in the five countries involved, financial sustainability is a key issue to maintain and accrue benefits. Even at the planning stage this issue was identified, given that it was indicated that "Perhaps most important, however, is the fact that these islands are small economies, and it can be difficult to attract investor interest and the capital needed to construct these facilities."[31] The plans drawn (such as the integrated resource plans and the national energy transition policies) need a strong financial substructure to be implemented, when and if approved. Moreover, the CAREC community of practice, although already established and successfully integrated to CARILEC, would also need funding for this institution to continue to run it and be sustainable in the long term. Therefore, the ranking for financial sustainability is *Moderately likely (ML),* given that, although there are moderate risks, there are also expectations that at least some of the outcomes will be sustained in time.

Socio-economic risks to sustainability: When analysing socio-economic risks to sustainability, an examination is made of the potential social or political risks that may jeopardize sustainability of project outcomes. The level of stakeholder ownership, as seen in the narrative of this report, is somewhat strong in some countries and weak in others, and this poses some socio-economic risks to sustainability. Although governments do indicate that it is in their interest that the project's benefits continue to accrue, other risks are still identified for some countries. Conceivably this is indicative of the countries willingness and or need to shift more of their energy matrix to renewables. The two countries that presented more concrete results (i.e. Saint Lucia and Saint Vincent and the Grenadines) were the two countries more prepared to transition fossil fuels to renewables due to the cost of energy from fossil fuels, their plans to impulse renewable energy before the project, etc. That is, several conditions were in place prior to the project that aided in buy-in and conceivably to socio-economic sustainability. Countries not fully engaged in transition to renewables for several reasons (cost of energy already used does not support cost-benefit for shifting to renewables, internal conflicts, etc.) are the ones more likely to present socio – economic risks to sustainability. Therefore, the ranking for socio-economic sustainability is *Moderately Likely (ML),* given that, although there are moderate risks, there are also expectations that at least some outcomes at different levels would be sustained.

[31] Source Project Document.

Institutional framework and governance risks to sustainability: At the time of the final evaluation there are no clear institutional and governance changes in most countries that would link to governance sustainability. There are no clear-cut legal frameworks, policies, governance structures and processes in place attributable to the Project as such. Yet, some of the energy-related plans generated within the scope of the TIC Project that pend approval are likely to be accepted and adopted. Therefore, the ranking for this sort of sustainability is *Moderately Likely (ML)* given that there is substantial risk that outcomes will not materialize in a manner attributable to the Project or will not carry on after project closure, although some outputs and activities should and are likely to carry on.

Environmental risks to sustainability: Environmental risks to sustainability conflicts are identified as those associated with natural resource management and regarding climate change. Weather patterns in the Caribbean due to climate change continue to affect and increasingly impact island and coastal nations due to an increase in severity of weather events such as hurricanes. At the time of the evaluation mission a hurricane category five devastated Bahamas, and this has brought to bear to stakeholders in the region several issues related to energy. For instance, that solar farms are currently planned to withstand lesser hurricane categories than five, therefore stakeholders indicate that they will need to plan with higher scale impacts in mind than what is done currently or what was done within the Project's framework. This includes ensuring that design and set up of investments can withstanding extreme weather conditions. Therefore, given the moderate risks faced, the ranking for environmental sustainability is *Moderately Likely (ML).*

With regards to sustainability, it is noteworthy to observe that the Project IP has developed a document containing an exit strategy report that deals with several of the sustainability factors indicated above. Although the report has only been generated at closing, with little opportunity as of yet for stakeholder assimilation and ownership in the countries involved and in the region, it draws a general road-map for follow-up and sustainability (see Annex 6: Exit Strategy Report). It identifies specific stakeholders to whom responsibilities for follow-up and sustainability would transfer and presents what processes need to be in place to ensure that positive impact continues following closing. It does not specify many sustainability issues at the country levels, but it deals a great deal with sustainability for the community of practice, in order for CARILEC to assume the running of this component. It also has components for replication and catalysation of results in other countries besides the target countries associated to the GEF/UNDP initiative.

Taking a composite view of the rankings for financial, socio-economic, institutional as well as environmental sustainability probabilities, the overall likelihood of sustainability is ranked as *ML (Moderately Likely).* This is assuming that although there are generally moderate risks expectations there are expectations that at least some outcomes will be sustained.

IMPACT

The environmental impact and global environmental benefits of the project is mainly measured through the metric of greenhouse gas emissions avoided. Although expected impact indicators were not achieved at the expected level due to the over ambitiousness of these upon design, there has been clear evidence demonstrating that there have been verifiable improvements in global ecological status and verifiable reductions in stress on ecological systems due to emissions avoided. Given that the emissions avoided thus far are associated to the new solar energy endeavours and their installed renewable energy capacity, it can be stated that the impacts are sustainable, at least as long as these investments remain operational. Furthermore, the leveraged new sources of financing and investment is also a demonstrated effect that has led to impact.

Although much of the emphasis has been on impact and corresponding metrics for emissions avoided, there are other effects discerned thus far that did not have any specific measurement attached, but have been achieved nonetheless. For instance, reduction of energy costs (globally and for consumers), reduction on dependency on foreign oil, and generation of capacity in-countries to transition towards energy matrixes more broadly based on renewables. Therefore, the impact ratings for the TIC initiative is *Significant (S).*

4. CONCLUSIONS, LESSONS LEARNED, AND RECOMMENDATIONS

4.1 CONCLUSIONS

Sustainable energy (in the context of this initiative), primarily means economically viable renewable energy and energy efficiency ventures that displace fossil fuel-based electricity. It is within this definition that Project *the Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables* operated in the Caribbean in the last several years. The project addressed several barriers (regulatory, institutional/technical, and market barriers) faced by countries in the region for transitioning to renewable energy.

Addressing the barriers was to be achieved through three expected outcomes (interconnected to corresponding products/outputs):

- Outcome 1. Policy De-risking Measures: Island-wide de-risked enabling environment for low GHG development through the demonstration of innovative policy tools
- Outcome 2. Institutional and Technical Capacity: Strengthened island capacity for integrated low GHG technical and institutional stakeholder planning and coordination
- Outcome 3. Investment Projects and Financial Mechanisms: Catalysed island funding for low GHG technology deployment.

It is noted, therefore, that the overall strategy of the project was to deal with each of the barriers through a corresponding outcome (regulatory barrier: Outcome 1, institutional/technical barriers: Outcome 2, and market barriers: Outcome 3).

The project has had varying degrees of success in achieving each of these outcomes. Overall, it had better performance in renewable energy issues than in energy efficiency matters. For Outcome 1, plans and policy tools have been drawn, yet the actual implementation of these is still has not occurred in all cases at the time of the evaluation, perhaps due to the fact that they were just achieved at the end of the implementation process. It is understandable that a Project (in particular a project implemented through a non-governmental organization based outside of project execution region) does not implement policy, yet this draws attention to the need of working closely and jointly with those partners that do or would implement such tools, developing mechanisms for this sort of implementation. This is particularly the case when a project is not implemented by a local/national state actor and the leverage for implementation is ultimately not there. The Project played a pivotal role in brokering dialogue between parties that can be considered divergent in their outlook on renewable energy.

Outcome 2 mainly entailed the creation and a platform or community of practice with the aim of creating or fostering individual and institutional capacity. The process for seeking this result were learning events and webinars. This has been a positive initiative for piloting such an effort in the region. Although uptake, effect and actual use of this technical capacity

development has not been captured to date, there are ample opportunities for the regional partners in the Caribbean to upscale, refine, augment and replicate this sort of platform in the near future in order to generate and transfer capacity with regional, national and local actors.

Outcome 3, lastly, is one of more visible outcomes associated to the TIC Project and the one that links to measurable impact in terms of global environmental benefits (reduction in emissions) as well as in terms of electricity cost reductions. It also has a high catalytic potential due to these results. Through the aid in mobilization of funds and through work in technical backstopping, the intervention supported the setting up of solar energy projects. This collaboration with national-level partners (utilities, governments) has brought about the clearest impacts, not only in terms of global environmental benefits but also in developmental benefits in those nations where renewable energy projects have been built. Conclusions can be drawn as to the degree of success in some countries and not in others in relation to the actual establishment of renewable energy installations. The degree of maturity of the renewable energy discussion and buy-in at the national level between the different parties, as well as agreement regarding the need to move away from fossil fuels is one of the factors that has aided implementation. The cost-benefit of the shift to renewable energy versus more traditional fossil fuel sources is also a factor that has either hindered or aided results as the case may be. Lastly, if there is inherent conflict in the electricity field between different stakeholders is indicative that there will be little or no results. Therefore, it is a question to analyse as to the existing situations regarding how ready a nation is to transition to renewable as a factor of a project success.

Generally, also, there were other results or effects which were not measured nor measurable with the Project's metrics and indicators and therefore not captured in reporting but have been equally important in the implementation process. The most salient of these unplanned effects is the promotion of trust between actors which might have antagonistic views regarding renewable energy. In the countries where results, effects and impacts are more evident, the role of Carbon War Room/Rocky Mountain Institute in brokering these dialogues, as well as the recognition of UNDP and of GEF as impartial actors whose aim is the promotion of sustainable development in the countries where it carries out projects, greatly supported this process.

Project design showed a series of failings that manifested themselves in implementation and in monitoring/reporting. To begin with, design was not as robust as necessary at the inception phase. First, the convoluted planning where many areas and countries that are outside of the GEF-funded UNDP-implemented project are included as an integral part of design was very unclear and contributed to a series of misconceptions and misunderstandings, even with several of the national-level partners. Second, the lack of robustness in design also manifested in the overambitious and unclear indicators. Furthermore, there was no profound analysis of the multi-layered issues that go together with transition to renewable energy in the Project's target countries. For instance, there was no robust analysis of risks, assumptions, national alignment with renewable energy options, as well as broader development issues.

Implementation through a non-governmental organization not based in the target region has proved in this case to have several positive aspects, in particular for what can be considered pilot interventions in the field. Although this implementation modality cannot be extrapolated

to all sorts of projects and interventions, there have been some positive aspects to implementing in this manner. For instance, efficiency in delivery, a programmatic approach to implementation, ability to broker processes with a series of diverse stakeholders, and the capacity to leverage outside funding have been constructive assets of this implementation modality with CWR/RMI.

On the other hand, however, there were several issues with this sort of implementation modality. Several of the matters are related to questions such as alignment with national policies and outlooks, understanding of some country's developmental and energy issues, fomenting appropriation and sustainability so that national and regional partners can uptake achievements and carry on, as well as communication and visibility of other stakeholders besides the implementing partner. Several of the implementing issues can also be linked to design. At design it was not overly specified how this modality would work, how this unique arrangement will report, what is the implementing agency's leverage, and even the specifics of decision-making process were not clearly elaborated upon.

The Project concludes with several key achievements, several of which are translated into effects and positive impacts. As a pilot it leaves not only products and processes, but also a series of lessons to be learned. Furthermore, the accomplishments have a very high replication and upscaling value and can prove to be catalytic, not only in the Caribbean region but in many developing countries contexts.

4.2 LESSONS LEARNED

There are a series of learned lessons that can be assimilated in the future for enhanced project planning and implementation. These lessons are listed below, and many are linked to proactive recommendations in the next section of this report.

- Design robustness, or lack of, has an indelible impact on implementation and monitoring.
- If indicators are not robust, applicable and achievable, then implementation and monitoring could be negatively affected.
- Throughout implementation, opportunities for adjustments are essential (adjustments to indicators, for adaptive management, etc.) in order to properly reflect changes in exogenous conditions or to adjust for over ambitiousness.
- When innovative implementing modalities are applied, these should be accompanied by proper architecture and guidelines on how this implementation would take place from design onward, how reporting is to take place (to whom, when, etc.) and how the decision-making process and assurance are carried out.
- Gender equality promotion does not occur unless a specific gender approach that addresses fully the different needs of men or women is developed early on in design and in the implementation process.
- The usefulness of an exit and sustainability strategy is related not only to content but also to when it is drawn and carried out. In order for an exit strategy to be

appropriated by the relevant parties which will implement all or some of the strategy's options, an exit/sustainability strategy needs to be drawn and carried out at a proper time and not at the very end of a project.

4.3 RECOMMENDATIONS

1 Design, especially of complex interventions, should contain in-depth knowledge of the areas and countries where interventions will take place, not only of the subject per se of the project being implemented, but also of the development context, political framework as well as assumptions and risks of the intervention. There has to be extensive underpinning and analysis during design to harness strategic knowledge of the area(s)/country(ies) where a project would be implemented. If the project is to be implemented by an organization from outside the country, then there have to be links to national/regional resource persons and expertise which can provide knowledge and information.

2 In order to enhance stakeholder engagement in implementation, and therefore impel improved results with a strong ownership potential, at design there should be a careful stakeholder analysis. This analysis should not only include a list of potential stakeholders, yet it should contain an accurate typology, stakeholder mapping, and also indicate what are stakeholders' concerns, incentives, goals and expectations vis-à-vis the anticipated results.

3 Outcome indicators should be robust, yet they should also be applicable and achievable within the context of implementation as well as realistic overall in terms of a project's resources and implementation time.

4 There should be opportunities for the adjustment and reformulation of indicators and metrics package throughout the implementation process as a means for adaptive management.

   a. This should be communicated properly to the relevant partners, indicating how these changes are to be conveyed, what supporting data and information is needed for the changes, and what are the appropriate mechanisms.

   b. This process should be communicated to relevant partners early enough in the implementation process.

   c. Project reformulations, changes, reforms and other such alterations need to be precise, and implemented as soon as early signs of failings manifest themselves.

   d. When these opportunities are not presented compellingly, UNDP should assert the need for this to take place in order to improve implementation.

5 Projects such as this one, with inherent complexities, pilot projects and interventions testing innovative implementation modalities should have a mid-term review, not only to give transparency to the achievements up to the midpoint

assessment but also to act as a catalysing factor to adjust whatever needs to be adjusted at that point.

6 Projects that instrument innovative sorts of implementation modalities should have very clear guidelines from onset on all matters related to implementation.

   a. Much as more traditional implementation modalities have manuals and guidelines and procedures, these should also be present for non-governmental modalities and the same imbedded in design instruments.

   b. Matters such as accountability, reporting, and oversight should be made specific and adapted to the modality.

   c. Particularly when implemented by entities outside a region or outside a country, staffing should include national project coordinators, in order to support the implementation as a whole in the particular country, attend to national implementation, and to anchor the project at the national level.

7 When training activities are designed, uptake and use (that is, monitoring of the application of knowledge acquired), as well as actual capacity built should be measured in order to understand the effects of these activities and to promote improvements and upscaling in the future. Indicators for increasing or building capacity should be robust measures of improved capacity, and at all possible, also capture use of conveyed capacity.

8 Multi-country projects should have mechanisms for horizontal exchanges between and among the countries involved. Not only to trade information but also to exchange lessons learned, problems and achievements between the different stakeholders from the different countries where a project is implemented.

9 Risks within a project should not be underestimated, and a risk management framework should be drawn at design and reviewed continuously. Once properly established, risks should be continuously monitored in order to promote whatever mitigation measures or adaptive management needs to be implemented.

10 Development projects such as this should have as its primary prospect to generate durable capacity at the national/regional levels. All efforts should be made to generate local capacity as well as introduce national issues in the resulting products. Although engaging with an entity from outside a country or region might be necessary to pilot interventions, follow up should be carried out as much as possible with national or regional institutions and/or expertise.

11 In order for projects to promote a gender equality approach, a strategy (that is an action plan based on gender analysis) should be set that addresses fully the different needs of men or women. It should be comprehended that a “women in” approach (that is the participation of women in whatever fields or activities a project promotes) is not a comprehensive gender equality approach. Projects

need to consider gender mainstreaming strategies from the onset of an intervention.

12 Exit and sustainability plans should be drawn earlier than at project finalization. This is in order for these plans to be appropriated by the relevant parties which will implement all or some of the strategy's options. An exit/sustainability strategy should also aim to make implementing partners and implementing agencies redundant, by accurately transferring capacity and the mechanisms that generate sustainability of achievements in the long term and not continue to be dependent upon them.

13 Projects should have a clear communication strategy.

a. A project's communication strategy should be an ongoing process that generates buy-in, generates knowledge about the issues a project deals with as well as acknowledge its visibility.

b. A communication strategy needs to be accompanied by clear inputs where the different partners are identified (funders, implementing agency(ies), UN agencies involved).

c. A communication strategy should document and communicate issues, achievements, and challenges.

d. Also related to communication is the need to give proper visibility and transparency to all partners involved and what are their roles in a project.

5. 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 *Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables* (PIMS 5526)

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

PROJECT SUMMARY TABLE

Project Title:	The Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewa			
GEF Project ID:	9112		*at endorsement (Million US$)*	*at completion (Million US$)*
UNDP Project ID:	00095631	GEF financing:	1,826,484	1,826,484
Country:	Regional	IA/EA own:	4,550,000	4,550,000
Region:	RBLAC	Government:		
Focal Area:	Climate Change	Other:	300,000,000	300,000,000
FA Objectives, (OP/SP):	SP 1. Promoting access to clean and affordable energy services SP 2. Promoting low emission and climate resilient urban and transport infrastructure (CCM Program 3)	Total co-financing:	304,550,000	304,550,000
Executing Agency:	UNDP	Total Project Cost:	306,376,484	306,376,484
Other Partners involved:	Rocky Mountain	ProDoc Signature (date project began):		15 March 2016
		(Operational) Closing Date:	Proposed:	Actual:

	Institute/Carbon War Room		31 December 2018	30 June 2019

OBJECTIVE AND SCOPE

The objective of the Ten Island Challenge (TIC) is to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency, thereby establishing a blueprint for other isolated economies. By accelerating the transition of islands to renewable energy sources, national governments can accomplish the following: lower electricity costs in the household and industry sectors; increased private investment on-island with the introduction of more and higher skilled jobs; lower GHGs and less local pollution; improved energy efficiency across different sectors and less money spent on fuel.

For this initiative, CWR will track the following key performance targets as a way of measuring success. The overall goal will be to have the islands participating in the program achieve renewable energy penetration that amounts to 20-50% share of RE in the power generation mix by 2030.

Outcome 1. Policy De-risking Measures:	Island-wide de-risked enabling environment for low GHG development through the demonstration of innovative policy tools
Output 1.1 Clean energy action plans to meet Ten Island Challenge targets in the Caribbean developed:	Goals and vision statements for each island participant with commitments and resources to meet them Renewable energy and energy efficiency strategies and assessments on selected islands with specific targets that are inclusive, gender responsive and human rights-based and include recommendations for clean energy livelihoods initiatives
Output 1.2 Policy de-risking analysis and guidance for Ten Island Challenge countries in the Caribbean provided:	Use of de-risking tools to low carbon energy technologies in the Caribbean context Model twelve possible Resource Conservations Measures (RCMs) for health centers Regional guide development (including support for grid integration and energy efficiency in hospitals) Transformation of the market and regulatory framework to demonstrate effective grid integration or renewable energy resources across the Caribbean

An important challenge for any utility dealing with large-scale renewable energy investments is integrating intermittent resources into the grid. Conventional power plants cannot be brought on and off-line quickly enough in response to changes in wind and solar power production with the changing weather. There are a number of technologies and practices that help mitigate this risk, as well as energy storage options. With smarter grid devices and software – combined with changes in government policy and utility practice – the grid infrastructure can do a better job absorbing intermittent energy supplies with minimal curtailment or risk to power lines, transformers, etc. CWR will put together a resource guide with case studies (including the use of innovative technology and the design instructive policy and regulatory changes) that demonstrate effective grid integration of renewable resources. This analysis will be tailored to the Caribbean context and will offer practical advice and guidance to utilities, regulators, private developers and others seeking to ensure that as many MW of renewable energy can be delivered through the grid as possible.

Based on the available data points and interviews with hospital/health facility officials, CWR will establish a benchmark energy use index for a typical hospital as a foundation for the comparison of building-wide, energy savings potential. The team will model twelve possible Resource Conservations

Measures (RCMs) for their savings potential and cost savings and develop a tool to allow properties to input simple property-specific information such as number of beds, age of property and utility rates to construct energy savings scenarios and likely returns on investment. CWR will also develop an Energy Retrofit Guide that addresses a whole building approach and process. The guide will be disseminated across the region, and GEF funding would support dissemination costs.

Outcome 2. Institutional and Technical Capacity:	Strengthened island capacity for integrated low GHG technical and institutional stakeholder planning and coordination
Output 2.1 Caribbean platforms for clean energy technology research, development, transfer and adoption enabled:	Caribbean Energy Transition Community of Practice for government officials, utility and other networking and coordination bodies (e.g. CARILEC, CARICOM, CDB, CCCCC) As part of the COP, a network of young leaders will be created to identify and nurture youth to transition and lead the clean energy sustainable development agenda in the Caribbean The virtual Caribbean energy transition platform will host a number of project related templates including standard Purchasing Power Agreement templates, Standard Engineering, Procurement and Construction contract templates, checklists for bankability, etc. This Community of Practice will support a pipeline of bankable projects that are eligible for financing Gender responsive mechanisms will be put in place to support technology transfer through consultation with an inclusive stakeholder base
Output 2.2 Skills and expertise in island-wide clean energy investment de-risking and market transformation built:	Gender responsive regional workshops and capacity building for knowledge-sharing and lessons learnt Follow-up tools, guidance and materials to measure and ensure the impact of capacity interventions

To facilitate the sharing of knowledge, tools and technology across the participating countries – and build the capacity of utility and government officials with grid integration – a sustainable community of practice (CoP) and on-line forum will be created. This CoP will be a peer network and target utility engineers, government energy practitioners and development partners active in the renewable space. With a range of on-line resources, discussion fora and in-person meetings, the CoP will promote and facilitate a culture of information sharing. The result of this cross-fertilization of ideas and experience will be to build the capacity and inform decision making across the network about how best to solve the barriers that inhibit the growth of renewable energy generation. Training workshops that include utility and government leaders from all participants in the Ten Island Challenge (TIC), with all associated materials and follow-up to measure impact of these events.

As part of the CoP, a network of young leaders will be created to support the identification and nurturing of youth who are keen to lead the energy agenda in the region and ensure that energy transition is sustainable. The network will help:

- Strengthen the learning platform for the Caribbean Energy Transition;
- Highlight the leadership on the energy agenda that Caribbean islands are keen to demonstrate;
- Highlight the position of islands leading the demonstration of solutions to climate change;
- Establish an engagement programme specifically designed for the region, led by young individuals from the region; and

- Build on the innovation from this generation of leaders to develop a framework for the future of sustainable energy and economic growth.
- Encourage the active participation of women and girls in all aspects of the renewable and energy efficiency space

The virtual Caribbean Energy Transition Community of Practice will host a number of project related templates including standard Purchasing Power Agreement templates, standard Engineering, Procurement and Construction contract templates, checklists for bankability, etc. This virtual platform will facilitate knowledge around the steps, studies and information required to support a bankable renewable project.

Skills-training workshops will be gender-responsive by mainstreaming the role of women in the RE/EE space. Women will be trained and equipped with the knowledge and skills necessary to transition into, or develop further in the RE/EE space.

Outcome 3. Investment Projects and Financial Mechanisms:	Catalyzed island funding for low GHG technology deployment.
Output 3.1 Caribbean energy resource capacity established:	Ten Island Challenge-wide gender responsive renewable energy assessments, feasibilities and analyses. Resource technical, economic and financial potential
Output 3.2 Clean energy island-wide investments leveraged:	De-risked equity/lending structures and other financing mechanisms to deliver on Caribbean clean energy targets Feasible investment project pipeline (400 MW) across Ten Island Challenge participant countries applying the Islands Playbook Plans for clean energy operation and maintenance in place Goals and vision statements for each island participant that outlines the overall goal for the island (X% of renewable energy by Year Y) with a commitment of staff and other resources needed to meet that commitment (Phase 1 and 2 of Islands Playbook). Development of investments that take account of the varying needs of rural communities and marginalized groups.

The success of this project will be evaluated in large part by the number of MW of renewable energy generation (as well as MW saved through efficiency) developed under the project. This work will involve island-wide, renewable energy assessments, including renewable resource potential, technical/economic assessments of individual projects, feeder specific grid integration studies and potential equity/lending structures to present to investors and lending institutions. Operation and maintenance plans are included as well (Phase 3-6 of the Islands Playbook). Phase 3 (Project preparation) involves the identification and prioritization of bankable projects, further to the confirmation of country level commitments (Phase 2). As such, the main criteria for pipeline selection will be geographical distribution across participant TIC islands. The pipeline results from: (a) the set-up of project development guidelines, (b) RE project development best-practices, (c) project risk mitigation; leading to, (d) the preparation of request for proposals (RFP), (e) the selection and negotiation with selected vendor(s), and finally (f) the commercial agreement and financing for the project to start. The Table 4 lists the preliminary capacity and project pipeline targets that have been set during the project period:

Table 3. Installed and committed capacity targets.

Activity (70% of which is wind and PV)	Total MW Installed and Committed
Wind, PV, energy storage projects in 2015	40 (28)
Wind, PV, energy storage projects in 2016	100 (70)
Wind, PV, energy storage projects in 2017	280 (196)
TOTAL (Installed and Committed)	400 (294 PV/wind)[32]
TOTAL (Installed)	85 MW

The Project forms part of a wider initiative – the Island's Energy Programme – which is funded by various other, non-GEF sources and implemented by RMI/CWR and other partners across the Caribbean. The GEF grant covered a series of specific interventions in the Bahamas, Belize, Grenada, Saint Lucia and Saint Vincent & the Grenadines. This Terminal Evaluation will focus only on those components of the Programme that are funded and supported by the GEF grant.

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[33] 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), including the following project sites: Saint Lucia 3 MW solar PV project near Hewonarra International Airport; Saint Vincent and the Grenadines 500 kW solar PV project at Argyle International Airport. Interviews will be held with the following organizations and individuals at a minimum:

Barrymore Felicien, Government of Saint Lucia

Victor Emmanuel, LUCELEC;

Ellsworth Dacon, Government of Saint Vincent and the Grenadines,

Vaughn Lewis, VINLEC

[32] This figure includes 106 MW target for energy storage (mainly electricity battery-based type, with potential thermal water heating applications) estimated to trigger of $79.5m of investment (i.e. $0.8-0.9m per MW installed).

[33] For additional information on methods, see the Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 7, pg. 163

Cletus Bertin, Director, CARILEC

Kurt Inglis, Ministry of Sustainable Development, Government of St. Lucia

Christopher Joseph, Energy Officer, Ministry of Finance and Energy, Grenada

Ryan Cobb, Energy Officer, Ministry of Public Service, Energy and Public Utilities, Bahamas

Rhianna Neely, Environmental Policy, Climate Change Risk Perception, Belize

Katya Whyte, Justin Locke, Chris Burgess, Kaitlyn Bunker, Roy Torbert – RMI/CWR

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 B 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 (Annex A), 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.

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		Overall likelihood of sustainability:	

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$)		Total (mill. US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions					304,550,000		304,550,000	
• In-kind support	200,000						200,000	
• Other								
Totals	200,000				304,550,000		304,750,000	

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will comprehensively assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender. This analysis is critical for an understanding of how the project addressed cross-cutting issues and the extent to which it reflected an appreciation of the nexus between energy and sustainable human development.

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, b) verifiable reductions in stress on ecological systems, c) energy-related impact results (emissions avoided, energy saved, increase in installed renewable energy capacity), d) leveraged new sources of financing and investment and/or e) demonstrated progress towards these impact achievements.[34]

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 Multi-Country Office for Barbados and the OECS in Barbados. The UNDP MCO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country 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 *20* days according to the following plan:

[34] 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

Activity	Timing	Completion Date
Preparation	*3* days	*7 calendar days after contract signature*
Evaluation Mission	*5* days	*26 calendar days after contract signature*
Draft Evaluation Report	*8* days	*27 calendar days after contract signature*
Final Report	*4* days	*61 calendar days after contract signature*

EVALUATION DELIVERABLES

The evaluator is expected to deliver the following:

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

All reports must be presented in **English**.

TEAM COMPOSITION

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

The Team members must present the following qualifications:

- Minimum *10* years of relevant professional experience
- Experience and knowledge of UNDP and GEF
- Experience and knowledge in development cooperation projects related to climate change and/or energy
- Demonstrated experience conducting results-based monitoring and impact evaluations for sustainable development programmes/projects;
- Technical knowledge in climate change mitigation
- 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 and work plan
40%	Following submission and approval of the 1ST draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

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: ITINERARY/MISSION AND MEETINGS HELD AS PART OF THE EVALUATION PROCESS

Date Time and Location	Agenda Item: Activity	Participants
Friday August 9th 10:30 am Online	Conference Call	Jason LaCorbinière, UNDP Allan Franklin, UNDP Justin Locke RMI/CWR Kaitlyn Bunker RMI/CWR
Tuesday September 3rd 5 pm Online	Meeting	Gessert Cory DNVGL
Wednesday September 4th 2 pm Online	Meeting	Kaitlyn Bunker RMI/CWR
Wednesday September 4th 6 pm Online	Meeting	Roy Torbert RMI/CWR
Thursday September 5th12 pm Online	Meeting	Ashley Echols WIRE
Friday September 6th 10 am Online	Meeting	Jason LaCorbinière UNDP
Friday September 6th 1 pm Online	Meeting	Justin Locke RMI/CWR
Friday September 6th	Departure from Argentina	
Saturday September 7th	Arrival Saint Lucia	-
Monday September 9th 9 am	Meeting	Kurt Inglis Ministry of Sustainable Development
Monday September 9th 11 am	Meeting	Cletus Bertin CARILEC
Monday September 9th 4 pm	Meeting	Victor Emmanuel LUCELEC
Wednesday September 11th	Travel Saint Lucia – Saint Vincent and the Grenadines	-

Thursday September 12 13:30 pm	Site Visit Argyle Project and Meeting	Vaughn Lewis VINLEC
Friday September 13th 9 am	Meeting	Ellsworth Dacon Energy Unit, SVG
Friday September 13th 10:30 am	Meeting	Fidel Neverson RMI
Saturday September 14th	Departure from Saint Vincent and the Grenadines	-
Sunday September 15th	Arrival Buenos Aires Argentina	-
Friday September 20thOnline	Meeting	Ryan Cobb Ministry of Public Service, Energy and Public Utilities Belize
Tuesday September 24thOnline	Debriefing and First Findings	Jason LaCorbinière UNDP
Tuesday October 1st Online	Meeting	Titus Antoine Grenada

ANNEX 3: LIST OF CONSULTED DOCUMENTS AND ONLINE RESOURCES.

- Inter-American Development Bank. Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Saint Vincent and the Grenadines Dossier. October 2015.
- Inter-American Development Bank. Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Grenada Energy Dossier. November 2016.
- Inter-American Development Bank. Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Achieving an Unrealized Potential. November 2016.
- Inter-American Development Bank. Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Saint Lucia Dossier. October 2015.
- Global Environment Facility. GEF/C.31/5 May 15, 2007. GEF Council June 12-15, 2007. Agenda Item 11. COMPARATIVE ADVANTAGES OF THE GEF AGENCIES.
- https://www.greenbiz.com/article/st-lucia-shows-leadership-renewable-future
- https://www.dnvgl.com/cases/the-ten-island-challenge-70497
- https://community.carilec.org/

ANNEX 4: RATINGS FOR RELEVANCE, PERFORMANCE CRITERIA, SUSTAINABILITY AND IMPACT.

Relevance ratings

Rating	Explanation
R	Relevant
NR	Not relevant

Performance criteria ratings

Rating	Explanation
Highly satisfactory (HS)	No shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency
Satisfactory (S)	Minor shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency
Moderately Satisfactory (MS)	Moderate shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency
Moderately Unsatisfactory (MU)	Significant shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency
Unsatisfactory (U)	Major shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency
Highly Unsatisfactory (HU)	Severe shortcomings in the achievement of its objectives in terms of relevance, effectiveness and efficiency

In a similar way, the sustainability of the project's interventions and achievements will be examined using the relevant UNDP/GEF ratings guideline as indicated in the table below.

Rating	Explanation
Likely (L)	Negligible risks to sustainability, with key outcomes expected to continue into the foreseeable future
Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained
Moderately Unlikely (MU)	Substantial risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
Unlikely (U)	Severe risk that project outcomes as well as key outputs will not be sustained
Highly Unlikely (HU)	Expectation that few if any outputs or activities will continue after project closure

Lastly, impact ratings are as follows:

Significant (S)
Minimal (M)
Negligible (N)

ANNEX 5: PROJECT RESULTS FRAMEWORK

Primary applicable 2014-2017 UNDP Strategic Plan Key Result Area: Sustainable Development Pathways **Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded** Indicator 1.3 Annual emissions of carbon dioxide (in million metric tonnes) Indicator 1.4 Coverage of cost-efficient and sustainable energy, disaggregated by rural/urban Output 1.4. Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented Output 1.5. Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)
Applicable GEF Strategic Objective and Program: GEF-6 CCM-1 Strategic Programs 1 and 2
Applicable GEF Expected Outcomes: Outcomes A, B and C for accelerated adoption of innovative technologies, policy frameworks and financial mechanisms for GHG emission reductions
Applicable GEF Outcome Indicators: Market penetration of on-grid RE (% from renewables) GHG emissions from electricity generation (tons CO_{2eq}/kWh and $/tons CO_{2eq}) no. of jobs/beneficiaries

	Indicator	Baseline	Targets End of Project	Source of verification	Assumptions
Project Objective: [35] To accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of RE/EE	▪ Number of countries signed on the Ten Island Challenge ▪ CO_2 emission reductions/year ▪ % share of RE in the power generation mix of TIC countries	▪ 0 ▪ 0 ▪ 1-7%[36]	▪ 10 ▪ 137 ktCO_2 ▪ 20-50%[37]	▪ Project final report ▪ Annual surveys of energy consumption and reductions for each RE project ▪ Electric utility reports on grid penetration ▪ GHG inventories	▪ Economic growth across islands will continue ▪ Island-wide government support for renewables development and utilization will not change
Outcome 1: [38] <u>Policy De-risking Measures</u> Island-wide de-risked enabling environment for low GHG development through innovative policy tools	• Number of RE/EE strategies and assessments with specific targets • Number of countries where implementation of comprehensive measures (plans, strategies, policies, programmes and budgets) to achieve low-emission and climate-resilient development objectives have improved (SP 1.4.2) • Number of islands applying the de-risking method, resource	• 0 • 0 • 0 • 0	• 5 • 7 • 5 • 12	• Gender responsive studies/assessments of de-risking RE/EE investment options • Annual project reviews of key performance indicators • Gender responsive national policy or planning documents	• Island-wide support for policy reform to promote RE continues • Technical capacity to apply tools does not delay adoption of RE policy measures

35 Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

[36] Source: IRENA. Figures range across islands from 1% in Bahamas, to 7% in Grenada

[37] Source: Carbon War Room

[38] All outcomes monitored annually in the APR/PIR.

	Indicator	Baseline	Targets End of Project	Source of verification	Assumptions
	conservation measures and Ten Island Challenge tools • Number of Resource Conservation Measures (RCMs) modelled for health centres				
Outcome 2: Institutional and Technical Capacity Strengthened island capacity for integrated low GHG technical and operational planning and coordination	• Number of stakeholder partnerships active in Ten Island Challenge KM platforms disaggregated by sex, by age and by rural and urban • Number of local counterparts with improved capacity to partake in RE/EE developments disaggregated by sex, by age and by rural and urban	• 0 • 10-50[39]	• 2 • 300-800	• Gender responsive workshop and seminar proceedings • Training evaluations by participants	• Local and regional stakeholders continue to be engaged during the various phases of the Ten Island Challenge
Outcome 3: Investment Projects and Financial Mechanisms Catalyzed island funding for low GHG technology deployment	• Installed RE capacity through Ten Island Challenge • Number of jobs and livelihoods/beneficiaries from Ten Island Challenge, disaggregated by sector and sub-sector, by sex, age, and excluded groups and by wage category were available and by rural and urban • Capital mobilised following support by Ten Island Challenge • Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women (SP1.5.1)	• 0 • 0 • $3million • 0	• 85 MW of installed capacity. • 209 MW of committed RE capacity • 700-1,000; 40% women • >US$63 million • 4	• Feasibility studies of RE technologies • Bankable project reports • PPAs and approval permits • Work inspection reports • MOU, grant or loan approvals or other partnership agreements	• Sufficient annual replenishment of RE development funds • Capacity of government does not substantially delay approval of RE policies and RE projects

[39] These personnel are from the Energy Unit

ANNEX 6: EXIT STRATEGY REPORT

Project Title:	*The Ten Island Challenge: De-risking the Transition of the Caribbean from Fossil Fuels to Renewables (Project ID:00095631)*		
Countries:	Bahamas, Belize, Grenada, Saint Lucia, Saint Vincent and the Grenadines		
UNDAF/SPD Outcome 1:	Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance		
UNDP Strategic Plan 2014-2017 Primary Outcome:	Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded Output 1.4. Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented Output 1.5. Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)		
Expected M-CPAP Output(s):	Output 6: Improved energy efficiency and the removal of barriers to the introduction and transfer of renewable energy technology facilitated		
Executing Entity/ Implementing Partner:	United Nations Development Programme		
Implementing Entity/ Responsible Partners:	Carbon War Room/Rocky Mountain Institute		
Project Period	November 01, 2015 – June 30, 2019	Total GEF allocated budget (USD)	1,826,484
Background + Expected Outputs	The project seeks to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency and establish a blueprint for other SIDS. The project includes three main outcomes:		

	• Policy De-risking Measures – Island-wide de-risked enabling environment for low GHG development through innovative policy tools; • Institutional and Technical Capacity – Strengthened island capacity for integrated low GHG technical and operational planning and coordination; • Investment Projects and Financial Mechanisms – Catalyzed island funding for low GHG technology deployment. This project includes direct work with five Caribbean island nations, as well as regional work to develop a community of practice, and processes and approaches that can be applied in other islands.
Objectives of Exit Strategy	The overall objective of this exit strategy is to ensure the sustainability of impact after the program ends in June 2019. This document identifies specific stakeholders to whom responsibilities will transfer, and processes in place to ensure that positive impact continues following the close of the program.
Exit Strategy for Outcome 1: Policy De-risking Measures *Output 1.1: Clean energy action plans to meet Ten Island Challenge targets in the Caribbean developed* *Output 1.2: Policy de-risking analysis and guidance for Ten Island Challenge countries in the Caribbean provided*	The exit strategy for Outcome 1 focuses around the institutionalization of RMI's policy and energy planning de-risking tools and approaches within the CARILEC Community of Practice, CARICOM and the newly established Caribbean Centre for Renewable Energy and Energy Efficiency. More details are included here: • Handover of materials and joint approach: throughout the program, all work in support of Outcome 1 was completed in partnership with island governments and utilities. On a regional level, best practice identified under Outcome 1 was shared with the CARILEC community. Decisions were made and analysis completed jointly with these entities and with CARILEC. All results and model files were shared with national stakeholders, so that they can utilize them going forward in their energy planning and de-risking activities. • Opportunity to collaborate with CARICOM & CCREEE: the RMI project team is currently in discussion with CARICOM and CCREEE to conduct an energy planning / policy de-risking exercise with another Caribbean nation. In addition to the inclusive approach described above for all planning exercises, this process would include close collaboration with CARICOM to document experiences and expertise from the Ten Island Challenge program, in order to jointly build policy de-risking tools and approaches for the Caribbean region in an effort to institutionalize the TIC approach as the official CARICOM endorsed approach to energy planning for the region.

Exit Strategy for Outcome 2: Institutional and Technical Capacity *Output 2.1: Caribbean platforms for clean energy technology research, development, transfer and adoption enabled* *Output 2.2: Skills and expertise in island-wide clean energy investment de-risking and market transformation built*	The exit strategy for Outcome 2 includes the following main components: 1) securing funding and support for the expansion and maintenance of the CARILEC Renewable Energy Community (CAREC), and 2) increased virtual and in-person learning opportunities. More details for each of these components are included here: • Securing Funding and Support o RMI is assisting CARILEC in their preparation to integrate CAREC into the Caribbean Energy Knowledge Hub (CEKH). The CEKH is an initiative of the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE). As such, a proposal for transition was shared with the CARICOM Energy Secretariat, CARILEC, and the German Development Agency (GIZ) for 3 years of funding support. This support will be used to enhance virtual and in-person training workshops and to facilitate utility exchange opportunities for hands-on systems implementation and operation trainings. o The RMI Team has also worked with CARILEC and the Pacific Power Association (PPA) on a proposal to the United Arab Emirates (UAE) Ministry for Foreign Affairs and International Cooperation (MoFAIC) to support the development of an interregional exchange and learning component between utility-scale work in the Caribbean and the Pacific regions. If successful, funding will go towards fellowships, exchange programs, increased training workshops at CARILEC conferences, and software tool development to build on the progress of CAREC to date. Secured funding will be put towards development of a Learning Management System (LMS). An LMS will afford CARILEC the opportunity to present measurable learning for each individual member and their utility. The LMS will facilitate the modules that lead to CAREC professional certification. The additional infrastructure and tools will allow CARILEC toutilize new revenue streams such as virtual participation in conference workshops and subscription-based options for premium content. o The CAREC Community Leader will remain on-board with RMI to assist CARILEC and chosen partners in navigating the governance and platform integration into the Caribbean Energy Knowledge Hub (CEKH). • Content Development and Enhanced Learning Opportunities o In the final few months of the current GEF funding, learning opportunities will continue to consist of webinars. However, the topics have been designed to focus on areas that are priority to CARILEC, CARICOM, GIZ, and CCREEE. o CARILEC has recently taken ownership of the Women in Renewable Energy (WIRE) Network started with the Clinton Climate Initiative (CCI). CARILEC has assigned a dedicated employee to assist in content development and has created a WIRE working group on CAREC. This is to ensure content and presenters

	continue to be gender balanced on CAREC activities. The CCI Team allocated funding to assist CARILEC in trainings. o The CAREC Community will continue to focus on driving working groups based around key technologies or processes e.g. (Smart Grids, E-mobility, Regulation, Disaster Communication). The next phase for CARILEC is to focus on engagement, enhanced in-person training and content creation. The CAREC Renewable Energy and Smart Grid Conference was first held in September 2018 and will continue as an annual event focused on knowledge exchange and convening of participants from within and beyond the Caribbean.
Outcome 3. Investment Projects and Financial Mechanisms *Output 3.1: Caribbean energy resource capacity established*	The primary exit strategy for Outcome 3 is to create a commercially viable clean energy market in the Caribbean. The Ten Island Challenge's / RMI's exit strategy for Outcome 3 includes three main components: 1) building a pipeline of bankable projects as well as a foundation for future projects, 2) creating and handing over a standardized project de-risking and procurement process, and 3) training clean energy project managers within the Caribbean that will continue this work in the private sector after the close of the program. More details for each of these components are included here: • <u>Project pipeline and foundation for future projects:</u> Under output 3.2, RMI created a pipeline of 26 bankable clean energy projects

Output 3.2: Clean energy island-wide investments leveraged	totalling over $500M in aggregate. In addition, we completed the project development, procurement, permitting, construction, and operation of the first cohort of large-scale renewable energy projects in several Caribbean jurisdictions. These processes set the precedence, processes and practices – in addition to building the capacity for replication, and can now be used as building blocks for the next cohort of projects, under the ultimate goal of full renewable energy transition. • Standardized project de-risking and procurement process: Under output 3.1, the RMI team ensured that all procurement documents and project plan templates have been handed over to participating government and utilities. In addition, they have been vetted and approved by the CARILEC Board of Directors and placed on the CARILEC Community of Practice document repository. These documents form a baseline for a replicable and scalable commercially standardized renewable energy development and procurement process, and can be tailored to specific islands and projects for future projects. • Trained project managers within the Caribbean: As a direct result of this program, several project managers worked directly with RMI and were trained in renewable energy project development. Their work was essential to progress success, and they are embedded within the CARICOM region so can utilize their expertise on future renewable energy projects.
Key Considerations	One key consideration for the ongoing sustainability of this work is the importance of engagement among key stakeholders. This crucial requirement came up throughout this project – when multiple stakeholders were engaged and participating in energy transition activities, those activities had greater impact and longer-lasting success. One stakeholder alone (i.e. a utility, or a government) is unlikely to be successful in advancing this work without engaging others. In addition, regional leadership of energy transition processes and implementation is a key consideration. While expert support is important, ownership and leadership of efforts from within the Caribbean are crucial to ensuring long-term impacts, and driving efforts forward.
Supporting Material (if any)	No materials were purchased; grant funds supported consultants and travel in support of the project outcomes.

Project Information	
Atlas Award ID:	00089334
Project ID:	00095631
PIMS #:	5526
CO Focal Points:	Allan Franklin Programme Officer, Energy and Environment allan.franklin@undp.org UNDP Barbados and the OECS
Name and address of Implementing Partner	Rocky Mountain Institute (RMI) Tel: +1 303 245 1003 Email: jlocke@rmi.org Boulder, Colorado, USA
Implementing Partners Focal Points:	Mr. Justin Locke Director, Islands Energy Program, RMI Email: jlocke@rmi.org Tel: +1 303 245 1003 Boulder, Colorado, USA
Report prepared by:	Kaitlyn Bunker, Callie Ruh
Date:	17 May 2019
Cleared by	Justin Locke

ANNEX 7: FINANCING AND CO-FINANCING INFORMATION

All values listed are Millions USD

	GEF Countries - Installed		Broader TIC - Installed or Signed	
During Project	Saint Lucia Solar	$ 6.00	Puerto Rico School Microgrids	$ 2.00
	Bahamas Solar Projects	$ 3.00	Montserrat Solar	$ 0.50
	SVG Grenadines Microgrids	$ 3.40	Aruba Solar for Schools	$ 10.00
	SVG Airport Solar	$ 1.25	Anguilla Solar	$ 2.20
	Total	$ 13.65	Turks & Caicos Solar	$ 2.50
			Jamaica Solar	$ 40.00
			Total	$ 57.20

	GEF Countries - Under Preparation		Broader TIC - Under Preparation	
Expected After Project	Bahamas Family Islands	$ 51.00	Aruba Wind	$ 66.00
	Saint Lucia Solar + Storage	$ 20.00	Aruba Solar Decentralized	$ 12.00
	Saint Lucia Wind	$ 41.00	BVI Solar Aggregated	$ 8.30
	SVG Geothermal	$ 50.00	Total	$ 86.30
	SVG Storage	$ 4.00		
	Total	$ 166.00		

Tracking Tool for Climate Change Mitigation Projects

(For CEO Endorsement)

Special Notes: reporting on lifetime emissions avoided
Lifetime direct GHG emissions avoided: Lifetime direct GHG emissions avoided are the emissions reductions attributable to the investments made **during the project's supervised implementation period**, totaled over the respective lifetime of the investments. **Lifetime direct post-project emissions avoided:** Lifetime direct post-project emissions avoided are the emissions reductions attributable to the investments made outside the project's supervised implementation period, but supported by financial facilities put in place by the GEF project, totaled over the respective lifetime of the investments. These financial facilities will still be operational after the project ends, such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds. **Lifetime indirect GHG emissions avoided (top-down and bottom-up):** indirect emissions reductions are those attributable to the long-term outcomes of the GEF activities that remove barriers, such as capacity building, innovation, catalytic action for replication. Please refer to the following references for Calculating GHG Benefits of GEF Projects. Manual for Energy Efficiency and Renewable Energy Projects Revised Methodology for Calculating Greenhouse Gas Benefits of GEF Energy Efficiency Projects (Version 1.0) Manual for Transportation Projects For LULUCF projects, the definitions of "lifetime direct and indirect" apply. Lifetime length is defined to be 20 years, unless a different number of years is deemed appropriate. For emission or removal factors (tonnes of CO2eq per hectare per year), use IPCC defaults or country specific factors.

General Data	**Target at CEO Endorsement**	**Notes**
Project Title	The Ten Island Challenge: Derisking the Transition of the Caribbean from Fossil Fuels to Renewables	
GEF ID	8006	
Agency Project ID	5526	
Country	Regional	
Region	LCR	
GEF Agency	UNDP	
Date of Council/CEO Approval		Month DD, YYYY (e.g., May 12, 2010)
GEF Grant (US$)	1,776,484	
Date of submission of the tracking tool	April 10, 2015	Month DD, YYYY (e.g., May 12, 2010)
Is the project consistent with the priorities identified in National Communications, Technology Needs Assessment, or other Enabling Activities under the UNFCCC?	1	Yes = 1, No = 0

Is the project linked to carbon finance?	0	Yes = 1, No = 0
Cofinancing expected (US$)	304,550,000	

Objective 1: Transfer of Innovative Technologies		
Please specify the type of enabling environment created for technology transfer through this project		
National innovation and technology transfer policy	0	Yes = 1, No = 0
Innovation and technology centre and network	0	Yes = 1, No = 0
Applied R&D support	1	Yes = 1, No = 0
South-South technology cooperation	1	Yes = 1, No = 0
North-South technology cooperation	1	Yes = 1, No = 0
Intellectual property rights (IPR)	0	Yes = 1, No = 0
Information dissemination	1	Yes = 1, No = 0
Institutional and technical capacity building	1	Yes = 1, No = 0
Other (please specify)	Policy derisking	
Number of innovative technologies demonstrated or deployed	3	
Please specify three key technologies for demonstration or deployment		
Area of technology 1	Renewable_Energy	
Type of technology 1	Wind	specify type of technology
Area of technology 2	Renewable_Energy	
Type of technology 2	Solar	specify type of technology
Area of technology 3	Energy_Efficiency	
Type of technology 3	Storage	specify type of technology
Status of technology demonstration/deployment	2	0: no suitable technologies are in place 1: technologies have been identified and assessed 2: technologies have been demonstrated on a pilot basis 3: technologies have been deployed 4: technologies have been diffused widely with investments 5: technologies have reached market potential
Lifetime direct GHG emissions avoided	4,760,000	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	14,280,000	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)	8,596,000	tonnes CO2eq (see Special Notes above)

Objective 2: Energy Efficiency		
Please specify if the project targets any of the following areas		
Lighting		Yes = 1, No = 0
Appliances (white goods)		Yes = 1, No = 0
Equipment		Yes = 1, No = 0
Cook stoves		Yes = 1, No = 0
Existing building		Yes = 1, No = 0
New building		Yes = 1, No = 0
Industrial processes		Yes = 1, No = 0
Synergy with phase-out of ozone depleting substances		Yes = 1, No = 0
Other (please specify)		
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained

Lifetime energy saved		MJ (Million Joule, IEA unit converter: http://www.iea.org/stats/unit.asp) Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments.
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)		tonnes CO2eq (see Special Notes above)

Objective 3: Renewable Energy		
Please specify if the project includes any of the following areas		
Heat/thermal energy production		Yes = 1, No = 0
On-grid electricity production		Yes = 1, No = 0
Off-grid electricity production		Yes = 1, No = 0
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained

Installed capacity per technology directly resulting from the project		
Wind		MW
Biomass		MW el (for electricity production)
Biomass		MW th (for thermal energy production)
Geothermal		MW el (for electricity production)
Geothermal		MW th (for thermal energy production)
Hydro		MW
Photovoltaic (solar lighting included)		MW
Solar thermal heat (heating, water, cooling, process)		MW th (for thermal energy production, 1m² = 0.7kW)
Solar thermal power		MW el (for electricity production)
Marine power (wave, tidal, marine current, osmotic, ocean thermal)		MW
Lifetime energy production per technology directly resulting from the project (IEA unit converter: http://www.iea.org/stats/unit.asp)		
Wind		MWh
Biomass		MWh el (for electricity production)
Biomass		MWh th (for thermal energy production)
Geothermal		MWh el (for electricity production)
Geothermal		MWh th (for thermal energy production)
Hydro		MWh
Photovoltaic (solar lighting included)		MWh
Solar thermal heat (heating, water, cooling, process)		MWh th (for thermal energy production)
Solar thermal power		MWh el (for electricity production)
Marine energy (wave, tidal, marine current, osmotic, ocean thermal)		MWh
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)		tonnes CO2eq (see Special Notes above)

Objective 4: Transport and Urban Systems		
Please specify if the project targets any of the following areas		
Bus rapid transit		Yes = 1, No = 0

Other mass transit (e.g., light rail, heavy rail, water or other mass transit; excluding regular bus or minibus)		Yes = 1, No = 0
Logistics management		Yes = 1, No = 0
Transport efficiency (e.g., vehicle, fuel, network efficiency)		Yes = 1, No = 0
Non-motorized transport (NMT)		Yes = 1, No = 0
Travel demand management		Yes = 1, No = 0
Comprehensive transport initiatives (Involving the coordination of multiple strategies from different transportation sub-sectors)		Yes = 1, No = 0
Sustainable urban initiatives		Yes = 1, No = 0
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Length of public rapid transit (PRT)		km
Length of non-motorized transport (NMT)		km
Number of lower GHG emission vehicles		
Number of people benefiting from the improved transport and urban systems		
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided		tonnes CO2eq (see Special Notes above)

Lifetime indirect GHG emissions avoided (bottom-up)		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)		tonnes CO2eq (see Special Notes above)

Objective 5: LULUCF		
Area of activity directly resulting from the project		
Conservation and enhancement of carbon in forests, including agroforestry		ha
Conservation and enhancement of carbon in nonforest lands, including peat land		ha
Avoided deforestation and forest degradation		ha
Afforestation/reforestation		ha
Good management practices developed and adopted		0: not an objective/component 1: no action 2: developing prescriptions for sustainable management 3: development of national standards for certification 4: some of area in project certified 5: over 80% of area in project certified
Carbon stock monitoring system established		0: not an objective/component 1: no action 2: mapping of forests and other land areas 3: compilation and analysis of carbon stock information 4: implementation of science based inventory/monitoring system 5: monitoring information database publicly available
Lifetime direct GHG emission avoided		tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emission avoided		tonnes CO2eq (see Special Notes above)
Lifetime direct carbon sequestration		tonnes CO2eq (see Special Notes above)
Lifetime indirect carbon sequestration		tonnes CO2eq (see Special Notes above)

Objective 6: Enabling Activities		
Please specify the number of Enabling Activities for the project (for a multiple country project, please put the number of countries/assessments)		
National Communication		
Technology Needs Assessment		
Nationally Appropriate Mitigation Actions		

Other		
Does the project include Measurement, Reporting and Verification (MRV) activities?		Yes = 1, No = 0
		Tracking Tool for Climate Change Mitigation Projects
	(For Mid-term Evaluation)	

Special Notes: reporting on lifetime emissions avoided

Lifetime direct GHG emissions avoided: Lifetime direct GHG emissions avoided are the emissions reductions attributable to the investments made **until the mid-term evaluation**, totaled over the respective lifetime of the investments.
Please refer to the Manual for Calculating GHG Benefits of GEF Projects.

Manual for Energy Efficiency and Renewable Energy Projects
Manual for Transportation Projects

For LULUCF projects, the definition of "lifetime direct" applies. Lifetime length is defined to be 20 years, unless a different number of years is deemed appropriate. For emission or removal factors (tonnes of CO2eq per hectare per year), use IPCC defaults or country specific factors.

General Data	Results at Mid-term Evaluation	Notes
Project Title		
GEF ID		
Agency Project ID		
Country		
Region		
GEF Agency		
Date of Council/CEO Approval		Month DD, YYYY (e.g., May 12, 2010)
GEF Grant (US$)		
Date of submission of the tracking tool		Month DD, YYYY (e.g., May 12, 2010)
Is the project consistent with the priorities identified in National Communications, Technology Needs Assessment, or other Enabling Activities under the UNFCCC?		Yes = 1, No = 0
Is the project linked to carbon finance?		Yes = 1, No = 0
Cumulative cofinancing realized (US$)		

Cumulative additional resources mobilized (US$)		additional resources means beyond the cofinancing committed at CEO endorsement

Objective 1: Transfer of Innovative Technologies		
Please specify the type of enabling environment created for technology transfer through this project		
National innovation and technology transfer policy		Yes = 1, No = 0
Innovation and technology centre and network		Yes = 1, No = 0
Applied R&D support		Yes = 1, No = 0
South-South technology cooperation		Yes = 1, No = 0
North-South technology cooperation		Yes = 1, No = 0
Intellectual property rights (IPR)		Yes = 1, No = 0
Information dissemination		Yes = 1, No = 0
Institutional and technical capacity building		Yes = 1, No = 0
Other (please specify)		
Number of innovative technologies demonstrated or deployed		
Please specify three key technologies for demonstration or deployment		
Area of technology 1		
Type of technology 1		specify type of technology
Area of technology 2		
Type of technology 2		specify type of technology
Area of technology 3		
Type of technology 3		specify type of technology
Status of technology demonstration/deployment		0: no suitable technologies are in place 1: technologies have been identified and assessed 2: technologies have been demonstrated on a pilot basis 3: technologies have been deployed 4: technologies have been diffused widely with investments 5: technologies have reached market potential
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)

Objective 2: Energy Efficiency

Please specify if the project targets any of the following areas		
Lighting		Yes = 1, No = 0
Appliances (white goods)		Yes = 1, No = 0
Equipment		Yes = 1, No = 0
Cook stoves		Yes = 1, No = 0
Existing building		Yes = 1, No = 0
New building		Yes = 1, No = 0
Industrial processes		Yes = 1, No = 0
Synergy with phase-out of ozone depleting substances		Yes = 1, No = 0
Other (please specify)		
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained

Lifetime energy saved		MJ (Million Joule, IEA unit converter: http://www.iea.org/stats/unit.asp) Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments.
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)

Objective 3: Renewable Energy		
Please specify if the project includes any of the following areas		
Heat/thermal energy production		Yes = 1, No = 0
On-grid electricity production		Yes = 1, No = 0
Off-grid electricity production		Yes = 1, No = 0
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Installed capacity per technology directly resulting from the project		

Wind		MW
Biomass		MW el (for electricity production)
Biomass		MW th (for thermal energy production)
Geothermal		MW el (for electricity production)
Geothermal		MW th (for thermal energy production)
Hydro		MW
Photovoltaic (solar lighting included)		MW
Solar thermal heat (heating, water, cooling, process)		MW th (for thermal energy production, 1m² = 0.7kW)
Solar thermal power		MW el (for electricity production)
Marine power (wave, tidal, marine current, osmotic, ocean thermal)		MW
Lifetime energy production per technology directly resulting from the project (IEA unit converter: http://www.iea.org/stats/unit.asp)		
Wind		MWh
Biomass		MWh el (for electricity production)
Biomass		MWh th (for thermal energy production)
Geothermal		MWh el (for electricity production)
Geothermal		MWh th (for thermal energy production)
Hydro		MWh
Photovoltaic (solar lighting included)		MWh
Solar thermal heat (heating, water, cooling, process)		MWh th (for thermal energy production)
Solar thermal power		MWh el (for electricity production)
Marine energy (wave, tidal, marine current, osmotic, ocean thermal)		MWh
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)

Objective 4: Transport and Urban Systems		
Please specify if the project targets any of the following areas		
Bus rapid transit		Yes = 1, No = 0
Other mass transit (e.g., light rail, heavy rail, water or other mass transit; excluding regular bus or minibus)		Yes = 1, No = 0
Logistics management		Yes = 1, No = 0
Transport efficiency (e.g., vehicle, fuel, network efficiency)		Yes = 1, No = 0
Non-motorized transport (NMT)		Yes = 1, No = 0
Travel demand management		Yes = 1, No = 0

Comprehensive transport initiatives (Involving the coordination of multiple strategies from different transportation sub-sectors)		Yes = 1, No = 0
Sustainable urban initiatives		Yes = 1, No = 0
Policy and regulatory framework		0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)		0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building		0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Length of public rapid transit (PRT)		km
Length of non-motorized transport (NMT)		km
Number of lower GHG emission vehicles		
Number of people benefiting from the improved transport and urban systems		
Lifetime direct GHG emissions avoided		tonnes CO2eq (see Special Notes above)

Objective 5: LULUCF		
Area of activity directly resulting from the project		
Conservation and enhancement of carbon in forests, including agroforestry		ha
Conservation and enhancement of carbon in nonforest lands, including peat land		ha

Avoided deforestation and forest degradation		ha
Afforestation/reforestation		ha
Good management practices developed and adopted		0: not an objective/component 1: no action 2: developing prescriptions for sustainable management 3: development of national standards for certification 4: some of area in project certified 5: over 80% of area in project certified
Carbon stock monitoring system established		0: not an objective/component 1: no action 2: mapping of forests and other land areas 3: compilation and analysis of carbon stock information 4: implementation of science based inventory/monitoring system 5: monitoring information database publicly available
Lifetime direct GHG emission avoided		tonnes CO2eq
Lifetime direct carbon sequestration		tonnes CO2eq

Objective 6: Enabling Activities		
Please specify the number of Enabling Activities for the project (for a multiple country project, please put the number of countries/assessments)		
National Communication		
Technology Needs Assessment		
Nationally Appropriate Mitigation Actions		
Other		
Does the project include Measurement, Reporting and Verification (MRV) activities?		Yes = 1, No = 0

Tracking Tool for Climate Change Mitigation Projects

(For Terminal Evaluation)

Special Notes: reporting on lifetime emissions avoided
Lifetime direct GHG emissions avoided: Lifetime direct GHG emissions avoided are the emissions reductions attributable to the investments made **during the project's supervised implementation period**, totaled over the respective lifetime of the investments. **Lifetime direct post-project emissions avoided:** Lifetime direct post-project emissions avoided are the emissions reductions attributable to the investments made outside the project's supervised implementation period, but supported by financial facilities put in place by the GEF project, totaled over the respective lifetime of the investments. These financial facilities will still be operational after the project ends, such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds. **Lifetime indirect GHG emissions avoided (top-down and bottom-up):** indirect emissions reductions are those attributable to the long-term outcomes of the GEF activities that remove barriers, such as capacity building, innovation, catalytic action for replication. Please refer to the Manual for Calculating GHG Benefits of GEF Projects. Manual for Energy Efficiency and Renewable Energy Projects Manual for Transportation Projects For LULUCF projects, the definitions of "lifetime direct and indirect" apply. Lifetime length is defined to be 20 years, unless a different number of years is deemed appropriate. For emission or removal factors (tonnes of CO_2eq per hectare per year), use IPCC defaults or country specific factors.

General Data	Results at Terminal Evaluation	Notes
Project Title	The Ten Island Challenge: Derisking the Transition of the Caribbean from Fossil Fuels to Renewables	
GEF ID	The Ten Island Challenge: Derisking the Transition of the Caribbean from Fossil Fuels to Renewables	
Agency Project ID	8006	
Country	5526	
Region	Regional	
GEF Agency	LCR	
Date of Council/CEO Approval	UNDP	Month DD, YYYY (e.g., May 12, 2010)
GEF Grant (US$)	0	
Date of submission of the tracking tool	November 5, 6763	Month DD, YYYY (e.g., May 12, 2010)

Is the project consistent with the priorities identified in National Communications, Technology Needs Assessment, or other Enabling Activities under the UNFCCC?	1	Yes = 1, No = 0
Is the project linked to carbon finance?	0	Yes = 1, No = 0
Cumulative cofinancing realized (US$)	304550000	
Cumulative additional resources mobilized (US$)	-	additional resources means beyond the cofinancing committed at CEO endorsement

Objective 1: Transfer of Innovative Technologies		
Please specify the type of enabling environment created for technology transfer through this project		
National innovation and technology transfer policy	0	Yes = 1, No = 0
Innovation and technology centre and network	0	Yes = 1, No = 0
Applied R&D support	1	Yes = 1, No = 0
South-South technology cooperation	1	Yes = 1, No = 0
North-South technology cooperation	1	Yes = 1, No = 0
Intellectual property rights (IPR)	0	Yes = 1, No = 0
Information dissemination	1	Yes = 1, No = 0
Institutional and technical capacity building	1	Yes = 1, No = 0
Other (please specify)	Policy derisking	
Number of innovative technologies demonstrated or deployed	3	
Please specify three key technologies for demonstration or deployment		

Area of technology 1	Renewable_Energy	
Type of technology 1	Wind	specify type of technology
Area of technology 2	Renewable_Energy	
Type of technology 2	Solar	specify type of technology
Area of technology 3	Energy_Efficiency	
Type of technology 3	Storage	specify type of technology
Status of technology demonstration/deployment	2	0: no suitable technologies are in place 1: technologies have been identified and assessed 2: technologies have been demonstrated on a pilot basis 3: technologies have been deployed 4: technologies have been diffused widely with investments 5: technologies have reached market potential
Lifetime direct GHG emissions avoided	4,760,000	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	14,280,000	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)	8,596,000	tonnes CO2eq (see Special Notes above)

Objective 2: Energy Efficiency		
Please specify if the project targets any of the following areas		
Lighting	1	Yes = 1, No = 0
Appliances (white goods)	1	Yes = 1, No = 0
Equipment	1	Yes = 1, No = 0
Cook stoves		Yes = 1, No = 0
Existing building	1	Yes = 1, No = 0
New building	1	Yes = 1, No = 0
Industrial processes	0	Yes = 1, No = 0
Synergy with phase-out of ozone depleting substances	0	Yes = 1, No = 0

Other (please specify)	0	
Policy and regulatory framework	3	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	2	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building	3	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Lifetime energy saved	-	MJ (Million Joule, IEA unit converter: http://www.iea.org/stats/unit.asp) Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments.
Lifetime direct GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)

Lifetime direct post-project GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)	-	tonnes CO2eq (see Special Notes above)

Objective 3: Renewable Energy		
Please specify if the project includes any of the following areas		
Heat/thermal energy production	0	Yes = 1, No = 0
On-grid electricity production	1	Yes = 1, No = 0
Off-grid electricity production	1	Yes = 1, No = 0
Policy and regulatory framework	2	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	2	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand

Capacity building	4	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
Installed capacity per technology directly resulting from the project		
Wind	-	MW
Biomass	-	MW el (for electricity production)
Biomass	-	MW th (for thermal energy production)
Geothermal	-	MW el (for electricity production)
Geothermal	-	MW th (for thermal energy production)
Hydro	-	MW
Photovoltaic (solar lighting included)	85.000	MW
Solar thermal heat (heating, water, cooling, process)	-	MW th (for thermal energy production, 1m² = 0.7kW)
Solar thermal power	-	MW el (for electricity production)
Marine power (wave, tidal, marine current, osmotic, ocean thermal)	-	MW
Lifetime energy production per technology directly resulting from the project (IEA unit converter: http://www.iea.org/stats/unit.asp)		
Wind	-	MWh
Biomass	-	MWh el (for electricity production)
Biomass	-	MWh th (for thermal energy production)
Geothermal	-	MWh el (for electricity production)
Geothermal	-	MWh th (for thermal energy production)
Hydro	-	MWh
Photovoltaic (solar lighting included)	-	MWh
Solar thermal heat (heating, water, cooling, process)	-	MWh th (for thermal energy production)
Solar thermal power	-	MWh el (for electricity production)
Marine energy (wave, tidal, marine current, osmotic, ocean thermal)	-	MWh

Lifetime direct GHG emissions avoided	1,376,020	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided	1,048,425	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	412,806	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (top-down)	498,017	tonnes CO2eq (see Special Notes above)

Objective 4: Transport and Urban Systems		
Please specify if the project targets any of the following areas		
Bus rapid transit	0	Yes = 1, No = 0
Other mass transit (e.g., light rail, heavy rail, water or other mass transit; excluding regular bus or minibus)	0	Yes = 1, No = 0
Logistics management	0	Yes = 1, No = 0
Transport efficiency (e.g., vehicle, fuel, network efficiency)	0	Yes = 1, No = 0
Non-motorized transport (NMT)	0	Yes = 1, No = 0
Travel demand management	0	Yes = 1, No = 0
Comprehensive transport initiatives (Involving the coordination of multiple strategies from different transportation sub-sectors)	0	Yes = 1, No = 0
Sustainable urban initiatives	0	Yes = 1, No = 0
Policy and regulatory framework	0	0: not an objective/component 1: no policy/regulation/strategy in place 2: policy/regulation/strategy discussed and proposed 3: policy/regulation/strategy proposed but not adopted 4: policy/regulation/strategy adopted but not

		enforced 5: policy/regulation/strategy enforced
Establishment of financial facilities (e.g., credit lines, risk guarantees, revolving funds)	0	0: not an objective/component 1: no facility in place 2: facilities discussed and proposed 3: facilities proposed but not operationalized/funded 4: facilities operationalized/funded but have no demand 5: facilities operationalized/funded and have sufficient demand
Capacity building	0	0: not an objective/component 1: no capacity built 2: information disseminated/awareness raised 3: training delivered 4: institutional/human capacity strengthened 5: institutional/human capacity utilized and sustained
	0	
Length of public rapid transit (PRT)	-	km
Length of non-motorized transport (NMT)	-	km
Number of lower GHG emission vehicles	-	
Number of people benefiting from the improved transport and urban systems	-	
Lifetime direct GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime direct post-project GHG emissions avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emissions avoided (bottom-up)	-	tonnes CO2eq (see Special Notes above)

Lifetime indirect GHG emissions avoided (top-down)	-	tonnes CO2eq (see Special Notes above)

Objective 5: LULUCF		
Area of activity directly resulting from the project		
Conservation and enhancement of carbon in forests, including agroforestry	-	ha
Conservation and enhancement of carbon in nonforest lands, including peat land	-	ha
Avoided deforestation and forest degradation	-	ha
Afforestation/reforestation	-	ha
	0	
Good management practices developed and adopted	0	0: not an objective/component 1: no action 2: developing prescriptions for sustainable management 3: development of national standards for certification 4: some of area in project certified 5: over 80% of area in project certified
Carbon stock monitoring system established	0	0: not an objective/component 1: no action 2: mapping of forests and other land areas 3: compilation and analysis of carbon stock information 4: implementation of science based inventory/monitoring system 5: monitoring information database publicly available
Lifetime direct GHG emission avoided	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect GHG emission avoided	-	tonnes CO2eq (see Special Notes above)

Lifetime direct carbon sequestration	-	tonnes CO2eq (see Special Notes above)
Lifetime indirect carbon sequestration	-	tonnes CO2eq (see Special Notes above)

Objective 6: Enabling Activities		
Please specify the number of Enabling Activities for the project (for a multiple country project, please put the number of countries/assessments)		
National Communication	-	
Technology Needs Assessment	-	
Nationally Appropriate Mitigation Actions	-	
Other	5	
Does the project include Measurement, Reporting and Verification (MRV) activities?	1	Yes = 1, No = 0

Evaluation Consultant Agreement Form

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[40]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Maria ONESTINI

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *Buenos Aires, Argentina* on *July 23 2019*

Signature: 

[40] www.unevaluation.org/unegcodeofconduct