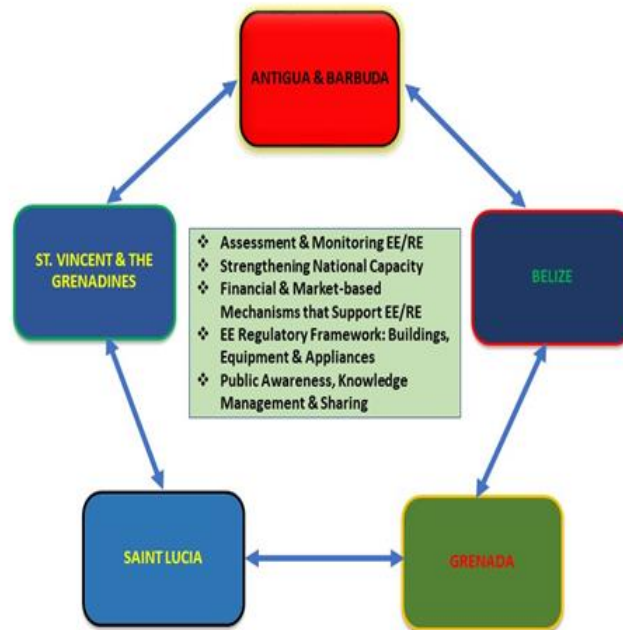


Mid Term Evaluation of the UN Environment Project Energy for Sustainable Development in Caribbean Buildings



March 2018



Evaluation Office of UN Environment

This report has been prepared by an independent consultant evaluator and is a product of the Evaluation Office of UN Environment. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Senior Management.

For further information on this report, please contact:

Evaluation Office of UN Environment
P. O. Box 30552-00100 GPO
Nairobi Kenya
Tel: (254-20) 762 3740
Email: chief.eou@unep.org

Project Title: Energy for Sustainable Development (ESD) in Caribbean Buildings
GEF Project ID: 4171
Date: March 2018
All rights reserved.
© (2018) Evaluation Office of UN Environment

ACKNOWLEDGEMENTS

This Mid-term Evaluation was prepared for the Evaluation Office of UN Environment by David A. Simmons, as an independent consultant. The report benefits from a peer review conducted within the Evaluation Office of UN Environment.

The Evaluation Office of UN Environment would like to thank the “Energy for Sustainable Development (ESD) in Caribbean Buildings” project teams within the Implementing and Executing Agencies for their contributions and collaboration throughout the evaluation process. Sincere appreciation is also expressed to past and present in-country representatives, including the Chairs of the National Steering Committees and National Coordinators, who took time to respond to the evaluation consultant’s request for consultations and to provide comments to the draft report.

Evaluation team

David Simmons – Consultant

Evaluation Office of UN Environment

Janet Wildish – Evaluation Manager

Mercy Mwangi – Evaluation Programme Assistant

ABOUT THE EVALUATION¹

Joint Evaluation: No

Report Language(s): English

Evaluation Type: Mid-Term Evaluation

Brief Description: This report is a mid-term evaluation of a UN Environment-GEF project which began in 2013 and had an intended completion plan for 2017. The project's overall development goal was to reduce greenhouse gas emissions and promote energy efficient technologies and practices in appliances and buildings in five Caribbean countries (Antigua and Barbuda, Belize, Grenada, St Lucia and St Vincent and the Grenadines). In light of substantial delays in project implementation, reflected in low project expenditure, the evaluation sought to assess the reasons behind the project's slow implementation and to assess its performance to-date. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing that could be applied as the project moves forward and used by UN Environment, the Executing Agency - Caribbean Community Climate Change Centre, national ministry representatives from the project participating countries and the GEF.

Key words: Caribbean; Antigua and Barbuda; Belize; Grenada; St Lucia; St Vincent and the Grenadines; Sustainable Development; Energy Efficiency; Resource Efficiency; Buildings; Climate Change; MTE; Mid-Term Evaluation; GEF; GEF Project.

¹ This data is used to aid the internet search of this report on the Evaluation Office of UN Environment Website (<https://www.unenvironment.org/about-un-environment/evaluation>)

Table of Contents

List of Acronyms and Abbreviations	viii
Executive Summary	1
Main Lessons Learned	8
Key Recommendations	10
I. Introduction	17
II. Evaluation Approach and Method	19
A. Evaluation Tools	20
B. Data Collection	20
C. Data Verification	22
D. Data Analysis	22
E. Limitations of the Evaluation	22
III. The Project	23
A. Context.....	23
B. Objectives and Components.....	24
C. Stakeholder Analysis	28
D. Project Implementation: Structure and Partners	29
E. Changes in Design During Implementation	32
F. Project Finance	32
IV. Theory of Change Analysis	35
V. Evaluation Findings	40
A. Strategic Relevance	40
B. Quality of Project Design	43
C. Nature of the External Context	46
D. Effectiveness	47
E. Financial Management	65
F. Efficiency	67
G. Monitoring and Reporting	69
H. Sustainability	71
I. Factors Affecting Performance	73

VI. Conclusions and Recommendations	77
A. Conclusions.....	77
B. Recommendations	82
C. Lessons Learned	83
Annexes	85
Annex I. Evaluation Terms of Reference	85
Annex II. Response to Stakeholder Comments	108
Annex III. Schedule of Evaluation Activities	110
Annex IV: Persons Met and Designation	111
Annex V. Bibliography	113
Annex VI. Consultant(s) Résumé.....	114
Annex VII. Quality Assessment of the Evaluation Report.....	115
Tables	
Table ES1: Project Identification Table.....	ix
Table ES2: Evaluation Criteria and Ratings Table	7
Table ES3: Main Lessons Learned	8
Table ES4: Options for Going Forward.....	11
Table ES5: Recommendations	13
Table 1: Cost of Project.....	17
Table 2: Mid-Term Evaluation Schedule	23
Table 3: Project Results Framework	26
Table 4: Total Project Cost	32
Table 5: Project Budget - Component	33
Table 6: Co-financing Budget	34
Table 7: Distribution of the Budget Between the Five Implementing Countries	35
Table 8: Theory of Change: From Outcomes to Impacts	39
Table 9: Summary of Achieved Outputs and Expected Outcomes	48
Table 10: Overall project implementation progress, reported in the annual Project Implementation Review reports	58

Table 11: Summary of Cash Advances to Executing Agency, Recorded Expenditures, Unspent Cash Balance & Undisbursed Budget..... 65

Table 12: Evaluation Criteria and Rating Table..... 77

Table 13: Recommendations (see Executive Summary for the complete table)..... 82

Table 14: Lessons Learned (see Executive Summary for complete table) 83

FIGURES:

Figure 1 – ESD for Caribbean Buildings Implementation Structure 31

List of Acronyms and Abbreviations

5Cs	Caribbean Community Climate Change Centre
CCREEE	Caribbean Centre for Renewable Energy and Energy Efficiency
CDB	Caribbean Development Bank
CROSQ	CARICOM Regional Organisation for Standards and Quality
DFC	Development Finance Cooperation
EA	Executing Agency
EE	Energy Efficiency
ESCOs	Energy Service Companies
ESD	Energy for Sustainable Development
GEF	Global Environment Facility
GHG	Greenhouse Gas
IA	Implementing Agency
MEPS	Minimum Energy Performance Standards
MOA	Memorandum of Agreement
MTE	Mid-Term Evaluation
NC	National Coordinator
NGO	Non-governmental Organisation
NSC	National Steering Committee
PC	Project Coordinator
PCA	Project Cooperation Agreement
PDMU	Project Development and Management Unit
PIR	Project Implementation Review
PMU	Project Management Unit
PMU/R	Project Management Unit/Regional
ProDoc	Project Document
PSC	Project Steering Committee
PTC	Project Technical Coordinator
PV	Photovoltaic
RCC	Regional Coordinating Committee
RE	Renewable Energy
REEBC	Regional Energy Efficiency Building Code
SIDS	Small Island Developing States
TOC	Theory of Change
TOR	Terms of References
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
USD/\$	United States Dollar
WINDREF	Windward Islands Research and Education Foundation

Table ES1: Project Identification Table

GEF project ID:	4171	IMIS number:	GFL-5070-2721-4C67
Focal Area(s):	Climate Change	GEF OP #:	5
GEF Strategic Priority/Objective:	CC1 – Energy Efficiency: To promote energy-efficient technologies and practices in appliances and buildings	GEF approval date:	August 27,2012
UNEP approval date:	November 1, 2012	Date of first disbursement:	Feb 21, 2013
Actual start date²:	March 1, 2013	Planned duration:	48 months
Intended completion date:	October 2016	Actual or Expected completion date:	December 31, 2018
Project Type:	Full-sized project (FSP)	GEF Allocation:	4,859,000
PPG GEF cost:	125,000	PPG co-financing:	175,000
Expected MSP/FSP Co-financing:	7,625,500	Total Cost:	12,784,500
Actual Co-financing:	3,227,916 ³		
Mid-term review/eval. (planned date):	April 2017	Terminal Evaluation (actual date):	January 1, 2019
Mid-term review/eval. (actual date):	June 2017	No. of revisions:	1 (amendment)
Date of last Steering Committee meeting:	November 12-13, 2017	Date of last Revision:	10.04.2017
Disbursement as of 30 June 2017:	2,920,990.00	Date of financial closure:	N/A
Date of Completion^{4*}:	31 October 2017	Actual expenditures reported as of 30 June 2017⁵:	
Total co-financing realized as of 30 June 2017⁶:		Actual expenditures entered in IMIS as of 30 June 2017:	736,914.61
Leveraged financing:⁷			

² Only if different from first disbursement date, e.g., in cases were a long time elapsed between first disbursement and recruitment of project manager.

³ Confirmed by FMO based on finance reports submitted on 2nd Oct 2017

⁴ If there was a “Completion Revision” please use the date of the revision.

⁵ Information to be provided by Executing Agency/Project Manager

⁶ Projects which completed mid-term reviews/evaluations or terminal evaluations during FY16 should attach the completed co-financing table as per GEF format. See Annex 1

⁷ See above note on co-financing

Executive Summary

Main findings

1. The Global Environmental Facility–funded “Energy for Sustainable Development in Caribbean Buildings”, has as its strategic priority the reduction of greenhouse gas emissions and the promotion of energy efficient technologies and practices in appliances and buildings in five Caribbean countries (Antigua and Barbuda, Belize, Grenada, St Lucia and St Vincent and the Grenadines). The project, which is being implemented by the UN Environment and executed by the Caribbean Community Climate Change Centre (5Cs), has a total cost of (United States Dollars) USD 12,484,500, of which USD 4,859,000 is GEF financing, and the balance, USD 7,625,500 is co-financing (cash and in-kind contributions) from different partner agencies.
2. The four-year project, which became effective in April 2013, was seen as being quite relevant to the region because high energy prices in the participating countries were proving to be a deterrent to economic growth, and the project provided a pathway through which increased access to affordable energy services could drive economic development in the Caribbean.
3. The project, however, encountered severe delays in implementation as a result of a combination of issues including changes in government in some participating countries and inadequate project management, at all operational levels, such that with only one year left, after being granted an extension, only 15 percent of the funds have been spent and 16.5 percent of co-financing realized.
4. This performance to date prompted the call for a Mid-Term Evaluation (MTE) in accordance with the UN Environment Evaluation Policy and the UN Environment Programme Manual. This evaluation was therefore initiated to establish “what are the main factors undermining the performance of this project and what are the causal relationships between them”; and, “...what is the recommended way forward”? Importantly, it is also intended to provide evidence of results to meet accountability requirements and to promote operational improvement, learning and knowledge-sharing among UN Environment, the Global Environment Facility and national partners in the five target countries.
5. Several issues have been identified as probable causes for the delay in project implementation ranging from aspects of project design to operational issues involving the Implementing Agency, the Executing Agency and the Project Management Units at the national or country levels. These issues, which surfaced from as early as the first year of the project, either went unnoticed or were inadequately addressed, contributing to the creation of an environment of non-

performance and disharmony, which seriously threatens the viability and sustainability of the project in its current form.

Project Design

6. From a project design perspective, the main issue of concern related to the inadequacy of the planned budget given the fact the project was being implemented in five different countries, all of which had different responsibilities for project implementation which required a high level of coordination. All participating countries asserted that the \$58,500⁸ over a four-year period was insufficient for them to provide the in-country leadership and participation that was intended in the project design. This meant that participating countries were constrained in their ability to hire National Coordinators and could only do so on a part-time basis. This resource constraint was further compounded during implementation by severe delays in funds disbursement from the Executing Agency to the countries.
7. The project design, although working in five countries over a four-year period, made no provision for dealing with changes in government, such as national elections, or in project administration, such as turnover of National Coordinators. Although election cycles, changes of government and turnover in national level project administration do not necessarily have any significant impact on the administration and implementation of projects, their potential for disrupting plans should be prepared for within the project design and mitigating measures put in place. Changes in government and concerns regarding changes to the Project Management Unit contributed to delays in Saint Lucia and Grenada.

Institutional Arrangements

8. While the project has a clearly defined structure on paper, the reality is that it is operated as a virtual entity under the umbrella of the Executing Agency / 5Cs. The personnel (Project Technical Coordinator and Project Coordinator) assigned to the project are not permanent staff of the Executing Agency and do not occupy a physical space at the headquarters in Belize. While virtual offices do have their place in the modern communications environment, the complexity of the project, and in particular, the intrinsic coordination, supervision and support requirements, suggest the need for a more permanent presence and clear integration into the operations of the 5Cs specifically its pre-existing Programme Development and Management Unit. Importantly, a physical presence could have supported the project in sharing general services provided by the 5Cs and ensured that information and documents pertaining to the operations of the project were centrally housed at the 5Cs. Also,

⁸ Saint Lucia was allocated \$22,500.00 and St. Vincent and the Grenadines \$44,200.00.

housing the project within the core structure of the Executing Agency would have removed doubts on issues such as branding, ownership and administrative responsibility. The absence of that physical presence and clear integration within the 5Cs normal project management structure created doubt as to the ownership of the project and contributed to internal discord with respect to basic administrative functions.

Management

9. Management functions were assigned to each of the parties in accordance with Global Environment Facility guidelines and the project agreement. This was to ensure that implementation took place in a timely manner with the greatest degree of efficiency to ensure that the project goals were achieved. However, persistent delays encountered with project implementation suggest that these roles were not fulfilled as intended.
10. UNDESAs abrupt withdrawal also represented a loss of key technical expertise. However, replacements in the form of consultants did little to improve the pace of implementation.
11. While it must be acknowledged that the project faced many challenges, some of which were unforeseen (e.g., Trinidad and Tobago dropping out of the project, general elections in all five countries, and protracted discussions with Antigua and Barbuda to resolve issues relating to the preparation of their workplan and budget and how the project funds assigned to them should be allocated), it must also be acknowledged that the Implementing Agency, whose mandate it was to take “an adaptive management approach” to correct problems which arise in the implementation of the project, did not perform that role in a commendable way.
12. All four Project Implementation Reviews from 2014 – 2017 consistently gave the project an “Unsatisfactory” implementation rate, with a risk level ranging from “Medium” to “High”. Despite these negative ratings in the reviews, delays continued and there is no real evidence of that “adaptive management approach”. The intervention that was made at Task Manager level, in terms of individual meetings with National Coordinators, did not lead to improved performance. There is no evidence to suggest that the persistently worrying risk ratings recorded in the Project Implementation Reviews attracted the institutional attention of the Implementing Agency or triggered a response beyond the level of the Task Manager.
13. For most of the countries, issues of finance, particularly the low budgets for in-country support functions and slow/incomplete disbursements for personnel expenses (payment to National Coordinators) was most troubling. The low level of funds meant that participating countries were constrained in their ability to hire National Coordinators and could only do so on a part-time basis. Without these

National Coordinators in place, or insufficiently compensated, the countries had difficulty attracting and holding on to their National Coordinators.

14. At the national level, issues relating to delays in the procurement of project equipment and protracted discussions regarding work plans and budgets and delayed payments only served to frustrate the project management personnel. One result was that National Steering Committees were only convened where there was certainty that the meeting would be meaningful. In that regard, Belize, Grenada and Saint Lucia convened Inception Meetings of their National Steering Committee in 2013, but it was almost another year (2014) before any of them signed their Memorandum of Agreement and convened another meeting of their National Steering Committee. Saint Lucia has not convened a National Steering Committee meeting since 2015.

Operations

15. The inability of the National Coordinators to satisfactorily meet the project's work plan and budget standards as advised by the 5Cs, meant that countries went long periods without payment or in some cases only one payment in the last three years. Some National Coordinators have also noted the failure of the 5Cs to reimburse them for expenditure incurred (e.g. associated with the meeting in St. Vincent and the Grenadines and report preparation, in the case of Saint Lucia). These ongoing conflicts became a central reason for the failure of the National Steering Committee to meet on a regular basis, as there was little to report, and eventually contributed to several of the National Coordinators (Antigua and Barbuda, Belize - twice, Grenada, Saint Lucia, and St. Vincent and the Grenadines) resigning in frustration.
16. Notwithstanding the above, one of the main successes of the project to date is capacity building in relation to the training of Energy Efficiency service providers and the creation of a cadre of professionals (engineers, technicians, architects, and relevant vendors), whom it is hoped, will become qualified to deploy energy efficient technologies, products, and equipment in buildings thus accelerating the energy savings that can be achieved in public buildings, private entities and individual homeowners. This was achieved by the 5Cs contracting different agencies, such as IRENA, to convene national and regional training workshops. In that regard, the project contributed significantly, both directly and indirectly, to creating and improving the skill sets of Energy Efficiency service providers through several training workshops covering aspects of Energy Efficiency and Resource Efficiency technologies. Notwithstanding the satisfaction stated by some participants and National Coordinators, it should be noted, that one participating country convened an additional two-week Energy Efficiency workshop for both public and private sector entities as it was believed that much more training was needed than was

provided under the Energy for Sustainable Development in Caribbean Buildings project.

17. This region is prone to natural disasters and although no contextual crises occurred during the project period being evaluated, during the evaluation severe weather conditions were experienced. It should, therefore, be borne in mind that this will affect the priorities of countries, and create further development challenges for the region, as they move forward.

Financial Management

18. Project expenditure over the four years is approximately 15%. By any standard, this is extremely poor. A major reason for this low rate of spend is the fact that very little has been disbursed to the countries, and to the entities responsible for executing the demonstration projects. Delays in disbursements to the countries contributed significantly to the difficulties encountered in retaining the National Coordinators in the participating countries. All of the countries encountered resignations of their National Coordinators. Three countries (Belize, Grenada, and Saint Lucia) are, since April 2017, without a National Coordinator and the National Coordinator in St. Vincent and the Grenadines handed in his resignation at the end of September. In the case of Belize funds allocated for the National Coordinator are exhausted, and in Grenada, Saint Lucia, and St. Vincent and the Grenadines, country representatives reported sheer frustration with the lack of payment and slow progress in respect of implementation.
19. In addition to the low expenditure and slow disbursement, co-financing, which formed 61% of the total budget (USD 7,625,500), was expected to be generated by the participating countries and partner agencies. Based on the co-finance reports submitted total co-finance secured is \$3,227,916.
20. This continued pattern of low expenditure and slow disbursement should have triggered some warning flags and prompted further interventions by the Fund Management Office or the Task Manager, seeking reasons for the delays. Also, the constant need to request timely submission of financial reports should also have warranted further intervention. While the Fund Management Office did make requests for timely submission of financial reports, there is little evidence of any sustained effort to address the real issues which were responsible for the low expenditure and disbursement to the countries.
21. In June 2017, a further \$2,000,000 was disbursed by the Implementing Agency to the Executing Agency to support the implementation of workplans in accordance with agreed documents. While this action may have been taken after considerable deliberation by IA (TM and FMO) in order to honour project commitments, this evaluation considers the transaction somewhat premature given the fact that very

little of the funds disbursed previously was being disbursed to the participating countries for project support. The fact that this large sum is currently held by the Executing Agency and has not been disbursed to the countries, gives rise to further concerns and adds further complications to the possible ways forward for this initiative.

Procurement

22. Another major cause of delays was difficulty with the procurement of monitoring equipment needed both to undertake the baseline studies and to support some of the demonstration projects. Several persons expressed concern with respect to the procurement of equipment, including suggestions that procurement rules were not always applied or followed, leading to distrust between national entities and the 5Cs.⁹ Responses at a country level point to an environment of mistrust that created persistent tension and affected the smooth and free flow of communications required for a project like this to work efficiently.
23. Annual audits which could have provided confirmation of whether proper procurement procedures were followed were not undertaken in a timely manner or in accordance with the project agreement. One audit was undertaken for the period ending 2014 and registered no concerns around procurement. The audits for 2015 and 2016 were due to commence in August 2017 but at the time of writing this report were not yet completed¹⁰.

Overall Assessment and Rating

24. In all the countries visited and consulted, the experiences of present and past National Steering Committee Chairpersons were of poor management at the regional level, particularly the inability to either approve work plans and budgets or provide adequate feedback to allow the plans to be improved and finalised. The only exception is Antigua and Barbuda where the National Coordinator has reported no difficulty with the arrangements under which he is contracted and obtaining approval for the work plan and budget submitted. Even when the equipment was finally delivered in the first half of 2016, the long delay in obtaining the equipment, together with concerns as to the reasons for the delays, meant that countries were unable to proceed with their own undertakings.
25. In the four Project Implementation Review reports (2014 – 2017) the project received an implementation rating of Unsatisfactory, Moderately Unsatisfactory,

⁹ After the writing of this evaluation report documentation relating to the procurement of the monitoring equipment was reviewed by the UN Environment Evaluation Office (in March 2018). Unfortunately, the documentation was not complete enough to provide any further clarity into the reasons for the delayed delivery of the equipment.

¹⁰ Annual audit report for January 1, 2015 to December 31, 2016 was submitted in November 2017. There were no concerns raised in respect of procurement procedures.

Moderately Satisfactory, and Unsatisfactory, all indicative of a project which is performing poorly. Since the last Project Implementation Review report (2017), nothing has changed to warrant anything than an overall rating of “Unsatisfactory”.

26. Table ES2 below provides an overview of the ratings given for each of the evaluation criteria. The evaluation criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Nature of External Context is rated from Highly Favourable (HF), Favourable (F), Moderately Favourable (MF), Moderately Unfavourable (MU), Unfavourable (U), and Highly Unfavourable (HU).

Table ES2: Evaluation Criteria and Ratings Table

Criteria	Rating HS – HU
A. Strategic Relevance	S
1. Alignment to the UN Environment Medium-Term Strategy (MTS) and Programme of Work (POW).	HS
2. Alignment to the UN Environment/GEF/Donor Strategic Priorities.	HS
3. Relevance to Regional, Sub-regional and National Environmental Priorities	HS
4. Complementarity with Existing Interventions	MS
B. Quality of Project Design	MS
C. Nature of External Context	U
D. Effectiveness	HU
1. <i>Achievement of outputs</i>	MS
2. <i>Achievement of direct outcomes</i>	U
3. <i>Likelihood of impact</i>	U
E. Financial Management	U
1. <i>Completeness of project financial information</i>	U
2. <i>Communication between finance and project management staff</i>	U
3. <i>Compliance with UN Environment standards and procedures</i>	U
F. Efficiency	MU
G. Monitoring and Reporting	MS
1. <i>Monitoring design and budgeting</i>	HS
2. <i>Monitoring of project implementation</i>	MU
3. <i>Project reporting</i>	MU
H. Sustainability	U
1. <i>Socio-political sustainability</i>	MS
2. <i>Financial sustainability</i>	U
3. <i>Institutional sustainability</i>	U
I. Factors Affecting Performance	MU
1. <i>Preparation and readiness</i>	U

Criteria	Rating HS – HU
2. Quality of project management and supervision ¹¹	MU
3. Stakeholders participation and cooperation	S
4. Responsiveness to human rights and gender equity	U
5. Country ownership and driven-ness	MS
6. Communication and public awareness	MU
Overall Project Rating	U

Main Lessons Learned

27. The following is a summary of the main lessons learned from some of the project’s successes and challenges.

Table ES3: Main Lessons Learned

Context:	Though it was clearly stated in the Project Document that the National Steering Committee would have responsibility for the operations at the national level, including the hiring of National Coordinators, instances of the Executing Agency office involvement in the hiring of National Coordinators and direct communications were quite common, contributing to the high level of mistrust between the countries and the Executing Agency.
Lesson #1:	One of the major objectives of implementing projects is to assist in building capacity in the target countries. In that regard, it is imperative that the countries are given opportunities to lead in some of the important decision-making aspects of the project such as the hiring and supervision of Project Coordinators. The Executing Agency should, however, have a role to play, such as vetting the Terms of Reference, and reviewing the selection process to ensure that the candidate selected satisfies the criteria of the Terms of Reference and leaving no doubt as to the suitability of the candidate.
Application:	UN Environment must ensure that these roles and associated lines of communications are clearly spelt out, monitored and reported on during supervision missions.
Context:	A constant complaint from the Executing Agency office was the inadequacy of work plans and budgets being submitted by countries, notwithstanding the provision of reporting templates. This led to enduring frustration on the part of National Coordinators, contributing to the rapid turnover of officers.
Lesson #2:	Executing Agencies should develop procedures manuals detailing all that is required of them in terms of preparation/revision of Project Documents

¹¹ In some cases, ‘project management and supervision’ will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment, as the implementing agency.

	(national component) budgets, work plans, reporting requirements as well as the formats and templates for preparation of all reports, and financial reports. These should all be discussed and agreed during inception meetings and a document circulated within a reasonable time (two months) to allow countries sufficient time to become familiar with the process prior to the submission of their first set of reports
Application:	Executing Agencies should ensure that for inception meetings, they have detailed templates for reporting and other information which National Coordinators will need to follow to ensure timely reporting.
Context:	Although election cycles and change of governments do not necessarily have any significant impact on the administration and implementation of projects, in this instance, it seems to have significantly affected three countries Antigua and Barbuda, Grenada, and Saint Lucia.
Lesson #3:	Elections can, but don't necessarily have to, affect project implementation to a great extent but should be anticipated and planned for, especially in projects of 4 or more years duration, given that this is a normal period for election cycles. Once an election is known to be taking place in a participating country, the Executing Agency, together with the Implementing Agency must devise a plan and strategy for timely intervention in the country to engage the necessary governmental officials to ascertain their continued commitment as well as ensuring there is an understanding of what is required of a country's continued involvement to avoid any unnecessary delays.
Application:	Executing Agencies initiate plans to engage immediately with countries before and following an election to ensure there are no unnecessary delays in providing continued support for the project.
Context:	With neither of the Project Technical Coordinator nor Project Coordinator based at the offices of the Executing Agency, the execution of the project functioned from a virtual office.
Lesson #4:	Although virtual offices have their place in modern business practices, it is imperative that the mode of execution of a project is known to all, that the repercussions are examined and that there is agreement on that approach. It is also imperative that clear rules of operation, particularly as they relate to reporting, communications and all other administrative functions associated with project execution are clearly detailed, and all involved are fully aware and there is written and confirmed agreement with this management approach.
Application:	UN Environment develops clear rules under which virtual offices are permitted in the execution of projects.
Context:	This project is implemented in multiple destinations and the country-level deliverables are co-dependent.
Lesson #5:	Managing projects in multiple destinations is nothing new and is characteristic of how many Global Environment Facility funded projects are implemented. However, when undertaken, and especially where

	countries are assigned responsibilities which demand the completion of one task by one country before another country can implement its agreed workplan, this requires careful coordination on the part of the Executing Agency and demands more management oversight. With a Project Coordinator who was part-time, with extensive reporting responsibilities and without the necessary administrative support, it is not surprising that simple tasks such as the convening of inception meetings and preparing reports became a management challenge.
Application:	UN Environment should carefully assess the needs of projects and determine management needs based on factors which have an immediate bearing on the project as opposed to simply a percentage of the cost of the project

Key Recommendations

28. The overall view of this evaluation exercise is that the performance of this project has been, and continues to be, rated as 'Unsatisfactory'.
29. Given the above, there are two apparent ways forward, a) close the project or b) continue, but with substantial changes to the management structure. Both courses of action present challenges and would require additional steps to re-direct the course of the project, as set out in Table ES4 below (*presented as the shortest text first, with no suggestion of preference*). Ultimately it is for UN Environment to lead a process to determine whether each scenario is feasible, and which is most likely to deliver positive outcomes for the intended beneficiaries, given the risks that each course of action entails.
30. A critical consideration in the future of this project is whether sufficient country buy-in exists for the project to continue. On one hand, some countries, especially Saint Lucia and Belize, the Development Banks in Belize and Saint Lucia are still fully committed to the project, and have, in fact, commenced advertising of low-cost financing for RE and EE retrofit. Antigua and Barbuda are also still committed to the project. At the same time there are some outputs, such as training for Energy Service Companies (ESCOs) and the development of a financing facility that still generate interest. On the other hand, there is a general climate of mistrust between the implementing countries and the Executing Agency, as well as outstanding issues regarding claims for reimbursement, all of which may not be overcome even if the management structure is substantially changed. There is also ongoing support for the project's objectives from other organisations such as the World Bank, the Caribbean Development Bank, and the European Union.
31. In the view of this evaluation there is value in UN Environment exploring the following possibilities before making a final decision about the future of the project:

- a) Explore (**with the executive management of 5Cs**) whether or not 5Cs is in a position to adopt the role of Executing Agency directly within its Programme Development and Management Unit. This would need to be supported financially from either the USD 500,000 which 5Cs committed but which has not yet been provided; 5Cs other sources of funding independent of this project or through a budget revision approved by the GEF. (*A positive outcome of this discussion is critical to moving forwards*).
 - b) Explore (**with GEF**) the possibility of revising the budget to provide more financial support to National Coordinators for the remainder of the project, leading to a project revision and extension until April 2019. (*A positive outcome of this discussion is critical to moving forwards*)
 - c) Explore (**with previously identified co-funders**) whether they are willing to fund the project as originally indicated or in some other form. (*A positive outcome of this discussion is important but not critical to moving forwards, assuming that adjustments are made to the scope of the project to fit its secured financing*).
32. If the questions in para 31 above cannot be answered by the end of January 2018 at the latest, or result in negative answers on critical points, then it is the view of this evaluation that UN Environment should lead a process of project closure and return all outstanding funds, including the USD 2,000,000 recently disbursed to 5Cs, to the GEF in accordance with its normal procedures and the project agreement.
33. If the questions in para 31 above can be answered in the positive, UN Environment would need to propose new arrangements to the implementing countries and ask for formal confirmation of their renewed commitment to the project.

Table ES4: Options for Going Forward

Scenario A: Close the project:
<p>Reasons for closure:</p> <ul style="list-style-type: none"> - After four years of implementation only 15% of the budget is reported as spent. - The presence of NCs has been incomplete throughout these four years. Three countries have been without a NC since April 2017, the NC in St Vincent and Grenadines tendered his resignation in Sept 2017. - The management structure, which is dependent on a virtual and/or part-time team does not have the confidence of most of the countries. - The documentation relating to large procurement processes is incomplete and several questions about procurement procedures remain unanswered, despite the efforts of this mid-term evaluation.
<p>Challenges associated with closure:</p>

- USD 2,000,000 was recently (June 2017) disbursed to the EA but has not been disbursed to country level. What are the procedures and likelihood of these funds being returned to the IA and GEF?
- All the support cost for the Project Coordinator were spent by the end of 2016 (as far as this evaluation could determine) yet the majority of outputs have not yet been achieved. What are the GEF rules when PSC have been spent long before planned activities have been completed?
- There remains a question as to whether 5Cs have already made their contribution of USD 500,000 to the project. The evaluation was not able to confirm the status of this co-financing. What are the GEF rules regarding the outstanding payment of co-financing commitments when a project is closed?
- The potential to deliver global environmental benefits remains.

Scenario B: Continue with the project with major structural and budgeting adjustments:

Reasons for continuing:

- Despite frustration and mistrust among the implementing countries of the Executing Agency, there is still substantive buy-in from the countries for the work itself. The area of work is still highly relevant to the region; workplans and budgets have now been approved; essential monitoring equipment has finally been delivered.
- The Executing Agency is a reputable organisation that has credibility and an appropriate mandate in this area. The Executing Agency does have alternative management capacity to run projects in the form of its Programme Development and Management Unit.
- USD 2,000,000 is currently held by the Executing Agency, to support demonstration projects as identified in the Project Document and agreed workplans. However, to the best knowledge of the evaluator, none of it has yet been disbursed.
- There is no evidence to suggest that 5Cs has contributed the USD 500,000 to which they committed, suggesting that some project coordination costs could still be covered from this source.

Challenges associated with continuing:

- All the support cost for the Project Coordinator appear to be spent (as far as this evaluation could determine) yet the majority of outputs have not yet been achieved. What is the likelihood of GEF agreeing to divert budget lines to increase the Project Support Costs and what is the process?
- The amounts budgeted to support the role of National Coordinators were never adequate in the initial budget, have not been disbursed in their entirety and the funds remaining in the budget as it stands are insufficient to support the role going forwards. What is the likelihood of GEF agreeing to divert budget lines to increase the funds for supporting National Coordinators and what is the process?

34. On the assumption that the project does go forward, recommendations generated from the evaluation exercise are presented in the table below. The recommendations are categorised in three priority levels as follows: 1 – Critical; 2 – High; 3 – Medium; 4-Opportunities for improvement.

Table ES5: Recommendations

Context	While the project has a clearly defined structure, the reality is that it is operated as a virtual entity under the umbrella of the 5Cs, but with personnel who are not permanent staff of the 5Cs and who do not occupy a physical space at the 5Cs. While virtual offices do have their place given the modern communications environment, the complexity of the project, and in particular, the intrinsic coordination, supervision and support requirements, suggests the need for a more permanent presence, and clear integration into the operations of the 5Cs. (Paragraphs #139 - #147).
Recommendation #1	The need for tighter controls as well as ensuring the management hierarchy at 5Cs is fully involved in going forward with this project will require a different management structure which embeds the project in the operations of the 5Cs. That will require absorbing the project within the organisational structure of the 5Cs under the Programme Development and Management Unit which has been in existence for several years and through which all projects being executed by the organisation are normally channelled. There is also a need to review the management team to ensure that adequate technical and financial support is provided to guide the project through this critical and final stage of implementation.
Responsibility	5Cs and UN Environment (Task Manager)
Time-frame	December 31, 2017
Priority Level	1 – Critical
Context	While it must be acknowledged that the project faced many challenges, some of which were unforeseen (e.g., Trinidad and Tobago dropping out of the project, UNDESAs abrupt withdrawal, and protracted discussions with Antigua and Barbuda to resolve issues of management and disbursement of funds), it must also be acknowledged that the supervision role assigned to the Implementing Agency mandates that they follow “an adaptive management approach” to correct problems which arise in the implementation of the project and ensure that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. (#148 - #162).
Recommendation #2A	<p>a) UN Environment should clarify, and confirm to all relevant parties, what procedures are followed in the event that unsatisfactory progress or substantial risks are identified in successive GEF Project Implementation Report. Formal institutional procedures are particularly needed to support Task Managers who also perform the role of Portfolio Managers or Task Managers who have large numbers of projects under their supervision. It is noted that more than one representative of UN Environment should have a role to play in relation to mitigating identified risks.</p> <p>This is reinforced by Recommendation #7 in that mechanisms for responding to identified risk situations in GEF projects should include a process for deciding when a project’s status is causing sufficient concern for further</p>

<p>Recommendation #2B</p>	<p>disbursements to be suspended pending senior management investigation and decision-making. There is also need for a revision of the GEF supervision policies at UN Environment to ensure that the requirements of a project are not dependent on a fixed amount of financial resources (i.e., that time allocated to project supervision is determined by the needs of the project and not limited by the funds that have allocated to supervision).</p> <p>b) The Regional Office for Latin America and the Caribbean, along with the Jamaica Country Office should be involved in exploring an alternative management structure if the project continues; should have an ongoing role in any remaining implementation period and should be closely involved in the design of any future projects to be implemented in the region. A budget to support the involvement of the Jamaica Office would need to be considered.</p> <p>UN Environment (First and Second Reporting Officers or the Task Manager) and the GEF Coordinator.</p> <p>Short to Medium Term (end June 2018) Critical (reputational and financial risks)</p>
<p>Context</p> <p>Recommendation #3</p>	<p>Chronic and persistent delays in implementation and completion of narrative and financial reports suggest the need for a full-time person who can ensure that countries not only prepare their reports in a timely manner but that the Executing Agency itself is capable of fulfilling its reporting obligations. (#148 - #162).</p> <p>The demands of the project over its life will require the services of a full-time Project Technical Coordinator to ensure that all other project implementation elements are properly established and functional both at the regional and national levels, including the Project Management Unit/Regional, National Steering Committees and National Coordinators. In addition, the Project Technical Coordinator will be required to ensure that Reports (Technical and Financial) are prepared and submitted in a timely manner and that other training programmes and meetings are convened and minutes prepared and submitted.</p> <p>5Cs December 31, 2017 High</p>
<p>Context</p> <p>Recommendation #4</p>	<p>One of the factors contributing to the discord between the 5Cc and National Steering Committees is the hiring and reporting functions of the National Coordinator. While it is clearly stated in the Terms of Reference that the National Coordinator is hired by the National Steering Committee and reports to the that Committee, there were instances where the National Coordinator was reporting directly to the Executing Agency. (#148 - #162).</p> <p>The hiring of National Coordinators should be the responsibility of the National Steering Committee based on guidelines (Terms of Reference) provided by the Executing Agency. The Executing Agency should, however, request an evaluation report detailing the process by which the First-Choice candidate was selected along with a CV. Following the issuing of a No Objection, an offer could be made to the candidate selected.</p> <p>5Cs March 31, 2018 High</p>

Context	The Executing Agency is currently proposing to replace the National Coordinator with Consultants hired by them. If they were to proceed as planned, it would further disrupt the fragile bond between the Executing Agency and National Steering Committees and create further disharmony. (#163-#174).
Recommendation #5	The Project Management Unit/Regional should be discouraged from engaging consultants directly to work with the National Steering Committee to complete the projects. Any mechanism which seeks to by-pass the management and oversight of the National Steering Committee should be discouraged as it has the potential to create two levels of reporting and accountability, and laying the foundation for further tension between the National Steering Committee and 5Cs.
Responsibility	5Cs and UN Environment (Task Manager)
Time-frame	November 6, 2017
Priority Level	High
Context	National elections in all five of the participating countries, resulting in some instances, in a change of governments and administration, seem to have impacted the project resulting in delays in the convening of Inception Meetings and National Steering Committee Meetings. (#163 - #174)
Recommendation #6	While external or unanticipated events such as elections and change of government, hurricanes etc., can negatively impact a project, it is also possible to anticipate some of such events and ensure that immediately after these events there is sufficient engagement between the Executing Agency and the local authorities to obtain reassurance and commitment for going forward. The project team is advised to strengthen its adaptive management and responsiveness to changes in external conditions for the remainder of the project.
Responsibility	5Cs and UN Environment (Task Manager)
Time-frame	Long-term
Priority Level	Medium
Context	USD 2,000,000 were disbursed to 5Cs in June 2017, despite the launching of this evaluation on the basis of reported risks of underperformance, continued concerns over the slow progress of the project and the apparent dysfunctionality of the management arrangements. (#175 - #181)
Recommendation #7	<p>a) UN Environment (Task Manager) to lead a decision-making process regarding the USD 2,000,000 that was disbursed to 5Cs in June/July 2017 and which has yet to be disbursed to the participating countries. Should these funds be returned to UN Environment/GEF (if the project closes) or disbursed to the countries (if the project continues). The decision-making process should involve the GEF, given the destructive climatic events that have recently befallen the Caribbean region.</p> <p>b) UN Environment (Task Manager) to engage with 5Cs and implementing countries to ensure that all outstanding dues at country level have been paid. UN Environment to resolve any differences of opinion regarding the legitimacy of expenditure claims.</p>
Responsibility	UN Environment (and 5Cs)
Time-frame	December 2017
Priority Level	Critical

Context	All the countries reported that the amount allocated for project management was insufficient. More disturbingly, they were required to engage the services of a National Coordinator, and submit work plans and budgets before any funds were disbursed to them. In the absence of a National Coordinator, there is no dedicated person assigned to the project, partially accounting for the long delays in having those documents prepared and convening of national steering committee meetings. (#175 - #181).
Recommendation #8	Project Documents should establish that immediately following the signing of the Partner Cooperation Agreement a certain percentage of national budget allocation should be made available to the country. Subsequent disbursements should be based on measurable targets within an established time-frame.
Responsibility	UN Environment
Time-frame	Long-term
Priority Level	Medium to Long-term
Context	Several respondents expressed great concern with respect to the procurement of equipment leading to an environment of mistrust between national entities and 5Cs. Responses at a country level point to an environment of mistrust that created persistent tension and affected the smooth and free flow of communications between the Executing Agency and National Steering Committees/National Coordinators. It is necessary to confirm whether the procurement of goods and services followed principles of highest quality, economy and efficiency. (#182 - #187).
Recommendation #9	Further investigation of the long delays in the procurement of goods, and the contracting of consultants for services provided is warranted, to confirm that best practices were indeed followed, using the principles of highest quality, economy and efficiency ¹² . The next audit, which should cover 2017, should be advised to specifically review the earlier procurement procedure for monitoring equipment.
Responsibility	UN Environment
Time-frame	December 31, 2017
Priority Level	Critical
Recommendation #10	No specific attention was given to gender and indigenous issues relevant to Energy Efficiency (EE) and Resource Efficiency (RE) management. These should be taken into account in future activities, together with other issues of social equity. It is common knowledge that a significant percentage of households in the Caribbean are headed by women, and more importantly, they are the primary users of EE appliances and technologies in the home. Also, a large percentage of the population in Belize are categorised as indigenous and they may have specific concerns in how they embrace EE/RE.
Time-frame	Medium to long term
Priority Level	Medium to long term

¹² After the writing of this evaluation report the UN Environment Evaluation Office requested further documentation relating to procurement exercises. Documentation relating to the receipt and onward delivering of equipment to the implementing parties was not available, although documents relating to the equipment lists and identification of suppliers from 2014 was provided. Partial documentation relating to the contracting of consultants was provided (comparison of shortlisted cvs for some posts) but this was insufficient to confirm all standards of a procurement process. Documentation was also provided for two other procurement processes, one involving the Argyle International Airport, St Vincent and the Grenadines (2016) and one relating to a KAP Survey (2017). The documentation for these two processes was found to be complete and reflected a good standard of procurement procedures.

I. Introduction

35. In 2012 the Global Environmental Facility (GEF) granted approval for the commencement of the four-year full-sized project “Energy for Sustainable Development (ESD) in Caribbean Buildings” which had as its strategic priority, the promotion of energy efficient technologies and practices in appliances and buildings in five Caribbean countries (Antigua and Barbuda, Belize, Grenada, Saint Lucia and Trinidad and Tobago). The main objective of the Project is to both reduce greenhouse gas (GHG) emissions and make the energy sector in the Caribbean more efficient and increase their use of renewable energy. Increased access to affordable energy services is essential to drive economic development in the island states of the Caribbean. The project, which is being implemented by the UN Environment Programme (UN Environment) and executed by the Caribbean Community Climate Change Centre (5CS), has a total cost of USD 12,484,500, of which USD 4,859,000 is GEF financing, and the balance is co-financing as described in Table 1 below.

Table 1: Cost of Project

Activity/Entity	US\$	%
Cost to the GEF Trust Fund	4,859,000	38.9
Co-financing		
Cash		
Executing Agency: 5Cs	550,000	4.4
National Executing Partners	2,266,500	18.2
National Development Banks	2,800,000	22.4
Bilateral (Government of Japan for Belize)	500,000	4.0
Sub-total	6,116,500	
In-kind		
National Executing Partners	1,174,000	9.4
Executing Partner: UNDESA	150,000	1.2
National Executing Partner/NGO: WINDREF	185,000	1.5
Sub-total	1,509,000	
Total Co-financing	7,625,500	
Total Project Cost	12,484,500	100.0

Source: UN Environment Project Document (ProDoc), undated.

36. The ESD in Caribbean Buildings Project became effective in March 2013, and an estimated completion date was set for 30 April 2017. However, due to several logistical issues including changes in government in some of the participating countries and the resulting difficulties in appointing National Coordinators (NC) and convening National Steering Committee (NSC) a new start date of April 2014 was acknowledged. The implementation of this project was the first attempt to

develop a regional project to address the inefficient use of energy in buildings in the Caribbean Community (CARICOM).

37. In accordance with the UN Environment Evaluation Policy and the UN Environment Programme Manual, a Mid-Term Evaluation (MTE) exercise was undertaken just past the halfway phase of project implementation to analyse whether the project was on-track, what problems or challenges the project was encountering, and what corrective actions are required.
38. The evaluation had two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment, the GEF and national partners in the five target countries. The delays with project implementation and small disbursement of resources required an additional consideration, which is whether there are reasons to seek a no-cost extension to complete the work.
39. Given the above, the evaluation exercise was based on the criteria outlined in Section 10 of the Terms of Reference (ToR) with a focus on some **strategic** questions which are of interest to UN Environment and its partners. These questions were as follows:
 - a) What are the main factors undermining the performance of this project and what are the causal relationships between them?
 - b) Based on an analysis of the causes of underperformance, what is the recommended way forward?
 - c) To what extent are the targeted reductions in Greenhouse Gas emissions associated with this project well-founded, realistically estimated and feasible to attain?
40. The evaluation utilised a participatory approach whereby key stakeholders were consulted throughout the evaluation process. A theory-based approach, using a Theory of Change (ToC) model, was used to determine project achievements against the expected outputs, outcomes and impacts.
41. The findings of the evaluation are therefore based on a combination of desk research and interviews with key stakeholders (see Stakeholder Analysis section) at various institutions including UN Environment, the Caribbean Community Climate Change Centre (5Cs); representatives of other partner agencies and other relevant organizations; national partners (National Steering Committees); and National Coordinators (NC).

II. Evaluation Approach and Method

42. The Evaluation Office of UN Environment is an independent office governed by the UN Environment Evaluation Policy. Provision for mid-term and terminal evaluations is made within this policy (and incorporated in project documents) and the work of the Evaluation Office follows standard operating procedures that ensure they remain accountable to the external bodies that regularly assess the evaluation function. The Evaluation Office is also required to follow the GEF guidelines for the evaluation of Full-Sized Projects. In keeping with these policies and guidelines, the evaluation has been designed using a theory-based approach. Full details of the evaluation criteria are provided in the Terms of Reference for this Mid-Term Evaluation (MTE).
43. This MTE was conducted by an independent consultant with expertise in policy and institutional analysis, and experience in project management and M&E analysis (including UN and GEF project experience – see Annex V). This was carried out under the overall responsibility and management of the UN Environment Evaluation Office in consultation with the UN Environment GEF Coordination Office (Nairobi), and the UN Environment Task Manager (Nairobi).
44. In accordance with the UN Environment mandate to evaluate the institutions' Programme of Work, the subject of this evaluation is the project as a whole. The change process that the intervention was designed to drive is described as a Theory of Change (TOC), which incorporates the project's agreed results framework. The project was, therefore, evaluated against this TOC - i.e. is there evidence that the project has initiated the change process as planned? In so far as country-based work is a part of the TOC, visits to countries provided an opportunity to gain insight into this process and to gather an independent view of reported achievements.
45. The evaluation is not, however, assessing the performance of each individual country per se and the project has provided regular reports to the GEF on country-level activities and progress. For field site visits 'cases' (i.e. countries) were selected that were most likely to: a) provide a good opportunity to see the Theory of Change in action and b) to represent some diversity in the key factors that are most likely to affect the change process. These site visits provided an opportunity for detailed discussions with key stakeholders so that enough evidence of the process of implementation and change processes could be gathered. Key stakeholders from countries that were not visited physically were invited to contribute via email, skype etc.
46. Based on the information made available during the inception stage three countries - Belize, Grenada and St Lucia – were identified as appropriate cases to provide primary data to explore the TOC for this project.

- Belize
- Grenada
- St Lucia

47. The findings from these countries were verified through triangulation with information gained from telephone/Skype interviews with respondents in Antigua and Barbuda and St. Vincent and the Grenadines.

A. Evaluation Tools

48. This exercise utilised both qualitative and quantitative evaluation methods as appropriate to determine project achievements against the expected outputs, outcomes and impacts. A primary tool of this exercise is the use of the standard evaluation criteria¹³ as defined in the ToR. Also, the evaluation utilised the TOC model which presents a comprehensive description of how and why the desired impact is expected to be achieved in a particular context. The information gleaned from such analysis not only informs on the success of the project but also provides information on the prospects for results. Given the fact that a TOC did not form part of the preparation of the project, and given the fact that one of the main criticisms of logical frameworks is that they do not often provide comprehensive information on the processes by which project outputs yield outcomes and eventually lead, via 'intermediate states' to impacts, a *reconstruction* of the project using TOC was deemed necessary. Other evaluation tools included desk reviews, interviews (utilising both fixed and open-ended questions) and field visits.

B. Data Collection

49. Data for the evaluation tools were gathered through interviews (Skype, telephone, email and person) desk-top study and stakeholder engagement.

50. Documents reviewed included:

- Relevant background documentation, inter alia, UNEP's Mid-Term Strategy (2010 – 13);
- Project design documents;
- Annual work plans and budgets or equivalent, revisions to the logical framework and project financing;

¹³ Strategic Relevance; Quality of Project Design; Nature or External Context; Effectiveness – *achievement of outputs, achievement of outcomes, likelihood of impact*; Financial Management; Efficiency; Monitoring and Reporting; Sustainability and Factors Affecting Performance – *preparation and readiness, quality of project management and supervision, stakeholders participation and cooperation, responsiveness to human rights and gender equity, country ownership and driven-ness, communication and public awareness.*

- Project reports such as progress and financial reports
 - National Steering Committee meeting minutes;
 - Annual reviews and relevant correspondence;
 - Documentation related to project outputs and relevant materials published on the project website;
 - Project publications.
51. The ESD for Caribbean Buildings included many stakeholders (See Section 3.3) however, only key stakeholders with a direct role in the management of the project were interviewed for this MTE. Stakeholders engaged included the Implementing Agencies (UN Environment, GEF), Executing Agency (5Cs) and Executing Partners (UNDESA and WINDREF), regional Stakeholders (SIDS-DOCK), National Coordinators and members of the National Steering Committee. A list of the specific persons engaged can be found in *Annex IV*.
52. In-person field visits were paid to three countries: Belize, Grenada, and Saint Lucia. In Belize meetings were held with personnel at the 5Cs, NSC, former PC, former Chairperson of the NSC and the former Finance Officer at the 5Cs.
53. Meetings in Saint Lucia (June 25 – 27, 2017) were held with the former Chairperson of the NSC, personnel of the Energy Division of the Ministry of Sustainable Development, and members of the NSC, the former NC, and personnel from the Saint Lucia Development Bank. Subsequent Skype/Telephone conversations were held with the former Officer responsible for coordinating the ESD National Component.
54. In Grenada (June 27 – 29, 2017), meetings were held with the Chairperson of the NSC, the Grenada Bureau of Standards and WINDREF. A Skype/Telephone meeting was later convened with WINDREF as a follow up to the in-person interview.
55. Skype meetings were also held with the 5Cs Project Technical Coordinator, and the Project Coordinator before travelling to Belize where further meetings were held with various persons at the 5Cs, the former Financial Officer and personnel from the Energy Unit of the Ministry of the Public Service, Energy and Public Utilities. Skype meetings were also held with the NC in Antigua and Barbuda. Skype meetings were also held with UN Environment Task Manager and Project Assistant, as well as the Fund Management Officer and her Assistant who provided copies of the financial reports.
56. The process and methods used in this evaluation have been consistent with the provisions of the terms of reference presented in Annex 1. All interviews were

conducted using an open-ended interview guide contained in the TOR and other questions compiled during the MTE inception phase. Each focal point in the countries visited was sent a list of questions in advance, as these formed the basis of the discussion. The interview guide template is provided in Annex 3.

C. Data Verification

57. The TOC model was validated initially through the Inception Report of the MTE. Information and assumptions were later verified in discussion with stakeholders during field visits.

D. Data Analysis

58. All data were analysed according to the interview guide template and the multiple sources were cross-checked for triangulation.

E. Limitations of the Evaluation

59. Interviews with the Project Technical Coordinator and Project Coordinator could only be arranged via telephone and not at the project headquarters, thus limiting the ability of the evaluator to obtain critical documents associated with the project.
60. The TOC based evaluation approach does not require field visits to all project countries. However, not all of the countries and stakeholders were as forthcoming as could be in facilitating dialogue and information exchange. It was only after numerous emails and telephone calls that a skype meeting was facilitated with the NC in St. Vincent and the Grenadines. Also, following the visit to Grenada, numerous attempts for a follow-up telephone/skype meeting with the Chairperson of the National Steering Committee proved futile. However, by the end of the data collection process contact was established with relevant parties and a wide range of respondents contributed to the process - a full list is in Annex IV.
61. The evaluation exercise encountered numerous delays as a result of changing and conflicting schedules. These delays made it difficult to convene meetings with key stakeholders prior to the field visit. Following the preparation and submission of the Inception Reports, further delays, as a result of conflicting schedules (travel and vacation) also resulted in further delays in the preparation and submission of the Draft Report.

Table 2: Mid-Term Evaluation Schedule

No	Activity	Date
1	Start of the evaluation	April 2017
2	Inception report	June 24, 2017
3	Comments from Evaluation Office	June 27, 2017
4	Field visits - Saint Lucia - Grenada - Belize	June 26-27, 2017 June 27-29, 2017 July 24 – 29, 2017
5	Preliminary Findings	October 24, 2017
6	Comments from Evaluation Office	October 31, 2017
7	First draft report	November 3, 2017
9	Final report	December 15, 2017

III. The Project

A. Context

62. The majority of the countries in the Caribbean are dependent on imported petroleum products for more than 90 % of commercial energy consumption. Given their relatively small land areas and dependence on a very limited productive sector (tourism, agriculture and light manufacturing) combined with high levels of energy inefficiency the energy cost of countries in the Caribbean are among the highest in the world, and further reduces their global competitiveness. Paradoxically, the same countries have considerable potential for increased use of renewable energy. The countries recognize that to achieve their goals of sustainable economic development as set out in the Barbados Plan of Action and the Mauritius Strategy of Implementation¹⁴, and the Lillindall Declaration, they will need to increase the use of their renewable energy resources and significantly improve the efficiency of their energy use, particularly in buildings, which account for a third of total energy used and associated greenhouse (GHG) emissions.

¹⁴ Negotiated agreements under the Commission on Sustainable Development of the United Nations Department of Economic and Social Affairs (UNDESA).

B. Objectives and Components

63. The overarching goal of the Project is to develop and implement measures for promoting sustainable energy development within the building sector. In that regard, the project objective is to reduce the use of fossil fuel based electricity use in buildings by 20% and eventually reach a long-term target of around 50%. These goals were considered as imperative given the fact that energy costs in the Caribbean were amongst the highest in the world, that energy inefficiency was common throughout the region, that financial institutions had little incentives to provide more attractive loans for retrofitting; and, affordable energy services are essential in driving economic development in the island states of the Caribbean.
64. In order to achieve the goals outlined above a number of interventions were planned which included the establishment of an assessment and monitoring system for energy efficiency; strengthening national capacity (training workshops, seminars, best practice manuals) in energy efficiency for building designers, architects and contractors; development and use of appropriate financial and market-based mechanisms that support sustainable energy use in buildings; development and implementation of a demonstration programme for sustainable energy use in buildings; development of minimum energy performance standards, adoption of a legislative and regulatory framework for appliances and equipment; and, increasing regional awareness and improving knowledge management of the benefits of energy efficiency and renewable energy. The target of 20% GHG reduction was set based on a general rule of thumb that states low-effort interventions (such as lighting changes, and changes to EE appliances), and the adoption of Energy Star or equivalent EU standards labelling requirements will yield reductions of that magnitude.
65. Like most donor-funded projects to the region, this project is being implemented in five different countries, with 85% of project funding decentralized to the country-level, requiring strict coordination to ensure that efforts are harmonized. All countries were to implement demonstration projects, and each participating country was to adopt a 'leading' role, in which they would provide primary support to other country partners. The anticipated roles were as follows:
- Grenada led the monitoring and reporting mechanism for tracking technology uptake, technology effectiveness, human health impacts and social perceptions of the project;
 - Belize led the development and support of ESCOs
 - Antigua and Barbuda led on the development of suasion materials and financial mechanisms;
 - St. Lucia led with regards to lighting research and projects;

- Trinidad and Tobago led with regard to the development of building codes and appliance standards. Trinidad and Tobago opted out of the project indicating that they were pursuing similar objectives through other initiatives. Saint Vincent and the Grenadines replaced Trinidad and Tobago, but the responsibility for developing building codes and appliance standards remained disaggregated among all five countries without a single focal point recognized as 'lead'. In the final event, CARICOM Regional Organisation for Standards and Quality (CROSQ) initiated the preparation of a Regional Energy Efficiency Building Code (REEBC) and Minimum Energy Performance Standards (MEPS) involving the wider Caribbean region.
66. The design of the project has all the hallmarks of a good project notwithstanding the inherent difficulties of coordinating a project involving several different countries and made more challenging by the fact that each one had responsibility for a different element on which the others were dependent.
67. The overarching goal of the ESD Project is to develop and implement measures for promoting sustainable energy development within the buildings sector, make the energy sector more efficient, and increase the use of renewable energy in five (5) pilot countries: Antigua and Barbuda, Belize, Grenada, Saint Lucia and Saint Vincent and the Grenadines) over a four-year period, through an integrated approach comprising:
- technical demonstration of energy efficient equipment, appliances, and best practices with regard to the design of more energy efficient buildings and retrofitting of buildings to make them more energy efficient;
 - development and use of innovative financing mechanisms to address the higher upfront cost associated with the use of energy efficient products and equipment and the development of renewable energy sources;
 - development of sustainable energy policies to support market transformation towards the use of more energy efficient products and equipment and the increased use of renewable energy;
 - capacity building and institutional strengthening to implement sustainable energy policies and measures; and
 - public education to raise awareness among the general population of the benefits of sustainable development of the energy in comparison with a business-as-usual continuation of current practices of supplying and using energy.
68. Table 3 below shows the outputs and outcomes of each component of the project

Table 3: Project Results Framework

Components	Outcomes	Outputs
Component 1: Establishment of an assessment and monitoring system for energy efficiency and renewable energy in buildings	Institutional capacity for management of sector, monitoring and assessment	<i>Output 1.1</i> Building audit reports, statistics on potential savings in domestic, commercial and public sectors
		<i>Output 1.2</i> Identification of measures at the design, construction and maintenance stages of the building life cycle for improved energy efficiency and renewables
		<i>Output 1.3</i> Identify equipment and lighting potentials to reduce fossil fuel use
		<i>Output 1.4</i> Specific energy saving measures and policy options for various classes of buildings are identified and developed
Component 2: Strengthening of national capacity for energy efficiency and renewable energy to support long-term development of the five SIDS	Technical capacity and awareness for Energy Efficiency: Grenada – training in Photovoltaic (PV) set up and connection St. Lucia – Lighting standards Belize – ESCOs and financing instruments	<i>Output 2.1</i> Development of training workshops, seminars on energy efficiency for building designers, contractor’s architects, renewable energy installers and maintenance personnel
		<i>Output 2.2</i> Publication of manual on best practices on energy efficiency for use in building sector
		<i>Output 2.3</i> Development of energy efficiency courses for national tertiary institutions
Component 3: Development and use of appropriate financial and market-based mechanisms that support sustainable energy use in buildings	Appropriate financial and market-based mechanisms that support energy efficiency.	<i>Output 3.1</i> Reduced operating costs and risk hedging against fuel price spikes are integrated into lending
		<i>Output 3.2</i> Fiscal incentives program to increase market uptake and penetration of sustainable energy measures
Component 4: Development and implementation of a demonstration program for sustainable energy use in buildings	Demonstration programme for sustainable energy	<i>Output 4.1</i> Demonstrations of measures and benefits of energy efficiency in buildings at the national level. Voluntary projects
		<i>Output 4.2</i> Challenge competition for private sector builders for construction and retrofitting of buildings to make a very low purchased energy target of some few kWh/m ² – Private sector competition for ESCOs.
Component 5: Development and adoption of a regulatory framework energy efficient buildings (building codes) and minimum energy performance	Regulatory instruments	<i>Output 5.1</i> Development of guidelines and standards for energy efficient construction practices including renewable energy and products based on an investigation of global and regional standards.

Components	Outcomes	Outputs
standards (MEPS) for appliances and equipment		
Component 6: Increasing regional awareness and improving knowledge management, and sharing with regard to the benefits of energy efficiency and renewable energy and the development of a replication strategy	Regional dissemination	<i>Output 6.1</i> Task reports produced on subtopics: <ul style="list-style-type: none"> • Grenada: PV interconnection and monitoring buildings • Antigua & Barbuda awareness and education program materials, schools, general public, • St. Lucia: Lighting • Belize: ESCO training and program • Trinidad & Tobago: Energy Efficiency Regulations

69. It is projected that an emission intensity reduction of 20 % of GHG emission will be achieved in the buildings under the project. Indirect impact following the project completion is expected to scale up to the entire buildings sector in due course in these countries as a result of the standards, codes, policy and legislature, and enhanced capacity that will result from successful implementation.
70. The ESD Caribbean project is aligned with the UN Environment strategic priority to promote resource efficiency, as part of its sustainable consumption and production initiative associated with buildings, as contained in its Medium-Term Strategy, as well as its energy policy and climate change mitigation priorities. The project's goal of increasing energy efficiency in buildings is also a high priority of GEF's climate change mitigation strategy and is aimed at achieving a 20% reduction of GHG emission across five Caribbean territories through a market-transformation intervention.
71. The project is funded by GEF, implemented by UN Environment and executed by the 5Cs. The ProDoc indicates that this Full-Sized project is co-financed by a host of partners including the 5Cs (550,000); National Executing Partners (2,266,500); National Development Banks (2,800,000); Bilateral - Government of Japan for Belize – (500,000); and in-kind contributions from National Executing Partners (1,174,000); UNDESA (150,000); and an NGO - WINDREF (185,000). The total budget for the project is USD 12,484,500, comprising of 7,625,500 in co-finance and the GEF Trust Fund grant of 4,859,000.
72. The feasibility and success of this intervention required:
- Monitoring and evaluation of the project's activities (outputs) as well as monitoring of environmental safeguards (indoor air quality and social perception); and
 - Dissemination of knowledge between countries to ensure the harmonized development of standards, regulations, financial policies and integrated building EE programmes.

C. Stakeholder Analysis

73. Stakeholders, categorized by The Evaluation Office of UN Environment as consisting of “all those who are affected by, or who could affect (positively or negatively) the project’s results”, formed an integral part of the Project performing various roles, ranging from implementing partners to supporting trade associations, all of whom are expected to contribute to achieving project outcomes and meeting the goals of the project. These stakeholders included the key partners like the 5Cs, which was entrusted with responsibility for the implementation of the Project; governmental agencies, regional institutions and private sector entities, and external parties such the Associations of Engineers and Architects, licensed contractors for the supply of energy efficient appliances and equipment under the Project as well as building contractors. Stakeholders are identified as playing a critical role in the project by being members of the Regional Coordinating Committee and National Steering Committee. These included the following:

- Ministries responsible for Housing and the Environment
- Ministry responsible for Energy
- Bureau of Standards
- Ministry of Finance
- Ministries with responsibility for Climate Change
- Major equipment suppliers
- Association of Professional Engineers and Architects
- Educational institutions
- Electrical utilities
- Energy Service Companies
- National Development Banks
- Energy Regulatory Authority

74. The role of each of the major stakeholders was clearly identified in the project, with, as expected, governmental ministries entrusted with responsibilities for the development of policy directives and providing the overarching intra-governance structure to ensure consistency in the development application of standards across the region and meeting the wider global objectives. In that regard, Ministries of Finance in the respective countries had a critical role to play in ensuring the success of the project not just for providing in-kind support, but also for the development of new policies which would make financing of EE/RE initiatives more attractive.

75. The professional agencies identified were also expected to play critical roles in helping with the development of building standards, but most importantly, ensuring that those standards were applied. In that regard, the issue of training, knowledge transfer and public awareness-raising initiatives required the involvement of these

professional groups, educational institutions and electrical utilities throughout the region, working in close partnership with the implementing agencies.

76. Despite the wide-ranging collection of stakeholders and the respective roles identified, a major oversight seems to have been the omission of any mention of indigenous groups in the ProDoc. In Belize, indigenous persons make up a significant percentage of the population, but no analysis was provided of their challenges in respect of EE and the use of RE. Also, no acknowledgement was made of other vulnerable groups, namely women and children, in any of the national jurisdictions. Notwithstanding, the major challenges with implementation will certainly rest on the ability of the implementing agencies to ensure that the interests of these stakeholders are satisfied, but that they are also involved to the levels required to ensure the success of the project.

D. Project Implementation: Structure and Partners

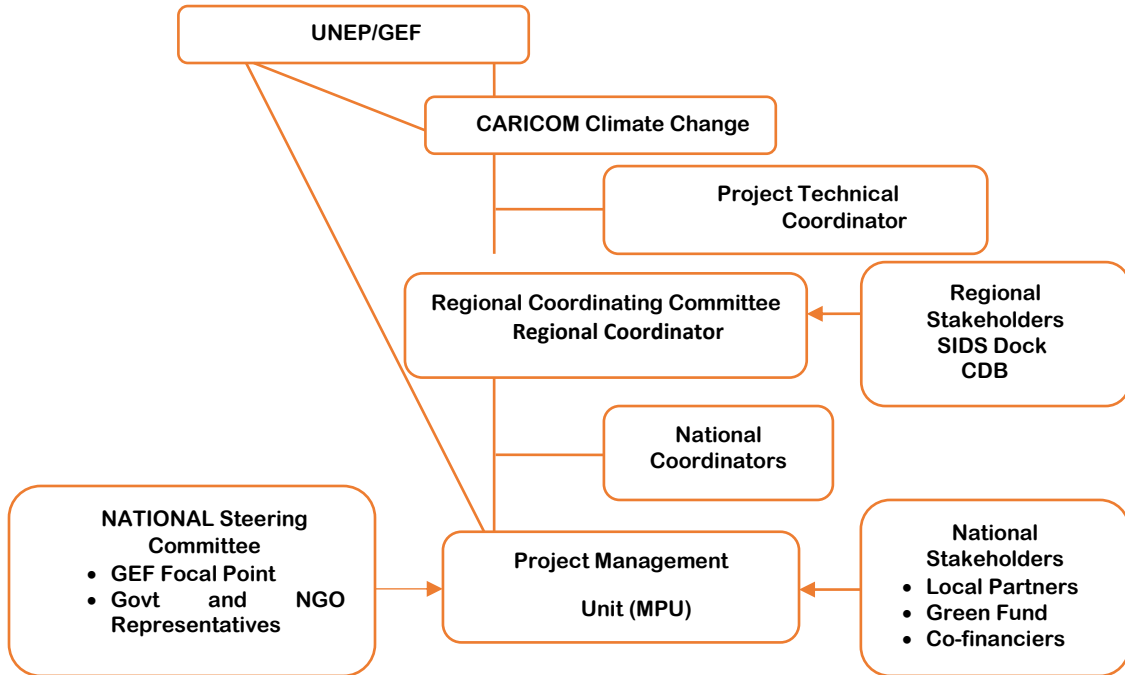
77. UN Environment is the Implementing Agency, and the project is situated in the Climate Change Mitigation Unit of the Energy Branch within the Economy Division. The Executing Agency (EA) is the Caribbean Community (CARICOM) Climate Change Centre (CCCCC or 5Cs). Project Partners are ministries in the target countries:

- Ministry of Health and the Environment, Government of Antigua & Barbuda
- Ministry of Energy, Science and Technology and Public Utilities (MESTPU), Government of Belize
- Ministry of Finance, Office of the Prime Minister, Energy Division, Government of Grenada
- Ministry of Sustainable Development, Energy, Science and Technology, Government of Saint Lucia
- Ministry of National Security, Air & Sea Port Development, Office of the Prime Minister, Energy Unit, Government of Saint Vincent and the Grenadines

78. The roles of the various parties are as follows: (i) UN Environment, acting as the GEF IA and initially, with assistance from United Nations Department of Economic and Social Affairs (UNDESA), is responsible for overall project supervision and ensuring consistency with GEF and UNEP policies and procedures. They will also provide guidance on linkages with related UNEP and GEF-financed activities; (ii) the Caribbean Community Climate Change Centre (5Cs), is the lead EA responsible for overall implementation, including the central coordination of project activities, contracting project staff and selecting members of the national steering committees; (iii) National Steering Committees (NSC), housed in the ministries listed above of the five countries, are responsible for overseeing local project implementation; and (iv) regional and local energy experts assisted by specialists from UNDESA, provide technical assistance.

79. In addition to the above, the 5Cs established in-house a Programme Development and Management Unit to provide regional oversight. The PMU team is comprised of the Executive Director (5Cs), PTC, PC, Finance Manager, and the RE/EE expert based at the 5Cs.
80. The above, along with Representatives from UNDESA, UNEP, and the GEF national focal points, and the national Project Management Units (PMUs) under the Project constitute an Oversight Group which was intended to meet quarterly over the first year. No information was made available indicating that this group met formally on a quarterly basis. However, it was noted that there was regular exchange of communications among the implementing partners as they sought to finalise the work plans and initiate national project steering committee meetings.
81. Also, an official Project Steering Committee comprising of representatives from all executing partner agencies, financiers, other stakeholders, and UN Environment Energy Branch were to meet annually to review and discuss the overall status and progress of the project. This group, which became formally known as the Regional Coordinating Committee (RCC) met on an annual basis. The first meeting of that group took place in on April, 2014 in Saint Lucia.
82. According to the Project Document 5Cs is responsible for coordinating all technical and administrative matters with UNEP, they also share the administration and project coordination with national PMUs in each country. Since 85% of the resources will be executed nationally, the National Steering Committees (NSCs) will provide the most important guiding function ensuring national buy-in and impact. Project management responsibilities are split evenly between national PMUs and 5Cs. PMUs are required to track their GEF and co-financing budgets while 5Cs is responsible for consolidating the reports, submitting them to UNEP and providing general supervision. The regional role is critical to the provision of backstopping and ensuring overall progress.
83. Figure 1 below shows the design of the implementation structure

Figure 1 – ESD for Caribbean Buildings Implementation Structure



E. Changes in Design During Implementation

84. There were several events that affected the project’s scope and parameters starting from the beginning of the project. Notable events are as follows:

- a. **March 2013:** Official project launch but encountered delays in becoming effective. Among the many issues contributing to this delay were challenges in convening NSC meetings, protracted discussions with Antigua and Barbuda in terms of the channels for distribution of project funds and issues relating to the appointment of the Project Coordinator.
- b. **March 2014:** Trinidad and Tobago formally withdraw from the project. Saint Vincent and the Grenadines replaced Trinidad and Tobago and was assigned responsibility for developing building codes and appliance standards.
- c. **June 2014:** Technical support which was supposed to have been provided by UN DESA was abruptly terminated, leaving a void in a key aspect of the support which was to be provided by them.
- d. **April 2014:** Project re-launched. The effective project time reduced by one (1) year due to delays.
- e. **June 2014:** Cash contributions to 5Cs previously promised by UNIDO no longer available due to several reasons including delays in the start of the project.
- f. **June 2014 – July 2015:** Loss of National Coordinators (NCs) in Antigua and Barbuda slows project delivery. Delays in disbursement of project funds.
- g. **June 2015 – July 2016:** Delays in the procurement of equipment.
- h. **April 2016:** New NC established in Antigua and Barbuda and project documents finalized.
- i. **June 2016 – July 2017:** No-cost extension granted to the project by one year. Project end date moved from April 2017 to April 2018.
- j. **April 2017 –** Commencement of the Mid-Term Evaluation/Review exercise.

F. Project Finance

85. Table 4, below shows the total estimated project cost at design.

Table 4: Total Project Cost

Agencies	US\$	%
Cost to the GEF Trust Fund	4,859,000	38.9
Co-financing		
Cash		
Executing Agency: 5Cs	550,000	4.4

Agencies	US\$	%
National Executing Partners	2,266,500	18.2
National Development Banks	2,800,000	22.4
Bilateral (Government of Japan for Belize)	500,000	4.0
Sub-total	6,116,500	
In-kind		
National Executing Partners	1,174,000	9.4
Executing Partner: UNDESA	150,000	1.2
National Executing Partner/NGO: WINDREF	185,000	1.5
Sub-total	1,509,000	
Total Co-financing	7,625,500	
Total Project Cost	12,484,500	100.0

Source: UN Environment Project Document (ProDoc), undated.

86. Table 5 below shows the budget for each of seven Project Components

Table 5: Project Budget – Component

Project Components	GEF Financing (\$)	%	Co-financing (\$)	%	Total (\$)
1. Establish Assessment and Monitoring System including studies of long term potentials	735,550	67	364,500	33	1,100,050
2. Strengthening of National capacity for energy efficiency and renewable energy	541,200	55	435,000	45	976,200
3. Appropriate financial and market based mechanisms that support energy efficiency	604,450	25	1,841,500	75	2,445,950
4. Demonstration program	1,475,750	29	3,688,750	71	5,164,500
5. Regulatory framework to promote energy efficient buildings	530,250	47	602,800	53	1,133,050
6. Regional Technical Advice	485,900	70	207,050	30	692,950
7a. National Project management	242,950	50	242,950	50	485,900
7b. Regional Project Management	242,950	50	242,950	50	485,900
Total	4,859,000		7,625,500		12,484,500

87. Table 6 below provides a breakdown of the co-financing budget for the project.

Table 6: Co-financing Budget

Name of Co-financier (source)	Project Preparation Cofinance (received – in-kind)	Project (USD)	Total Eligible Commitment accepted	Notes
Caribbean Community Climate Change Centre (5Cs)		550,000	550,000	Cash-
UNDESA	25,000	150,000	175,000	In-Kind
Ministry of Land Housing and Environment A&B		550,000	550,000	Cash estimate based on project activities and establishment of a revolving fund
Ministry of Land Housing and Environment A&B	10,000	732,500	742,500	In-kind includes Government financing of upgraded public buildings
JICA in Belize		500,000	500,000	Cash. Although up to 10M USD is identified, the buildings integrated portion addressing project objectives during the project period is estimated conservatively at 0.5M USD
Development Finance Corporation Belize		800,000	800,000	Soft loan. Excludes normal management costs if their own finance and the equity required of borrowers
Central Buildings Authority Belize		45,000	45,000	In- Kind
Ministry of Natural Resources and Environment Belize	10,000	92,000	102,000	In-Kind
Grenada Development Bank		1,200,000	1,200,000	Soft loan -Excludes normal management costs if their own finance and the equity required of borrowers
WINDREF	10,000	185,000	195,000	In-Kind
St. Lucia Development Bank		800,000	800,000	Soft loan -Excludes normal management costs if their own finance and the equity required of borrowers
Sustainable Development & Environment Unit St. Lucia	110,000	82,500	192,500	In-Kind- EU funded activity related to buildings was instrumental in the project design
Ministry of Housing and the Environment T&T		1,716,500	1,716,500	Cash
Ministry of Housing and the Environment T&T	10,000	222,000	232,000	In-Kind
Total	175,000	7,625,500		

Source: Un Environment Project Document (ProDoc), pg 146

88. Table 7 below shows the distribution of the budget between the five implementing countries.

Table 7: Distribution of the Budget Between the Five Implementing Countries

GEF Agency	Focal Area	Country Name/ Global	(in \$)		
			Project (a)	Agency Fee (b)	Total c=a+b
UNEP	Climate Change	Antigua & Barbuda	988,740		
UNEP	Climate Change	Belize	988,740		
UNEP	Climate Change	Grenada	988,740		
UNEP	Climate Change	St. Lucia	372,540		
UNEP	Climate Change	St Vincent	741,390		
		UNEP (evaluation)	75,000		
		5C	703,850		
Total GEF Resources			4,859,000	485,900	5,344,900

Source: GEF Project Identification Form, submitted Nov 12th, 2009 (refers to April 1st, 2011 GEF Approval Date)

IV. Theory of Change Analysis

89. The growing demand to ensure the successful outcomes of projects and that they deliver on their intended impacts has meant that evaluations have become a critically valuable tool in reviewing the achievement of results and project progress along the project's pathways from outcome to impact. The information gleaned from such analysis not only informs on the success of the project but also provides information on the prospects for results.

90. In the evaluation literature, 'Theories of Change' (ToC) have been used to describe the causal relationships between a project's activities, outputs (goods and services delivered by the project) and immediate project outcomes (changes resulting from the implementation of project outputs), and longer-term intermediate states and the project's ultimate desired impact (usually changes in environmental and social benefits). It also helps to define the external factors that influence change along the pathways and whether one result can lead to the next, which may be either drivers (over which the project has a certain level of control) or assumptions (where the project has no, or no significant, control).

91. At the time of project preparation, ToC was not required and did not form part of the tools applied during the project design. Given the fact that one of the main criticism of logical frameworks is that they do not often provide comprehensive information on the causal processes by which project outputs yield outcomes and eventually

lead, via 'intermediate states' to impacts. It, therefore, became necessary to undertake a *reconstruction* of the project using a ToC.

92. The long-term impact of the project was estimated to be improved energy efficiency and renewable technologies mainstreamed throughout the Caribbean along with the concomitant reductions in GHG emissions. However, the project's accountability ceiling stops at the intermediate state of realizing 20% emission intensity reductions by 2033. The causal pathways between the projects' outputs and this intermediate state are varied. However, they share some common assumptions and drivers. The identified causal pathways are as follows:

- a) According to the project design, high fuel prices in most Caribbean territories and the understanding by their political leaders of the need to change unsustainable EE practices and behaviours are the main drivers of change. When combined with the support provided by regional standards and financial institutions and their cooperation, countries should reach an "intermediate state", where best practices are being broadly replicated, enhancing the possibility of national and regional reforms.
- b) The development and implementation of the assessment and monitoring system by Grenada is intended to provide robust empirical evidence to support the success of EE & RE projects. This evidence should be applicable to all countries and reinforce the development of regulations and suasion measures, support the identification of best practices, and assist with generating public-demand/buy-in. Additionally, it should allow for the early detection of the 'rebound effect' so that timely interventions can be made to limit unsustainable practices. The result of this is expected to be improved institutional capacity for management of the energy sector, specifically as it relates to buildings. With a refined system for monitoring established, it was envisioned that continued political, public and financial support would extend beyond the project duration resulting in increased penetration of EE and RE technologies throughout the Caribbean to the extent that 20% reduction by 2033 would be achieved.
- c) Strengthening the national capacity to undertake EE/RE measures is coordinated at the regional level through the 5Cs with support from UNDESA. Well-developed training programs offered to in-country stakeholders were expected to increase the technical knowledge and awareness of PV installations (St. Vincent and the Grenadines), lighting standards (St. Lucia) and ESCOS (Belize). The stakeholders targeted include regulators, project developers, designers, contractors, architects, as well as skilled labourers and maintenance personnel involved in energy efficiency and renewable energy interventions. This enhanced capacity, supported by technical manuals, and

on-going education at tertiary institutes promised enhanced uptake of EE/RE metrics by professional's active in the buildings sector of each country.

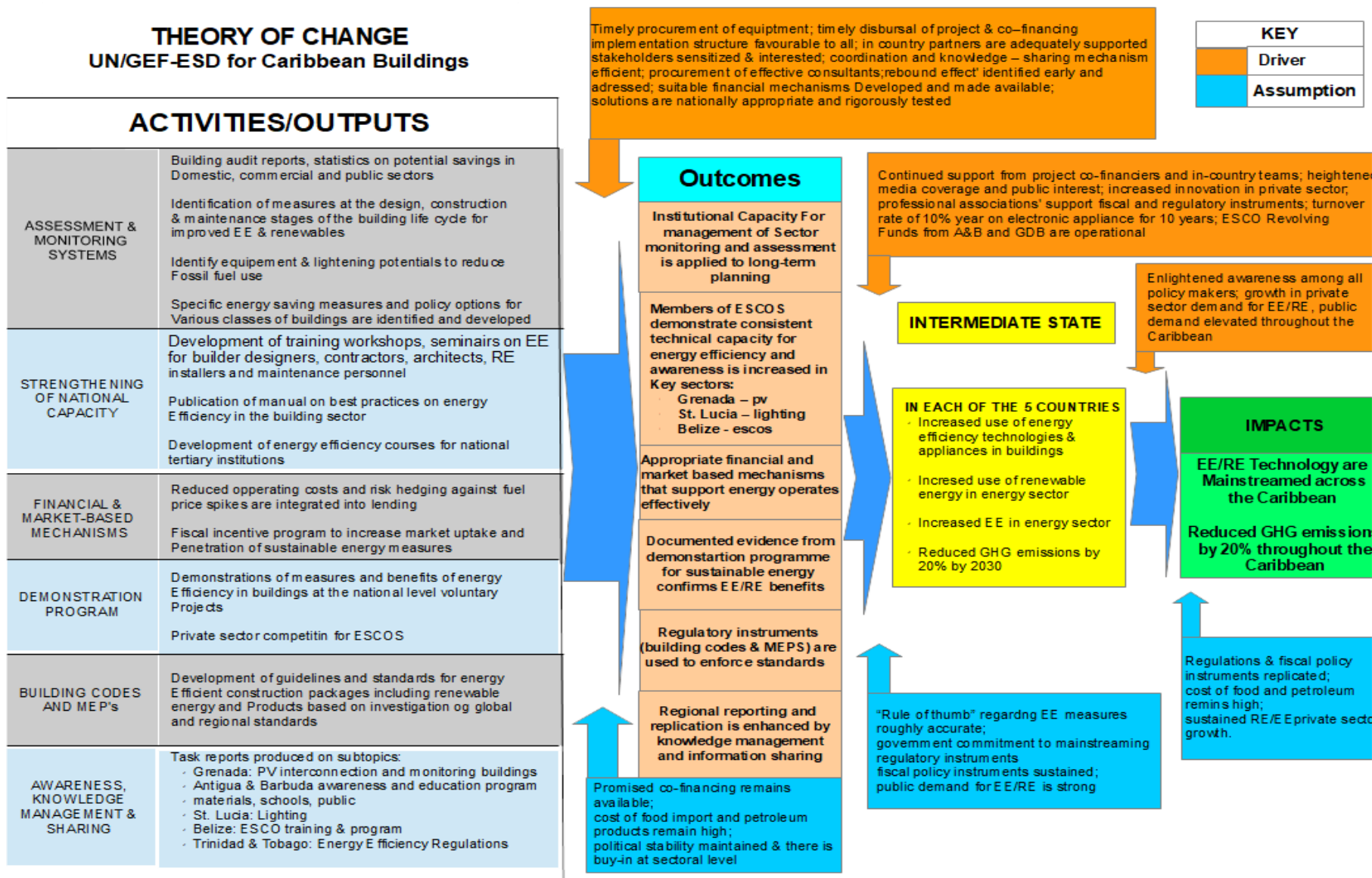
- d) Establishing an attractive financial environment through partnership with multilateral donors (e.g. CDB) and domestic development banks (e.g. Development Finance Corporation in Belize and Saint Lucia Development Bank) under Component 3, is expected to permit the progressive evolution of nationally-appropriate, and regionally suitable, EE/RE projects. This assumes agreement on attractive lending terms, timely dispersal of funds from the project's financiers and co-financiers initially and the cementing of relationships between state agencies and banks towards establishing revolving loans post-project completion. A sustainable system of EE/RE project financing is expected to hedge the fuel-price risks associated with the traditional energy sector by enabling the development of more efficient buildings and more stable sources of electricity.
- e) All countries are expected to coordinate in-country stakeholders to implement demonstration projects of EE/RE in buildings. Given that national steering committees will be effective, strong political support continued, and demonstration projects are well publicised, it is expected that public awareness of the potential benefits from EE/RE will be enhanced. This elevated awareness is expected to translate into elevated demand and thus increase the proliferation of EE/RE building projects in the region.
- f) The deepening of the Caribbean Single Market and Economy (CSME) will provide more opportunities for ESCOs to produce and sell their goods and services resulting in more investments in EE/RE in the region. The potential for more investments is based on the fact that the creation of one large economic market in the region with free movement of goods and services and the elimination of all barriers to intra-regional movement and the harmonization of standards, will provide a larger market where more goods and services (RE/EE) will be traded.
- g) Under the oversight of national steering committees, in-country stakeholders are expected to coordinate efforts to develop nationally appropriate regulation instruments such as building codes and MEPS for electronic appliances. The composition of stakeholders varied between countries given the differences in assigned tasks. However they were all cross-sectoral groups comprising of public, private and non-governmental entities. The stakeholders included but weren't limited to: Ministries with the responsibilities for housing, finance, climate change, environment and energy; energy regulatory authorities; bureaus of standards, national building authorities; electric utilities; universities; national development banks; associations of professional

engineers and architects; energy service companies and equipment suppliers. The application of these instruments would vary between countries depending on political will and their economic context. However it is envisioned that countries would, at the least, apply measures on a voluntary basis. The application of these instruments is expected to lead to shifts in the market towards EE/RE options. Combined with the increased public demand for other project outputs, and the progressive reiterations of the MEPS, increased adoption of EE/RE projects is expected.

h) It is anticipated that, through an agreed reporting hierarchy, lessons learned from national partners in the execution of their assigned areas of interest would be disseminated across all territories by the 5Cs. This knowledge transfer is expected to reduce duplication of ineffective approaches and quickly compile best-practices which would support the replication of all measures within the project time frame. The combined replication of effective projects would result in meeting the 2033 target for the project countries.

93. Following on from the above, the theory of change can then be deduced and reproduced as indicated in Table 8. “Theory of Change – From Outcomes to Impacts.

Table 8: Theory of Change: From Outcomes to Impacts



V. Evaluation Findings

A. Strategic Relevance

94. *Alignment to the UN Environment Medium-Term Strategy (MTS and Programme of Work (POW)).* The project is fully consistent with UNEP's strategies and programmes and contributes to the achievement of their objectives in the target countries. The project seeks to both reduce greenhouse gas (GHG) emissions and make the energy sector in the Caribbean more efficient and increase their use of renewable energy. Given the high cost of energy, it is intended to provide for increased access to affordable energy services which is an essential driver of economic development in the island states of the Caribbean.
95. The project objectives and activities are also aligned with the Bali Strategic Plan. The approaches and methods used by the project are also consistent with those proposed by UNEP globally, including pilot projects, experimentation and the development of methodologies, partnerships with financial institutions, and monitoring and evaluation. When completed, the project will have contributed to several of the expected accomplishments of UNEP's current medium-term strategy and programme of work, especially with respect to the Climate Change, one of six cross-cutting thematic priorities.
96. It is also consistent with the United Nations Framework Convention on Climate Change (UNFCCC) and fits within the broader United Nations approach for dealing with climate change, create enabling environments at national level through the promotion of national legislative, economic and institutional frameworks that are adequate to address the climate change challenges, and strengthening the ability of countries to integrate climate change responses into national development processes. It is so expected that this initiative will complement other processes and the work of other institutions and will emphasize the substantial co-benefits of climate change actions and their contribution to environmental sustainability; assist vulnerable states to adapt to a changing climate by building resilience in sectors of national priority; and support countries to make a transition towards societies based on more efficient use of energy, energy conservation and utilization of cleaner energy sources, with a focus on renewable energy.
97. UN Environment expected accomplishments are that adaptation planning, financing and cost-effective preventative actions are increasingly incorporated into national development processes, and that countries make sound policy, technology, and investment choices that lead to a reduction in greenhouse gas emissions and realise potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation.

98. *Alignment to the UN Environment/GEF/Donor Strategic Priorities.* The project is also consistent with GEF-4 Focal Area Strategies and Strategic Programming¹⁵, and specifically the Climate Change Focal Area which seeks to promote energy efficiency in residential and commercial buildings; and, the use of energy-efficient technologies and practices in the appliance and building sectors. It is also linked with the UNDP executed, and GEF funded project “Promoting Energy Efficiency and Renewable Energy in Buildings in Jamaica”. The UN Department of Economic and Social Affairs (UNDESA) and SIDS Unit, one of the partner EA, was expected to also provide access to information and national sustainable development strategies development support from its regular program for Technical Cooperation and the SIDS Unit’s ongoing projects.
99. *Relevance to Regional, Sub-regional and National Environmental Priorities.* The ProDoc has relevance to the region’s environmental priorities as it speaks of the development of a “Regional Energy Policy for CARICOM region.” That regional policy is a follow up to the mandate given to the 5C upon its establishment by the Heads of Government of the Caribbean, to promote the development and use of sustainable energy in the region so as to build regional resilience to the impacts of a changing climate (ProDoc, 26). The Project is also entirely consistent with the national priority and plans. Grenada, for example, has initiated several programmes aimed at ensuring energy efficiency in its building sector. Antigua has indicated their intention to use the results of the project to help with the formulation of their National Energy Policy. For Saint Lucia, the project objectives are consistent with their Sustainable Energy Policy and envisage possibilities of using the outputs of the project to help craft a policy and legislative framework which will facilitate diversification of the energy market and greater energy efficiency.
100. *Complementarity with Existing Interventions.* The project was an ideal complement to several other initiatives which are either ongoing or due to come onstream given the growing awareness of the high-cost of energy and the need to have it addressed if SIDS are to turn around their stagnating economies. Particularly significant is the implementation of the Regional Energy Efficiency Building Code (REEBC) and Minimum Energy Performance Standards (MEPS)¹⁶ being undertaken by CARICOM Regional Organisation for Standards and Quality (CROSQ), the CARICOM Secretariat

¹⁵ <https://www.thegef.org/documents/gef-4-focal-area-strategies-and-strategic-programming>

¹⁶ A regional project team (RPT), established to develop the REEBC, was held in Kingston, Jamaica, 30-31 March 2017. Nine Caribbean Community (CARICOM) member states – Antigua and Barbuda, Barbados, The Bahamas, Belize, Guyana, Haiti, Jamaica, Saint Lucia, and Trinidad and Tobago – are represented on the RPT, which consists of 19 members. http://www.jamaicaobserver.com/news/Jamaica-to-host-energy-efficiency-building-code-project-launch_93261

– Energy Program and supported by the Caribbean Development Bank (CDB) and a number of other regional and international entities.

101. *The project does not give specific attention to gender and indigenous issues relevant to EE and RE management.* These should be taken into account in future activities, together with other issues of social equity. It is common knowledge that a significant percentage of households in the Caribbean are headed by women, and more importantly, they are the primary users of EE appliances and technologies in the home. It seems evident, therefore, that engagement of women and understanding the role they play in making a decision with respect to the use of energy will have a significant impact on reducing consumption or making wise decisions in respect of energy conservation.
102. The three areas of work where these issues should be directly considered are: (a) the activities of the Public Education Awareness, which should seek to identify and target stakeholders, identify and analyse equity issues (particularly as it relates to training in EE and RE technologies, accessing of low-cost financing, and overall opportunities for livelihood improvements which can contribute direct economic benefits to women through formal sector employment and by providing them with opportunities to improve their livelihoods through small-scale enterprises).
103. The same degree of sensitivity, awareness and attention to the needs of indigenous people applies, particularly in the case of Belize where there are large populations of persons who classify themselves as indigenous. In the context of the continued operations of the project a recommendation is being made for specific initiatives aimed at identifying the percentage of women participating and benefiting directly from training opportunities and ensuring that a greater effort is made to raise the awareness and ensure that equitable measures form part of any low-cost financing initiatives introduced to ensure the participation of women, and indigenous groups.

Criteria	Summary Assessment	Rating
A. Strategic Relevance		
1. Alignment to the UN Environment Medium-Term Strategy (MTS) and Programme of Work (POW).	There is alignment to the UN Environment MTS and POW	HS
2. Alignment to the UN Environment/GEF/Donor Strategic Priorities.	There is alignment to the strategic priorities of UN Environment/GEF/Donor	HS
3. Relevance to Regional, Sub-regional and National Environmental Priorities	The project is highly relevant to Regional, sub-regional and National Environmental Priorities	HS
4. Complementarity with Existing Interventions	The project was an ideal complement to several other initiatives which are either ongoing or due to come onstream. However,	U

Criteria	Summary Assessment	Rating
	there was no real acknowledgement of gender issues or interests of indigenous populations.	
Overall Strategic Relevance rating		S

B. Quality of Project Design

104. The evaluation exercise has not uncovered any significant flaws in the overall design of the project, although some weaknesses are apparent with hindsight. This project was prepared before ToC became an essential tool in the preparation or projects being implemented by UN Environment. Notwithstanding, the log frame used was based on a clear problem analysis, which identified the issues of high energy cost in the participating countries and the extent to which a range of EE measures combined with the introduction of RE technologies would lead to tremendous savings.
105. Having identified the problems of high cost of energy, it proceeds to identify the challenges or “root causes and barriers” which have been identified as “lack of awareness” on the part of the general public of the economic and financial benefits to be derived from efficient energy practices and the use of renewable energy sources. It also identifies several barriers including financial, institutional and capacity constraints as contributors to the slow pace at which energy efficient practices and RE technologies are being utilised.
106. Since logframe-based projects don’t usually identify causal pathways, but simply identify outputs and outcomes, the application of the ToC concept was used to recreate the causal pathways. Using the information contained in the ProDoc, one is, therefore, able to establish the causal pathways from project outputs (goods and services) through outcomes (changes in stakeholder behaviour) towards impacts (long-term, collective change of state). In the recreation of the ToC, it was also necessary to identify assumptions and drivers, which though not clearly identified, was deduced, using expert knowledge of issues, and challenges associated with the intended outcomes.
107. SMART indicators for each expected outcome as well as mid-term and end of term targets are specifically identified in the Results Framework (ProDoc Appendix 4.). The ProDoc, for example, talks about the need for 20% reduction in GHG and 20% improvement energy performance improvement. While it may be argued that these targets were not based on any empirical assessments of what is achievable in the respective countries, the counter to that is that it was based on careful assessments of what is achievable in other jurisdictions, when similar scenarios were analysed.

108. It is also determined that the monitoring and evaluation systems incorporated at the design stage should have allowed for project personnel to adequately monitor energy efficiency achieved in the building sector, and RE uptakes, and monitor the effects of consumer awareness. The responsibility for ensuring these milestones are met is shared among the National PMUs and counterpart governments, using protocols established in the ProDoc and developed under the project by the countries and partner agencies (e.g. WINDREF, The Grenada Bureau of Standards, DFC).
109. An analysis of the strengths and weaknesses of the project at design stage provides an indication of the issues which set the stage for some of the challenges encountered and ultimately determined the low score achieved.
110. Among the identified strengths of the Project are the following:
- a. The Project represents another regional effort¹⁷ aimed at achieving energy efficiency improvements while at the same time promoting greater use of renewable energy.
 - b. The goal it sought to achieve had profound implications for reducing energy costs and represented an opportunity to make significant changes to the economic and financial situation of persons in both the public and the private sector. Most importantly, from a national economic perspective, it presented opportunities for the five target countries to become more competitive as a significant element of their production capacities – energy cost – would be reduced.
 - c. It builds on the July 4, 2009 Liliendaal Declaration, issued by the Heads of Government of the Caribbean, which recognized the need for energy efficiency and conservation and the need for increased technical and financial support for the development of renewable energy in the Caribbean, so as to build regional resilience to the impacts of a changing climate. Most importantly, it provides support to several national governments in the formulation of their National Energy Policies and promoting energy efficient programmes and greater use of renewable energy.
 - d. The Project was targeted at the building sector in the region which is the major consumer of electricity

¹⁷The first regional energy efficiency initiative was initiated under the Caribbean Hotel Energy Efficiency Action (CHENACT) in 2009. Financed by IDB, GTZ, CDE, UNEP, BL&P, BHTA and Government of Barbados, it was implemented by the Caribbean Tourism Organization (CTO) the Caribbean Hotel and Tourism Association (CHTA) and the Caribbean Alliance for Sustainable Tourism (CAST). CHENACT's goal is to improve the competitiveness of the small and medium sized hotels (less than 400 rooms) in the Caribbean through more affordable and predictable energy costs, through improved use of energy with the emphasis on Renewable Energy and Micro-Generation, while assisting Caribbean governments in meeting their international obligations in emissions of greenhouse gases and phase-out of ozone depleting substances <http://www.chenact.com/index.php>.

- e. The project built on a specialized division of labour with each country taking the lead in areas of their interest or where they already had advanced capacity.
- f. Many key stakeholders were identified and assigned critical roles at both the regional (RCC) and national (NSC) levels. In addition, they were expected to play pivotal roles in developing policies, laws, regulations, standards, in-kind contributions and ensuring the transferring of knowledge, providing and receiving training in EE and RE, all of which are critical success factors in determining project outcomes.
- g. A decentralized management structure was used to allow for the nationally determined operationalization of project.
- h. A thorough problem analysis was done.
- i. The Project Document clearly defined what activities would be put forth by the project to ensure sustainability.
- j. Appropriate project risks were identified and assessed prior to commencement

111. Among the identified weaknesses of the Project are the following:

- a. Baselines of potential emissions' reduction based on anecdotal evidence or general 'rules of thumb'. While the general rule of thumb might have been based on recognized criteria applied in other jurisdictions, reference to the CHENACT project mentioned above would have provided greater assurance that the targets were realistic and achievable.
- b. The majority of funding is dependent on co-financing, much of it is cash contributions which are yet to be realised or have not been accurately documented.
- c. The project is ambitious in the number of countries and number of sub-national stakeholders required to be managed given the limited financial resources allocated for management.
- d. Each country had responsibility for implementing one component. Delays in implementing one component created a cascading effect of delays in other countries and other activities. e.g., Grenada's delay in developing IAQ monitoring protocols had a cascading effect in other countries which were dependent on that data in order to commence their own IAQ monitoring. Likewise, Antigua and Barbuda's delay in commencing the public education and awareness component led to delays in other countries implementing education awareness activities in their respective countries.
- e. Despite the wide-ranging collection of stakeholders and the respective roles identified, a major oversight seems to have been the omission of any mention of indigenous groups in the ProDoc. In Belize, indigenous persons make up a significant percentage of the population, but no analysis was provided of

their challenges in respect of EE and the use of RE. Also, the acknowledgement was made of other vulnerable groups, namely women and children, in any of the national jurisdiction.

Criteria	Summary Assessment	Rating
B. Quality of Project Design	No major flaws in the design other than limited financial allocation, particularly given the number of countries involved, and no mention of indigenous populations and gender issues.	MS

C. Nature of the External Context

112. *The main external factor(s) which impacted on the project were the changes in government and administration.* During the early phase of the project, elections were held in all five of the participating countries. Though election cycles and change of governments don't usually have any significant impact on the administration and implementation of projects, in this instant, it seems to have affected three countries Antigua and Barbuda, Grenada, and Saint Lucia. In the case of Grenada, the election was held on February 12, 2013; Antigua and Barbuda on June 12, 2014; and Saint Lucia on June 6, 2016, all of which resulted in a change of administration.
113. In Grenada, the new administration resulted in a change of personnel with responsibilities for the management of the project, which contributed to delays in convening of NSC meetings. In Antigua and Barbuda, the changes in administration did not have an impact on management, though a new Ministerial team required time to become familiar with the project as some key decisions had to be made in respect Antigua and Barbuda's interaction with the 5Cs, the Project Executing Agency. In Saint Lucia changes in personnel (National Coordinator), difficulties in identifying and appointing a new NC, and the selection of demonstration buildings contributed to delaying the project.
114. Notwithstanding the convening of elections in all five of the participating countries and the delays attributed to the change in administration, these should not have had such a significant impact on the key decisions made in respect of the implementation of the national component of the ESD Project. In the case of Grenada, the election was held early in 2013 providing sufficient time for the EA and National entities to put in administrative measures which should have resulted in a timelier signing of the PCA. In the case of Antigua and Barbuda, the change of administration had no significant impact. However, in Saint Lucia, notwithstanding the fact that the Head of the NSC (Permanent Secretary) remained in office until December 2016, and there were no changes to the administration team, not one NSC was convened in that year.

Criteria	Summary Assessment	Rating
C. Nature of External Context	External factors did cause some delays. However, timely interventions to limit those delays were not adequate.	U

D. Effectiveness

115. The project has been very slow in getting out of the starting block, and three years after its official start, though some progress has been made in commencing some activities, none of the identified outputs have been fully achieved. See Table 9 for a summary of the achieved outputs followed by a more detailed review in the paragraphs which follow.

Table 9: Summary of Achieved Outputs and Expected Outcomes

Component	Expected Outcome	Outputs	Status at MTE/R August 2017
C1. Establish an assessment and monitoring system for energy efficiency and renewable energy in buildings	Institutional capacity for management of sector monitoring and assessment	<i>Output 1.1</i> Building audit reports, statistics on potential savings in domestic, commercial and public sectors	Energy Audit Guide developed - baseline monitoring template. Presented at the 3 rd RCC Meeting in Nov. 2016. To be finalized by countries by the end of July 2017. IAQ monitoring and assessment protocols which should have been prepared by Grenada for use by the other countries for the data collection and analysis in their respective countries has not been done. While waiting on the protocol from Grenada, countries advised to use eQuest.
		<i>Output 1.2</i> Identification of measures at the design, construction and maintenance stages of the building life cycle for improved energy efficiency and renewables	
		<i>Output 1.3</i> Identify equipment and lighting potentials to reduce fossil fuel use	
		<i>Output 1.4</i> Specific energy saving measures and policy options for various classes of buildings are identified and developed	
C2. Strengthening of national capacity for energy efficiency and renewable energy	Technical capacity and awareness for Energy Efficiency: Antigua & Barbuda – Regional PA and RE/EE tertiary courses Belize – ESCO guidelines Grenada – PV set up and interconnection St. Lucia – Lighting standards St. Vincent & the Grenadines - Building codes and MEPS	<i>Output 2.1</i> Development of training workshops, seminars on energy efficiency for building designers, contractor’s architects, renewable energy installers and maintenance personnel	Antigua & Barbuda started regional public awareness component - Knowledge Based Assessment, in May 2017. The first draft of the Economic Benefits Paper submitted in June 2017. Belize: Work completed on Guidelines for ESCOS Grenada has made no progress in implementing IAQ study in buildings - Scope of Works for WINDREF and GDBS for (1) IAQ and (2) establishing Minimum Energy Performance standards for energy efficiency in refrigeration and cooling devices (fans, AC units) and other common household appliances drafted – these documents prepared in the absence of work plans, budget and procurement plans. St. Lucia has made no progress since November 2015, on lighting standards. St. Vincent & the Grenadines is participating with CARICOM, CROSQ and the CDB under the Regional Energy Efficiency Building Code (REEBC) – three meetings held to date, with a completion date of Nov 2018.
		<i>Output 2.2</i> Publication of manual on best practices on energy efficiency for use in building sector	
		<i>Output 2.3</i> Development of energy efficiency courses for national tertiary institutions	
C.3 Development of appropriate financial and market-based mechanisms that	Appropriate financial and market-based mechanisms that support energy efficiency.	<i>Output 3.1</i> Reduced operating costs and risk hedging against fuel price spikes are integrated into lending	Blended Grant Loan Finance Mechanism/Revolving Fund window established by the Belize Development Finance Corporation (DFC) under a MOA developed in partnership with the CCCCC, CDB, DFC and Government of Belize. Disbursement of funds to the DFC expected by 30 September

Component	Expected Outcome	Outputs	Status at MTE/R August 2017
support sustainable energy use in buildings			2017. ESCOs identified to assist with retrofitting of Demo Buildings and other private sector activities St. Lucia and Grenada to adapt the MOA Template with the DFC to develop similar agreements with their national development banks. MOA sent in December 2016. No progress made since then.
		<i>Output 3.2</i> Fiscal incentives program to increase market uptake and penetration of sustainable energy measures	Countries have not indicated co-financing, i.e., additional equipment to facilitate audits.
C.4 Development and implementation of demonstration program for sustainable energy	Demonstration programme for sustainable energy	<i>Output 4.1</i> Demonstrations of measures and benefits of energy efficiency in buildings at the national level. Voluntary projects	Antigua & Barbuda, Belize and SVG have completed collecting baseline electricity usage data on demonstration buildings for which there was no historical data. These countries to begin retrofitting August 2017. Grenada and St. Lucia have not begun any work on their demo buildings
		<i>Output 4.2</i> Challenge competition for private sector builders for construction and retrofitting of buildings to make a very low purchased energy target of some few kWh/m ² – Private sector competition for ESCOs.	St. Vincent and the Grenadines signed a contract in August 2016, for the Installation of PV at the Argyle Airport – project delayed until October 2017.
C5. Development and adoption of a regulatory framework energy efficient buildings (building codes) and minimum energy performance standards (MEPS) for appliances and equipment	Regulatory instruments	<i>Output 5.1</i> Development of guidelines and standards for energy efficient construction practices including renewable energy and products based on an investigation of global and regional standards.	In July 2016, the ESD Project entered into an agreement with CDB, CARICOM and CROSQ to support the development of strategies and promote buy-in and early adoption of the establishment of a REEBC and MEPS. A workshop, on Energy Efficiency Standards and Regulations in Buildings, took place in Grenada from July 13-15, 2016. In March 2017, a Regional Project Team (RPT), was established to develop a Regional Energy Efficiency Building Code (REEBC), review the International Energy Conservation Code (IECC) in an effort to adapt it, where necessary, and present for acceptance and adoption by the Member States as a REEBC. Two review meetings have been held, and a third is planned for 2018 after which, draft legislation and a Road Map, and Implementation will be developed. SVG, initially assigned responsibility for this activity will now monitor its development and implementation.

Component	Expected Outcome	Outputs	Status at MTE/R August 2017
C6. Increasing regional awareness, knowledge management, and sharing, with regard to the benefits of EE and RE and the development of a replication strategy.	Regional dissemination	<p><i>Output 6.1</i> Task reports produced on subtopics:</p> <ul style="list-style-type: none"> • Grenada: PV interconnection and monitoring buildings • Antigua & Barbuda public awareness and education program materials for schools and the general public • St. Lucia: Lighting efficiency standards • Belize: ESCO training and program • Trinidad & Tobago: Energy Efficiency Regulations 	<p>Antigua & Barbuda State College is responsible for developing RE&EE Courses. Providing co-financing is SIDS DOCK-Swedish Energy Agency Project: <i>Capacity Building & Institutional Strengthening Renewable Energy and Energy Efficiency (RE& EE) Strategy: The project will also deliver One-Year Certificate Programmes In Renewable Energy and Energy Efficiency (RE& EE) At Community Colleges in The Organisation Of Eastern Caribbean States (OECS).</i></p>

i. **Achievements of outputs**

116. **Component 1 (C1): Establish an assessment and monitoring system for energy efficiency and renewable energy in buildings.** Initial delays in signing the MOAs, convening of Inception Meetings (country levels) and the convening of NSC meetings in some countries delayed the commencement of work on the identification and selection of buildings and subsequently the undertaking of building audit reports, and the generation of statistics on potential savings in domestic, commercial and public sectors. Even after overcoming these initial hurdles, the convening of elections in all the participating countries, resulting in changes in government in some, contributed to further administrative turmoil. This was further compounded by delays in the procurement of equipment, needed to undertake baseline assessment of buildings. Also, delays with respect to the preparation of work plans, personnel (Technical Staff and NCs) changes at both the regional and national levels resulted in slow disbursements to the participating countries.
117. One small achievement in respect of C1 Output is the completion of the baseline monitoring template¹⁸. The purpose of the Building Performance Assessment Protocol is to establish uniform and reliable test and analysis procedures to estimate the relative energy performance of buildings. Notwithstanding the completion of this protocol in 2015, the countries have not yet completed their audits and monitoring of buildings.
118. **Component 2: Strengthening of national capacity for energy efficiency and renewable energy.** The project has successfully completed five training workshops in the development of Simulation Tools for Energy Efficiency in Caribbean Buildings. The aim of the workshop was to provide participants with basic knowledge and tools to effectively understand and use various energy efficiency software and demonstrate the use of key energy monitoring equipment. The course targets those persons in public and private sector who are directly involved with energy management, building and facilities design and monitoring.
119. In addition, a regional Capacity Building Workshop for Energy Service Companies in the Caribbean was convened in Saint Lucia July 4 – 6, 2016. Over forty (40) persons participated in the workshop which targeted personnel in the tourism industry, public sector energy managers, which was aimed at promoting the integration of renewable energy into energy efficiency interventions in the region. The workshop also sought to provide participants with knowledge on ESCO business models, the role of ESCOs in energy management plans/strategies, technology options. It also provided hands-on group work involving the

¹⁸ Building Performance Assessment Protocol - 2015

preparation of fundable proposals to clients and financial institutions to undertake integrated RE and EE interventions. Participants who attended the workshop spoke highly of the training received.

120. **Component 3. Development of appropriate financial and market-based mechanisms that support sustainable energy use in buildings:** The first part of this initiative was successfully completed in 2016 with the preparation of the MOA for a Blended Grant Loan Finance Mechanism/Revolving Fund. This initiative was undertaken by the Belize Development Finance Corporation (DFC) under a MOA developed in partnership with the CCCCC, CDB, DFC and Government of Belize, and is intended to facilitate the provision of a grant for development and co-financing of an Energy Efficiency Pilot Financing Facility for investments in EE and RE for eligible sub-projects in Belize. The MOA was also intended to serve as a template for use by the development banks in Grenada and Saint Lucia. To date, neither of the two countries have made any progress towards the adaptation and use of this template.
121. **Component 4. Development and implementation of demonstration program for sustainable energy use in buildings:** Some of the countries (Antigua & Barbuda, Belize and St. Vincent and the Grenadines) have completed the collection of baseline electricity usage data on demonstration buildings for which there was no historical data. The other countries, Grenada and Saint Lucia, have also commenced the collection of baseline data and some of the buildings have also been retrofitted, either as part of this project or by other entities. Delays in the completion of this component were due to the late start and problems with respect to the procurement of equipment as alluded to earlier.
122. St. Vincent and the Grenadines completed the ToR and is currently finalising contract documents for the supply and installation of a 75 kW Ground Mounted Array Type Grid Connected Solar Photovoltaic System at the Argyle Airport. The installation is awaiting approval of the OECS' Eastern Caribbean Civil Aviation Authority.
123. **Component 5. Development and adoption of a regulatory framework for energy efficient buildings (building codes) and minimum energy performance standards (MEPS) for appliances and equipment:** The outputs of this component was initially assigned to Trinidad and Tobago but when that country decided to withdraw from the project, it was agreed that St. Vincent and the Grenadines would assume the lead on the development of standards, labelling and codes for buildings and appliances, working closely with CROSQ, CARICOM Energy Programme, and Belize. In hindsight, that might not have been the best option since St. Vincent and the Grenadines did not have the capacity to develop such standards by itself.

124. Subsequent to that agreement, 5Cs entered into an agreement with the CDB and the CARICOM Secretariat Energy Programme, to co-finance development of strategies that promote buy-in and early adoption of the establishment of a Regional Energy Efficiency Building Code (REEBC) and Minimum Energy Performance Standards (MEPS). A workshop, on Energy Efficiency Standards and Regulations in Buildings, took place in Grenada from July 13-15, 2016. In March 2017, a Regional Project Team, was established to develop a Regional Energy Efficiency Building Code (REEBC), review the International Energy Conservation Code (IECC) in an effort to adapt it, where necessary, and present for acceptance and adoption by Member States as a REEBC, development of MEPS for public and commercial buildings in CARICOM Member States among other mandates.
125. The Regional Project Team has held two meetings to date and is currently reviewing a Draft Code prepared by CROSQ, which seeks to establish requirements for a building envelope, cooling system, ventilation, pumping, lighting, and the service water heating systems in buildings. That document is currently being reviewed by the participating countries along with other CARICOM partners. A third and final meeting is scheduled for the early part of 2018 after which it is anticipated that the adopted Building Code will form the basis for which a REEBC Model Legislation can be drafted, along with an REEBC Strategic Implementation Framework and Road Map.
126. **Component 6. Increasing regional awareness and improving knowledge management, and sharing with regard to the benefits of energy efficiency and renewable energy and the development of a replication strategy:** The output of this component involved a range of public awareness materials involving Press Releases, hosting of a web-page and the preparation, by Antigua and Barbuda, of Public Awareness and Educational Program materials. The ESD Project Website, hosted by SIDS-DOCK, has been the main vehicle through which project information and media releases on activities have been issued. Also, after much delay, a consulting firm was eventually contracted to commence work on this component in May 2017. However, further delays have been encountered as they have had to place a temporary halt on the project due to the poor quality of work produced by that consulting team. This delay has had a knock-on effect in delaying the dissemination of project information as all the other countries were intent on using the Public Awareness modules prepared by Antigua and Barbuda for use in their respective countries.
127. Antigua and Barbuda has also commenced dialogue with the Community College in that country in respect of the development of a course curriculum in EE and RE. With the assistance of the University of the West Indies Open Campus, the EAD project is seeking to establish the first Regional Capacity Building and Institutional Strengthening Renewable Energy and Energy Efficiency (RE& EE) Strategy for

Community Colleges in the Organisation of Eastern Caribbean States (OECS). The project will also be seeking to develop and launch, in 2018, four, Pilot One-Year Certificate Courses in the Installation, Operation and Maintenance of Solar Photovoltaic (PV), Biogas, and Solar Water Heater Systems, and Energy Efficiency and Energy Management, at four community colleges in Antigua and Barbuda, Dominica, Grenada and St. Vincent and the Grenadines

128. While it appears that a substantial amount of work has taken place in realizing the outputs, most of them are severely delayed and only partially completed as these are activities which should have been completed in the first or second, and not the fourth, year of the project. None of the planned outputs are considered fully achieved. These delays, partial accomplishments and other management issues have implications for assessing the achievements of direct outcomes as well as the likelihood that the intended impacts will be realised.
129. Using our ToC model above, and taking into consideration the change processes, it is acknowledged that the achievements of direct outcomes are dependent not only on outputs but on certain drivers and assumptions being held. Among the key drivers of change from output to outcome are “timely procurement of equipment; timely disbursement of funds including co-finance; in-country partners are adequately supported; stakeholders sensitized; and, interested and suitable financial mechanisms are developed.
130. Also, the assumptions which would trigger the change from output to outcomes are “promised co-financing is available; the cost of imported food and petroleum products remains high; political stability maintained; and, there is buy-in at sectoral level”. What this analysis points to is that neither drivers or assumptions can be satisfied, making it difficult, if not impossible to appreciate how the direct outcomes can be achieved. This unfavourable conclusion leads one to ask the question, what was responsible for the delays and, given the state at which the project now stands, to what extent can it be anticipated that any of the outputs and direct outcomes can be achieved, and intended impacts realised?
131. In seeking to answer these questions, one needs to revisit the project and examine the issues or factors which contributed to the delays and current state of partial progress. Several issues have been put forward as probable causes for the delay in project implementation ranging from project design to operational issues both at the regional and national (country) levels. These issues, which surfaced from as early as the first year of the project, either went unnoticed or were inadequately addressed. The lingering nature of these issues contributed to the creation of an environment of non-performance and disharmony, which seriously threatens the viability and sustainability of what was originally intended to be a pioneering project which would demonstrate how greater efficiency in the use of energy could not only reduce high energy costs but also contribute to the reduction of GHG emissions.

132. In order to answer the questions posed above, it is necessary to look at some of the core governance issues including the institutional, financial and operational arrangements which defined and guided the overall management of the project over the last four years.

D1. Institutional Arrangements

133. The institutional arrangements for the effective management of the project were clearly defined with UN Environment identified as the Implementing Agency (IA) and 5Cs as the lead umbrella Executing Agency (EA), with responsibility for executing the Project through National Coordinators (NCs). UN Environment, as GEF IA, had project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. These responsibilities were entrusted to and discharged by the UNEP/GEF Task Manager and Fund Management Officer, acting on behalf of the Director.
134. As the lead EA, 5Cs was required to put in place a regional oversight team comprising the 5Cs Executive Director, Administrative/Financial Officer, representatives from UNDESA, UN Environment, the GEF national focal points, and the national Project Management Units (PMUs) under the Project. This oversight group (Regional Coordinating Committee), it was stated, would meet quarterly over the first year.
135. 5Cs was also expected to appoint a Regional Coordinator/Project Technical Coordinator (PTC/RC), who would, with assistance from the RCC, ensure that reporting requirements were met, but most importantly, facilitate coordination in the implementation of the project among the project countries. In addition to those coordinating responsibilities, the 5Cs, together with the national focal points, and the National GEF Operational Focal Points, had responsibility for selecting the National Steering Committee (NSC) in each of the countries and the selection/appointment of the National Coordinator (NC).
136. At the country level, each participating country was supposed to establish a National Project Management Unit (PMU) led by a Project Manager (National Coordinator/ Consultant) with responsibility for the day to day management of the national component assigned to the country. The National Coordinator (NC), it is clearly stated, is directly responsible to the Chairperson of the National Steering Committee (NSC) and 5Cs.
137. While the project has a clearly defined structure, the reality is that it is a virtual entity operated under the umbrella of the 5Cs, but with personnel who are not permanent staff of the 5Cs and who do not occupy a physical space at the 5Cs. While this may not seem to be a big issue, it has implications for the branding of the product, even allowing for uncertainty as to its ownership. For example,

several persons interviewed thought the project was a SIDS DOCK,¹⁹ as opposed to the 5Cs project. More importantly, a physical presence would also have allowed for shared services provided by the EA to be seamlessly facilitated and ensure that information and documents pertaining to the operations of the project were housed at the EA.

138. While it is possible to convene virtual meetings, given the communications technology available, in the absence of carefully minuted meetings it is difficult to keep track of what was discussed and what decisions were taken to address problems which arose on a regular basis. More significantly, with both the PTC and the PC operating out of a virtual office, regular scheduling of meetings was difficult. No information was presented during the evaluation exercise to indicate the regularity with which such meetings of the PMU/R was convened or how the project benefited from their combined management.
139. A virtual office also has implications for the keeping of project documents and could also negatively affect the timely delivery of services. Statements by the Procurement and Financial Officers suggests that in some instances routine services were delayed as they had to request supporting documents which did not accompany the original request and which were not in the office.
140. The continued operation of a virtual office to manage the project does beg the question to what extent a more permanent alternative is more suitable given the complexity of the project and in particular, the inherent coordination, supervision and support requirements? It is a question worth pursuing given the fact that the 5Cs does have a Programme Development and Management Unit within its organizational structure with a mandate to coordinate the implementation of all projects managed by 5Cs.
141. At the national level, the physical proximity of actors meant that such problems of holding meetings, keeping documentation or clear ownership were not evident. However, issues relating to the structure of the NSC as well as the frequency of meetings created serious problems. Dedicated NSCs usually pose a problem for countries as they tax the limited human resources of a country. As such, Chairpersons are reluctant to convene meetings unless there is absolute certainty that the meeting will be deemed meaningful. In that regard, Belize, Grenada and Saint Lucia convened Inception Meetings of their NSC in 2013, but it was almost

¹⁹ SIDS DOCK (Sustainable Energy and Climate Resilience Organisation) is an initiative among member countries of the Alliance of Small Island States (AOSIS) to provide the Small Island Developing States (SIDS) with a collective institutional mechanism to facilitate the development of a sustainable energy sector within their small island economies. Launched in Copenhagen, in December 2009, SIDS DOCK development is being jointly coordinated by 5Cs and the Secretariat of the Pacific Regional Environment Programme (SPREP), with oversight from a Steering Committee comprised primarily of AOSIS Ambassadors to the United Nations and technical experts. <http://sidsdock.org/>

another year (2014) before any of them signed their Project Cooperation Agreement (PCA) and convened another meeting of their NSC.

D2. Project Management

142. A project of this size and complexity required a management structure and operational modalities which allow for clearly defined authority, responsibility and accountability. For each of the principal entities (UN Environment, 5Cs and participating countries), the rules of operation were clearly defined. As the GEF IA, UN Environment is responsible for overall project supervision to ensure consistency with GEF and UN Environment policies and procedures and providing guidance on linkages with related UN Environment and GEF-financed activities. Actual supervision is assigned to a Task Manager, who is responsible for ensuring that the project meets UN Environment and GEF policies and procedures.
143. The Task Manager was therefore mandated to employ an adaptive management approach ensuring that project activities were being implemented and financial parameters satisfied to ensure cost-effective use of financial resources. The TM is also expected to regularly monitor project risks, and assumptions, rate risks and report on the performance of the project via the PIR reports, which were completed on an annual basis.
144. The EA has responsibility for overall implementation, including the coordination of project activities, providing backstopping assistance to countries and ensuring overall progress. Each year the PMU/R was expected to convene a meeting of the RCC to review and discuss progress being made with implementation and address any outstanding issues. A Project Coordinator, appointed by the 5Cs was therefore entrusted with the day to day responsibility of coordination, preparation of half yearly project reports and quarterly financial reports; and ensuring the realization of project objectives in accordance with the UN Environment Project Document and UN Environment's Guide.
145. The NSC has overall responsibility for the management, coordination and implementation of the ESD in-country activities. That essentially involves having responsibility for oversight and providing guidance at the national level, keeping track of GEF and co-financing budgets and ensuring that reports are submitted in a timely manner. However, most importantly they are required to ensure national buy-in and keeping informed, ministries and other agencies of government (professionals and politicians), NGOs and the private sector about the ESD project and its outcomes.
146. Given the responsibilities mentioned above, the management functions assigned to each of the parties was to ensure that implementation took place in a timely manner with the greatest degree of efficiency to ensure that the project goals were achieved.
147. The chronic delays encountered with project implementation suggests this has not happened. It, therefore, leads one to ask the question how was it possible, given

the supervision role assigned to the Task Manager, and the PTC, for these delays to occur without the necessary interventions to either bring things back on track or take necessary measures to correct any identifiable problems which were responsible for the delay?

148. The PIR reports, prepared by the EA (Project Coordinator) and issued with the approval of the IA (Task Manager), accurately noted the various issues and delays affecting the project. Individually, each of the PIR reports noted problems with implementation, governance, procurement and reporting in respect of both financial and non-financial reports. This is adequately reflected in the primarily unsatisfactory implementation scores assigned to the project (See Table 10) using the GEF Secretariat six-point scale system²⁰.

Table 10: Overall project implementation progress, reported in the annual Project Implementation Review reports

Project	FY2014	FY2015	FY2016	FY2017
Implementation	U	MU	MS	U
Risk Level	High	High	Medium	Medium

149. Likewise, in respect of the risk level, all four PIR reports speak of high-risk levels. It is, however, somewhat puzzling that in FY2017 the implementation is scored as Unsatisfactory, but the risk level is Medium.
150. Various reports, as well as interviews with some project personnel, confirmed that several initiatives were undertaken by the TM and UN Environment oversight office to address these problems. These included the attendance by the TM or his Assistant at RCC meetings, meeting with NCs individually during the Third RCC meeting and participating in monthly Conference Calls with NCs which were coordinated by the PMU/R.
151. Following the abrupt withdrawal of UNDESA from the Project, the PMU/R engaged the services of a consultant to assist the countries with the preparation of their work plans and budgets. Also, the Executive Director, along with the Procurement Officer attended the Second RCC meeting to address concerns of participants as well to assist in providing clarity and direction in going forward with implementation.
152. The question, therefore, is, were those responses by both the IA and EA adequate, given the consistently low implementation scores recorded and the elevated risk noted in the PIR?

²⁰ GEF Secretariat uses a six-point scale system as follows: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU)

153. While it must be acknowledged that the project faced many challenges, some of which were unforeseen (e.g., Trinidad and Tobago dropping out of the project, UNDESAs abrupt withdrawal, and protracted discussions with Antigua and Barbuda to resolve issues of management and disbursement of funds), it must also be acknowledged that the supervision role assigned to the IA mandates that they follow “an adaptive management approach” to correct problems which arise in the implementation of the project and ensure that the project meets its objectives and achieves expected outcomes in an efficient and effective manner.
154. The interventions identified above, together with the persistent low ratings suggests that those intervention measures were not sufficiently adaptive or adequate, as they had little effect on halting the delays, correcting the other management issues affecting completion of work plans and budgets, or speeding up disbursements. Apart from the issues documented in the annual PIRs this review/evaluation exercise was not presented with information such as Aid Memoires or Field Reports in which concerns were expressed about the performance of the project. Notwithstanding those poor ratings, the mid-term evaluation/review which is usually trigged at the mid-point of the project was not initiated until the fourth year.
155. While acknowledging that more could have been done given the problems identified, the TM did indicate that the level of supervision provided at any one time is directly related to the availability of resources. Despite not being in a position to assess the internal guidelines with respect to the factors determining the level of resources assigned for supervision, or the factors which will trigger different types of intervention, it is apparent that there are some systemic issues which need to be addressed at the level of the IA such that neither the TM, the IA and EA is left exposed without adequate resources for supervision. Also, importantly, there should be clear guidelines as to what action can follow when projects consistently demonstrated elevated risks.

D3. Operations

156. The project has a very clear objective which is to achieve a 20% reduction in GHG emissions from the building sector in the five countries through an integrated approach comprising support for: institutional capacity development in monitoring and assessment; national technical capacity for energy efficiency and the development of national/regional regulatory frameworks along with the demonstration of energy efficiency in buildings; stimulation of supportive financial and market-based mechanisms and targeted national awareness raising on the benefits of energy efficiency in buildings.
157. Whilst all five countries were to engage in undertaking demo projects to demonstrate the viability of energy efficiency in the building sectors (Component 1.), they each had responsibility for collecting baseline electricity usage data on demonstration buildings and for implementing different components, some of which were dependent on information generated from projects or activities

- undertaken in one of the countries. For example, Grenada was assigned responsibility for the *Establishment of an Assessment and Monitoring System for Indoor Air Quality (IAQ)*, as well as developing development of Building Codes for Indoor Air Quality. To date, the monitoring protocol, as well as the IAQ Code, have not been developed. Though primarily due to the late arrival of equipment, this had repercussions for undertaking air quality monitoring in all of the other countries.
158. Convening of national Inception meetings in all the participating countries took all of 2013. It would be another year before all the countries would sign their PCA. An initial estimate of three months was unrealistic, but likewise, one year was sufficient time for the NSC to complete the review of national ProDocs, budgets and work plans and their MoA. Also, one year was sufficient time for the EA to provide the assistance needed by the countries and convene Inception Meetings. A one-year mobilisation period is normal in most project situations and anything more than this is cause for concern.
 159. Following the convening of the Inception Meeting, it took another year to convene the First Meeting of the RCC which was held in Saint Lucia April 2-3, 2014. At that meeting, it was agreed that the 5Cs would hire a consultant to work directly with the countries to accelerate completion of work plans, budgets and procurement plans, and to finalise MoAs with the 5Cs to facilitate disbursement. Notwithstanding this decision, there was no noticeable acceleration in the preparation of work plans and completion of budgets. This was a recurring theme with NCs complaining that they were submitting work plans and budgets but not obtaining the approval of 5Cs, nor adequate feedback and guidance. Because of their failure or inability to meet those requirements, little or no disbursements were made in respect of payment for the NCs.
 160. The PMU/R response is that countries have indeed attempted to revise their national project documents, but that work plans, budgets, procurement plans and co-financing have not been finalized to their satisfaction. The PMU/R also made several interventions to assist countries with preparation of their documentation, including one-on-one meetings with Chairs and National Coordinators, and bringing a senior colleague from the 5Cs Procurement Office to the 2nd RCC Meeting in St. Vincent and the Grenadines, in November 2015, to discuss procurement rules and guidelines and the preparation of the procurement template.
 161. The inability of the NCs to satisfactorily meet 5Cs work plan and budget standards meant they went long periods without payment or in some cases only one payment in the last three years. Some of them have also complained of failure on the part of 5Cs to reimburse them for expenditure incurred (e.g. associated with the meeting in St. Vincent and the Grenadines and report preparation, in the case of Saint Lucia). These ongoing conflicts became a primary reason for the failure of the NSC to meet on a regular basis. In addition, resignations of NCs in several countries (Antigua and Barbuda, Belize – twice, Saint Lucia, and St. Vincent and the Grenadines), resulted in additional delays with the execution of the project.

162. While there are elements of truth on all sides and justification for some of the decisions taken, it is difficult to envisage how or why, given the resources made available to the countries (PTC, PC and Consultants), that the completion of work plans and budgets, using the templates provided by the 5Cs, still posed a problem to the countries.
163. The 5Cs has indicated their intention to replace the NCs with consultants from the respective countries. They have advertised the positions and are targeting individuals who would have received training from in EE/RE workshops convened in the respective countries. While that may be a viable option, issues of financing for those consultants could be an issue as it was previously established that the amounts allocated for the NCs were insufficient.
164. Another issue which seemed to have affected implementation of the project was the convening of national elections in all five countries. Though election cycles and change of governments don't usually have any significant impact on the administration and implementation of projects, in this instance, it seems to have significantly affected three countries Antigua and Barbuda, Grenada, and Saint Lucia. In the case of Grenada, the election was held on February 12, 2013; Antigua and Barbuda on June 12, 2014; and Saint Lucia on June 6, 2016, all of which resulted in a change of administration.
165. In Grenada, the new administration resulted in a change of personnel with the responsibilities for the management of the project, which contributed to delays in convening of NSC meetings as the new management team had to become familiar with the project. In Antigua and Barbuda, the change in government meant that the new administration needed time to become familiar with the project. More importantly, however, issues with respect to management and disbursement of funds needed time to be resolved. In Saint Lucia changes in personnel (National Coordinator), difficulties in identifying and appointing a new NC, and the selection of demonstration buildings contributed to delaying the project. The resignation of the NC soon after, meant further delays as there was a new search for a replacement.
166. Notwithstanding the convening of elections in all five of the countries and the delays attributed to the change in administration, these should not have had such a significant impact on the key decisions which had to be made in respect of the implementation of the national component of the ESD Project. In the case of Grenada, the election was held early in 2013 providing sufficient time for the EA and national entities to resolve issues and put in place administrative measures which should have resulted in a timelier signing of the PCA. In the case of Antigua and Barbuda, the change of administration had less of an impact than issues related to the disbursement of funds. In Saint Lucia, notwithstanding the fact that the Permanent Secretary in the Ministry of Sustainable Development, Energy, Science and Technology, who is the also Chairman of the NSC, remained in position until December 2016, a meeting of the NSC was not convened in all of 2016 or up to the end of August 2017.

167. While there is agreement that changes of governments and personnel changes negatively impacted the implementation of the project, it is also not apparent that there were serious and sustained efforts (correspondence and number of visits) to engage the countries and governments to resolve the issues affecting the countries.

D4. Financial Management

168. For most of the countries, the issue of finance, particularly disbursements for personnel expenses (payment to NC) is most troubling. They all complained that the \$58,500²¹ over a four-year period was insufficient but most troubling, was the failure to disburse those funds in a timely manner. While acknowledging that the NC component was small, the PTC indicated that the amount allocated for the NC was only intended to compensate for part-time staff, given the anticipated tasks. However, for some countries, public sector staffing rules do not allow permanent employees (Civil Servants) to earn part-time salaries. This meant they were required to engage consultants as NCs.
169. The delays in the disbursement of funds meant that countries had to finance the engagement of an NC. This created a high degree of discord, disappointment and distrust between the countries and 5Cs as it denied them funding and required that they utilise their own resources to cover the expenses of the NC. More importantly, delays in the hiring of the NC meant there was no dedicated staff with responsibility for completing the work plans and budgets which were established as a pre-condition for the disbursement of funds to the countries.
170. Following the first disbursement to the EA in February 2013, the next disbursement was two and a half years later in August 2015. Given the fact that disbursement was based on deliverables, it seems odd that neither the Fund Manager or the Task Manager at UN Environment saw this as a serious enough issue to warrant more specific intervention in any of their interactions with the 5Cs or an elevated risk which should have triggered other responses which would not only determine the reasons for these delays, but also corresponding action to have it addressed.
171. These delays in disbursements to the countries was partially responsible for difficulties encountered in retaining the NCs in the countries. Three of the countries (Belize, Grenada, and Saint Lucia) are, since April 2017, without an NC. In the case of Belize funds allocated for the NC are exhausted, and in Grenada and Saint Lucia, sheer frustration with the lack of payment and slow progress in respect of implementation prompted the resignation of their NCs.
172. Given the above, the 5Cs is proposing to dispense with the dependence on the NSC to appoint NC. Instead, they are making plans to contract consultants who will work with the NSC to fulfil the obligations to the specific country but who would report directly to the 5Cs. While such an approach does have some advantages,

²¹ Saint Lucia was allocated \$22,500.00 and St. Vincent and the Grenadines \$44,200.00.

any mechanism which seeks to by-pass the management and oversight of the NSC should be discouraged as it has the potential to create two levels of reporting and accountability, and laying the foundation for further tension between the NSC and 5Cs. It also has the potential to undermine national ownership of the project.

173. Likewise, the PC was engaged on a part-time basis and working from a virtual office which, as stated above, brought with it some inherent logistical problems. While it may not have been the intention of the project to have permanent staff at both the National and Regional levels to coordinate implementation both nationally and regionally, it was a gross underestimation of the resources, financial and human, needed to achieve the objectives. A project of this size and complexity, involving five different countries and operational activities which required carefully timed coordination and implementation demanded not only a fully committed PC but someone based at the location of the EA.
174. Notwithstanding the above, the most recent financial statements indicate that the line item under which the PC was engaged is exhausted, raising the possibility that the project must proceed without the services of an RC or alternatively, co-finances which were pledged, but not delivered to date, will be forthcoming.

D5. Procurement

175. The Project Cooperation Agreement between UN Environment and the 5Cs stated clearly that 5Cs would use its own procurement rules for the engagement of consulting services and purchasing of equipment financed by GEF funds. However, it noted that any such procurement should meet internationally acceptable standards. That meant that the EA was required to ensure that the procurement of goods and services was based on the principles of highest quality, economy and efficiency, and that “the placing of such orders be based on an assessment of competitive quotations, bids, or proposals unless otherwise agreed to with UN Environment”.
176. At the First RCC Meeting, countries agreed to undertake common procurement of equipment, allowing the 5Cs to undertake a bulk procurement of monitoring equipment and materials. Delays were encountered in trying, first, to get countries to identify equipment and potential suppliers who could meet the needs of countries in terms of volts and appropriately written instruction manuals. However, other problems soon surfaced with respect to the shipping of the items purchased. It is the understanding of the evaluator that the first shipment of equipment was lost, resulting in 5Cs having to reorder and ship the equipment again, causing further delays²². It was not until 2016 that countries started receiving the equipment and even then, several countries reported some equipment still missing or receiving the wrong equipment or equipment which was

²² After the writing of this report the UN Environment Evaluation Office requested further documentation to clarify the causes of the delays in delivering the monitoring equipment. While some documentation was provided from 2014 showing the equipment lists and correspondence with potential suppliers, no documentation regarding the lost shipment or reasons why deliveries were not completed until 2016 were received.

intended for another country. This impacted not only the commencement of monitoring of buildings in all the countries as specified in Component 1 but also the Simulation Tools workshops scheduled for March 2015.

177. The 5Cs also engaged the services of several consultants between 2013 and 2017. It was brought to the attention of the Evaluator that there were many occasions when requests for payment to consultants was received but the accompanying paperwork was not submitted²³. While the Evaluator was told that all consultants contracted under the project followed the standards articulated above, a request for the paper trail has yet to be facilitated.
178. There is little doubt that the procurement challenges contributed significantly to the delays in respect of monitoring equipment and subsequent delays in the undertaking of monitoring requirements under Component 1 and in other instances (Grenada, Saint Lucia and St. Vincent and the Grenadines). The extent to which any recommendations can be made to avoid similar occurrences is limited given the fact that the Evaluator did not receive access to the documentation under which those goods and services were procured²⁴.
179. Several respondents expressed great concern with respect to the procurement of equipment leading to some element of distrust between national entities and 5Cs. While there is no way of assessing the extent of this distrust, there is little doubt that it created considerable tension and affected the smooth and free flow of communications required for a project like this to work.
180. Annual audits which could have provided clarity, if not answers to these concerns, have not been undertaken in a timely manner. One audit was undertaken for the ending 2014. The audits for 2015 and 2016 were due to commence in August 2017 but at the time of writing these are yet to be completed²⁵.

Criteria	Summary Assessment	Rating
D. Effectiveness		
1. Achievement of outputs	Four years after commencement several of the outputs are partially completed. Some countries are more advanced than others, but overall, the achievements to date can only be described as moderate.	MS
2. Achievement of direct outcomes	While it is still possible to achieve the indicated outcomes, much of that will be dependent on the completion of the outputs.	U

²³ In the early months of 2018 the UN Environment Evaluation Office requested further documentation relating to the hiring of consultants. While tables comparing several cvs for some posts were provided, and reference to email correspondence in other cases, complete documentation to show that all standards of a procurement procedure were followed was not received.

²⁴ Whilst seeking documentation related to the purchasing of monitoring equipment and the hiring of consultants, the UN Environment Evaluation Office was provided with complete documentation showing that standard procurement procedures were followed for goods and services relating to work at the Argyle International Airport (2016) and a KAP Survey (2017).

²⁵ Annual audit report for January 1, 2015 to December 31, 2016 was submitted in November 2017. There were no concerns raised in respect of procurement procedures.

3. Likelihood of impact	Unable to draw any conclusions as to the likelihood of impact given the state of the project	U
Overall Effectiveness rating		HU

E. Financial Management

181. The Project is estimated to cost a total of \$12,484,500, with \$4,859,000 coming from GEF and the balance, \$7,625,500 anticipated to come from co-financing (\$6,116,500 in cash, and \$1,509,000 in-kind). The co-financed component consists of contributions from several different partners which included the 5Cs (\$550,000); National Executing Partners (\$2,266,500); National Development Banks (\$2,800,000); Bilateral - Government of Japan for Belize – (\$500,000). The in-kind component consists of contributions from National Executing Partners (\$1,174,000); UNDESA (\$150,000); and an NGO - WINDREF (185,000).
182. As can be seen in Table 10, at the end of April 2017, four years after the effective start date, the EA has spent a total of \$736, 914.61, out of a total of \$920,990 disbursed by UN Environment, over two periods (February 20, 2013, and August 26, 2015). The financial statements are not broken down into components, so the actual spending per component is not known.

Table 11: Summary of Cash Advances to Executing Agency, Recorded Expenditures, Unspent Cash Balance & Undisbursed Budget

Executing Agency Expenditure	Approved Budget	Recorded Expenditure	Balance
Original allotment	4,859,000.00	736,914.61	4,122,085.39
Increase/(decrease)	-61,000.00		-61,000.00
	4,798,000.00	736,914.61	4,061,085.39
UN Environment direct expenditure			
Other expenditures			
	4,798,000.00	736,914.61	4,061,085.39
CASH BALANCE HELD BY PROJECT EXECUTING AGENCY			
	Date	RCPT	Amount
1	20.02.2013		400,000.00
2	26.08.2015		520,990.00
3	24.05.2017		2,000,000.00
Cash disbursed to executing agency to date			2,920,990.00
Less: Executing agency expenditures (as above)			736,914.61
Unspent cash advances / UN Environment receivable			2,184,075.39
BALANCE OF APPROVED BUDGETS NOT YET DISBURSED			
Executing agency budget (as above)			4,798,000.00
Less: Cash disbursed to executing agency to date			2,920,990.00

Executing Agency Expenditure	Approved Budget	Recorded Expenditure	Balance
Executing agency budget not yet disbursed by UN Environment			1,877,010.00

183. Expenditure by the 5Cs, including payments to the five countries, totalled \$736,914.61 or just 15% of the total amount. The third disbursement from UN Environment to 5Cs on May 24, 2017, or \$2,000,000 took the total disbursement to date to \$2,920,990. However, to date (August 2017), no further disbursements have been made to the countries.
184. In respect of co-financing, several entities were supposed to provide cash contributions. The co-financing report submitted for August 31, 2017 (actual FY 2015m- 2016) indicates a total of \$1,257,316, out of which Antigua Contributed \$1,200,000 and 5Cs \$210,000.
185. As can be seen from Table 11 in the fourth and final year of the project an expenditure ratio (actual/planned) of 15% is extremely low. This low level of expenditure is directly related to the fact that very little was disbursed to the countries in the first two years (2013 and 2014). In addition, the high budget item such as grants to the development banks to capitalise the financing facility, and payment for demonstration projects have yet to be disbursed as these items have not yet started.
186. As noted above (#154) the low expenditure rate and lack of disbursement to the countries should have been warning signs that prompted further enquiries by the Fund Manager or the Task Manager as to the reasons for the delays, initiating other measures to specifically address the problem. While the Fund Office did make requests for timely submission of financial reports, there is little evidence of any sustained effort to address the real issues which were responsible for the low expenditure and disbursement to the countries.
187. While it is acknowledged that countries should be made to account for their use of GEF funds it is also acknowledged that without financial support, obtaining country buy-in and sustaining interest, preparing work plans and budgets, will be difficult.
188. Though the financial records accurately reflect amounts disbursed and the various expenditure items, that information, from all indication, was not done in a timely manner.²⁶ The Financial Audits, required on an annual basis have constantly been delayed. The 2013 and 2014 audits were completed in June 2015, while the 2015

²⁶ In an email dated August 16, 2017 the Fund Manager noted that “the 2015 and 2016 expenditure report has not yet been received. We have been waiting for this report from May 2017”.

and 2016 audit only commenced in August 2017²⁷. Also, the co-financial statements, submitted in September 2017, are, at the time of this report, yet to receive the approval of the Fund Manager due to some unresolved accounting issues.

Criteria	Summary Assessment	Rating
E. Financial Management		
<i>1. Completeness of project financial information</i>	There were delays in the submission of financial information particularly in respect of preparation and submission of co-financing reports and annual audits	U
<i>2. Communication between finance and project management staff</i>	Effort was made to request the financial information, but that was not always forthcoming.	U
<i>3. Compliance with UN Environment standards and procedures</i>	The submitted reports demonstrated compliance, but not always in a timely manner.	U
Overall Financial Management rating		U

F. Efficiency

189. Although the project is being executed by the 5Cs, established by CARICOM to address the challenges of climate change in the region, its overall execution is dependent on the active involvement of a host of partners including governmental agencies, and various private sector associations in related industries (building, financing and RE/EE objectives).
190. The project, however, experienced chronic delays at the start-up phase with problems of communications, disagreements in respect of the objectives and work plans, delays in securing co-financing and problems convening NCS meetings in several of the countries. Problems associated with the convening of NSCs in the respective islands was a major factor contributing to the delay in work plans being proved and the project becoming effective. Protracted discussions in Antigua and Barbuda concerning the management and disbursement of funds allocated to that country, as well as a change of administration, meant that the MOA was not signed until March 2015.
191. Likewise, in Grenada, a change of administration in 2013 was a major contributor to the delay in getting the PCA signed and the convening of the NSC. These delays in the convening of the NCS was further compounded by the withdrawal of Trinidad and Tobago from the Project, which had lead responsibility for the development of building codes and appliance standards. Saint Vincent and the Grenadines replaced Trinidad and Tobago, but the responsibility for developing building codes

²⁷ Audit reports for 2015 and 2016 were received in November 2017.

and appliance standards remained disaggregated among all five countries without a single focal point recognized as 'lead'.

192. UNDESA, a partner IA, abruptly terminated their involvement starving the project of a valuable technical input as well as cash contribution. Reasons for this abrupt departure by a significant UN agency has still not been clearly determined as none of the key partner agencies seems willing to speak to this issue, and the paper trail which could have led to this decision has not been made available to the Evaluator.
193. In addition, because the major aim of the Project is to reduce GHG emissions and Trinidad and Tobago's estimated GHG emissions reductions of 5,671,000 (tons of CO₂ equivalent) was more than 50 % of the total combined amount anticipated of the five countries, Trinidad's withdrawal immediately cast some doubt on the overall ability of the project to meet its major objective of achieving the 20 percent GHG reduction. Delays in the start-up also resulted in the loss of the valuable cash contribution which Trinidad had earlier pledged and cast in doubt the ability of the other countries to achieve key targets in respect of the development of building codes, appliance standards, and the ability of the project to achieve the targeted GHG reduction.
194. Delays with respect to the procurement of equipment was another major contributor to the slow progress in achieving the outcomes of the project. The project had Six Components, with each country taking the lead in one area. Component I was concerned with the Establishment of an assessment and monitoring system for energy efficiency and renewable energy in buildings. Each country was assigned various responsibilities. Grenada: Monitoring Health, Well-being – surveys, guidelines on improvements; Trinidad & Tobago (replaced by St. Vincent), energy efficient equipment standards and building codes; Antigua & Barbuda: public relations; Belize: ESCO guidelines; and St. Lucia: energy efficient lighting.
195. Notwithstanding the above, one of the major outputs of the project was capacity building in relation to training of EE service providers and the creation of a cadre of professionals (engineers, technicians, architects, and relevant vendors will become qualified to deploy energy efficient technologies, products, and equipment in buildings thus accelerating the energy savings that can be achieved in buildings individuals and companies) capable of undertaking energy audits. In that regard, the project contributed significantly, both directly and indirectly, to creating and improving the skill sets of EE service providers through several training workshops covering aspects of EE and RE technologies.
196. Several of the participants expressed great support for the training provided and in particular, the first Capacity Building Workshop for Caribbean ESCOs, 4-6 July 2016, St. Lucia, which identified the viable ESCOs within the region who are now,

with the assistance of NREL, organising themselves into an association. Over forty (40) participants from around the Caribbean participated in this workshop, several of whom have been identified as suitable candidates to facilitate implementation of select project activities, in particular, retrofitting of buildings and participation in the energy financing facilities in Belize, Grenada and St. Lucia.

197. The ESD Project entered into an agreement with CDB, CARICOM and CROSQ to support the development of strategies and promote buy-in and early adoption of the establishment of a REEBC and MEPS. A workshop, on Energy Efficiency Standards and Regulations in Buildings, took place in Grenada from July 13-15, 2016. In March 2017, a Regional Project Team (RPT), was established to develop a Regional Energy Efficiency Building Code (REEBC), review the International Energy Conservation Code (IECC) in an effort to adapt it, where necessary, and present for acceptance and adoption by the Member States as a REEBC. That document is currently being reviewed by the participating countries along with other CARICOM partners and a Third and final meeting is scheduled for the early part of 2018 after which it is anticipated that the adopted Building Code will form the basis for which a REEBC Model Legislation can be drafted, along with a REEBC Strategic Implementation Framework and Road Map.

Criteria	Summary Assessment	Rating
F. Efficiency	The training initiatives that have been undertaken are a positive feature of the project. However, the considerable delays resulting in a request for an extension from April 2017 to April 2018 completion date, has overshadowed the few successes.	MU

G. Monitoring and Reporting

198. Monitoring and Evaluation (M&E) forms an integral part of UN Environment projects. Likewise, projects funded by GEF have specific evaluation requirements with regard to verifying documentation and reporting (i.e. the Project Implementation Reviews, Tracking Tool and CEO Endorsement template), in an effort to ensure that donor commitments are fulfilled. In that regard, a number of M&E instruments were included as part of the reporting requirements of the project. These included Progress and Financial Reports, Inception Reports, Progress Reports, Annual Project Reports (APR), PIR, Regional Advisory Review (TPR), Terminal Regional Advisory Review (TTR), Project Terminal Report, Mid-term Independent Evaluation, Final External Evaluation. The project budget also made allowance for the undertaking of both an MTE/E and Terminal Evaluation.
199. The Project Results Framework presented in Appendix 4 which included SMART indicators for each expected outcome as well as mid-term and end-of-project targets, and the key deliverables and benchmarks included in Appendix 6 are the

main tools for assessing project implementation progress and whether project results are being achieved.

200. Whilst some of these M&E instruments (e.g. Inception Reports, half-yearly Reports, Annual Reports, PIR and Financial Reports) were satisfactorily completed, they were not always completed and submitted to the TM or Fund Officer in a timely manner. Also, only one Annual Audit (January 1, 2013 – December 31, 2014) has been completed to date²⁸. Also, the Co-Financing Report, an integral part of the financing arrangement for the project has not been satisfactorily completed.
201. The monitoring of project implementation is a shared responsibility involving the IA, EA and the national PMUs. However, as noted previously, the PIR reports, prepared by the EA (Project Coordinator) and issued with the approval of the IA (Task Manager), accurately noted the various issues and delays affecting the project, including the lack of timely reports of failure to meet various milestones. Notwithstanding, the reports tended to paint a more optimistic picture, by consistently stating that things were back on track or “getting back on track” when that never was the case.
202. Each of the PIR reports noted problems with implementation, governance, procurement and reporting in respect of both financial and non-financial reports. Some attempts were made by the TM to address some of the problems by attending RCC Meetings (2015 and 2016) and meeting, in 2016 individually with NCs from each of the countries (except Saint Lucia who was unable to make the trip) to obtain a better understanding of the problems plaguing the project and solutions for the way forward. Any immediate changes resulting from these interventions were hardly noticed as the main issue of approval of work plans and disbursement of funds continued to impede implementation in all of the countries, with the exception of Antigua and Barbuda.
203. The quality of some of the Progress Reports was not always of the highest standards, making it difficult to track the progress of each output and outcome both in terms of time and results. Part of the reasons was the quality and timeliness of reports emerging from the participating countries.

Criteria	Summary Assessment	Rating
G. Monitoring and Reporting		
<i>1. Monitoring design and budgeting</i>	Monitoring and design are consistent with GEF/UNEP guidelines.	HS
<i>2. Monitoring of project implementation</i>	Delays and an inability to correct problems which consistently arose suggest not enough was being done.	MU

²⁸ The audit reports for 2015 and 2016 were completed in November, 2017.

3. Project reporting	Reports prepared, but not all timely, too optimistic and not consistent in terms of format, making tracking difficult.	MU
Overall Monitoring and Reporting rating		MS

H. Sustainability

204. Under this criterion UN Environment requires an assessment of the likely sustainability of the project's direct outcomes. The absence of any direct outcomes being realised to date severely limits the current sustainability of the initiative. Notwithstanding, some of the embedded design factors intended to enhance capacity and financing facilities, as well as the partial successes achieved in terms of partnerships established and training provided, together with an overall increase in awareness that EE/RE metrics are viable options for SIDS faced with high energy costs, form a basis for assessing sustainability of the project's results. While it is believed that these small achievements provide some indication of what outcomes will be realised, without the necessary stakeholder ownership, as evidenced by institutional strengthening and policy directives reinforced with appropriate regulatory and legislative reforms, these outcomes could remain a distant mirage.
205. **Socio-political Sustainability:** For many of the countries, the ESD project was a compliment to initiatives already in train and they saw it as a valuable opportunity to enhance national capacity. Grenada, for example, has initiated several programmes aimed at ensuring energy efficiency in its building sector. Antigua has indicated their intention to use the results of the project to help their National formulate Energy Policy. For Saint Lucia, the project objectives are consistent with their Sustainable Energy Policy and envisage possibilities of using the outputs of the project to help craft a policy and legislative framework which will facilitate diversification of the energy market and greater energy efficiency. Even at the regional level of CARICOM, it was envisaged that the ESD project would provide some impetus for the development of a "Regional Energy Policy for CARICOM region" which was being developed.
206. Unfortunately, delays and other management issues never really allowed the countries to make much progress in the development of their national capacities, and to demonstrate their firm ownership to date. However, the fact that they have indicated their continuing interest in the project suggests there is still a likelihood that the current institutional capacities which exist could ensure the management of this project will become the vehicle through which ownership can be established. More importantly, the creation of the Caribbean Centre for Renewable

Energy and Energy Efficiency (CCREEE)²⁹ will provide a platform for both the Caribbean as a whole and the individual countries to continue in their pursuit of EE and satisfying the outcomes of the project.

207. **Financial Sustainability:** One of the main outcomes of the project was the establishment of appropriate financing and market-based mechanism to facilitate access to financing for EE/RE sub-projects. Though late in getting off the ground, the model MOU prepared by the DFC in Belize and their demonstrated desire to roll out their loan facility is evidence of the continuing sustainability of this initiative. Though the other developments banks in Saint Lucia and Grenada have yet to adapt and finalise a similar MOU with the 5Cs, the Development Bank in Saint Lucia has already embarked on a similar initiative with financing from the World Bank and CDB and have indicated their desire to enter into an agreement with 5Cs which will see them receiving and matching a US \$800,000 grant to increase their loan portfolio.
208. **Institutional Sustainability:** One of the partial successes of the project has been the partnerships established and training provided. These partnerships with the U.S. Department of Energy, National Renewable Energy Labs (NREL); Austrian Energy Agency; United Nations Industrial Development Organization (UNIDO), CARICOM Energy Programme; Caribbean Regional Organization for Standards and Quality (CROSQ), have not only been responsible for providing valuable technical input in training participants to undertake EE audits and developing a cadre of ESCOs, but also ensuring that the building codes and MEPS, essential platforms for achieving greater EE across the spectrum of buildings and facilities are developed, but also establishing the regulatory platform on which EE can become mainstreamed.

Criteria	Summary Assessment	Rating
H. Sustainability		
<i>1. Socio-political sustainability</i>	Project delays and inadequate management have resulted in low achievements and enthusiasm at the national levels. However, continued involvement of the countries together with increased awareness of the importance of EE in addressing high energy cost will continue to drive support and ownership.	ML

²⁹ CCREEE is a specialized agency, established the CARICOM with an official CARICOM and SIDS DOCK mandate to promote renewable energy and energy efficiency investments, markets and industries in the Caribbean

Criteria	Summary Assessment	Rating
2. <i>Financial sustainability</i>	Some co-financing commitments have only recently been realized, which currently limits the potential for the initiative to be financially self-sustaining. With the signing of the MOU for the establishment of the EE/RE Financing Facility window between DFC-Belize and the 5Cs, as well as stated interest by the development bank in Saint Lucia, there is a demonstrated interest which may achieve the intended financing sustainability.	U
3. <i>Institutional sustainability</i>	The network of National Coordinators is currently non-existent, which severely limits the likelihood of institutional leadership at the moment. Several training initiatives have been successfully concluded which should enable the establishment of ESCOs. Likewise, the development of the building code, currently under review, and MEPS should provide the legal framework on which EE could become mainstreamed in all new development initiatives.	U
Overall Sustainability rating		U

I. Factors Affecting Performance

i. Preparation and Readiness:

209. The project took some time to get off the ground, and while no explanation has been provided for this delay, it appears that the process of obtaining internal approvals could have been a primary factor. This delay together with the fact that there were further delays after the signing of the MOA between the IA and EA, resulted in monies initially pledged for co-financing support from UNIDO was no longer available. Even after the project received the signature of both the IA and EA, it took almost two years before all participating countries convened their Inception Meetings and signed their MOA. During that time period, management changes (IA Task Manager) and resignations and abandonment (UNDESA), left the project short of the technical inputs necessary to guide its implementation in the early phase. All these issues undoubtedly contributed to the slow start and long delay which ensued.

ii. Quality of Project Implementation and Execution:

210. The quality of project implementation and execution can only be described as poor and severely delayed. Several issues have been identified as a probable cause for the delay in project implementation ranging from project design to operational issues both at the regional and national (country) levels. None of the six outputs

has been completely executed; essential equipment required for undertaking one of the primary functions of the project was disastrous and severely delayed; very few of the national entities have satisfactorily and consistently provided timely, work plans, budgets and reports, resulting in delays in disbursement of funds to the entities and eventual resignation of the NCs, borne out of frustration with the slow pace of implementation.

211. While it was initially thought that the disaggregating of responsibilities among the various countries would have helped to fast-track the achievement of outcomes, this proved to be a major stumbling block as some countries found themselves in a holding pattern waiting on the results of initiatives from other countries. In the absence of equipment, none of the countries was able to complete their baseline audits of buildings, and likewise, failure to prepare the monitoring protocols for the IAQ initiative, and delays in the preparation of Public Education and Awareness materials, meant that other countries were also delayed in undertaking those activities in the respective countries.
212. These issues, which surfaced from as early as the first year of the project, either went unnoticed or were inadequately addressed. The lingering nature of these issues contributed to the creation of an environment of non-performance and disharmony. While not seeking to point fingers at anyone one entity, it can be stated, that managing a project like this from a virtual office, insufficient funding and inadequate supervision all contributed to the poor performance of the project.
213. While some semblance of order has been restored in the last year, and some work has commenced in respect of the intended outcomes, questions regarding retention of NCs and overall management both at the regional and national levels still linger, casting some doubt regarding the possibility of the project being able to achieve those outcomes within the current life of the project. These, however, are not insurmountable issues, and with timely intervention and agreement on the way forward, it is possible to realise the outcomes and achieve the intended objectives.

iii. Stakeholder Participation and Cooperation:

214. A stakeholder analysis conducted during the Project's design phase identified several general groups of stakeholders that were to be engaged with during implementation of the full project. These stakeholders included the key regional institutions and governmental agencies, private sector entities, and national organisations such as the Associations of Engineers, Architects, licensed contractors for the supply of energy efficient appliances and equipment, and building contractors. Several of these entities were engaged during the training

workshops (regional and national) as well as partnering with the NSC in providing project oversight. However, the primary mechanisms through which it was envisaged that deeper stakeholder participation and cooperation would occur - formation of ESCOs and utilisation of the financing facilities have not materialised due to the limited accomplishments of the project.

iv. Responsiveness to Human Rights and Gender Equity:

215. The project does not give specific attention to gender and indigenous issues relevant to EE and RE management. These should be taken into account in future activities, together with other issues of social equity. It is common knowledge that a significant percentage of households in the Caribbean are headed by women, and more importantly, they are the primary users of EE appliances and technologies in the home. It seems evident, therefore, that engagement of women and understanding the role they play in making a decision with respect to the use of energy will have a significant impact on reducing consumption or making wise decisions in respect of energy conservation.

v. Country Ownership and Driven-ness

216. Country ownership as evidenced by the fact that each of the projects was housed in a governmental ministry and a senior governmental staff person (Permanent Secretary or Department Head) assigned responsibility for coordinating the overall implementation through an NSC. The project also benefited from extensive stakeholder consultations during the preparation phase, thereby allowing both governmental, and private sector entities to assume a keen interest and even participate in its implementation.
217. On the surface, there is little evidence of country buy-in, except in Antigua and Barbuda, and to some extent, Belize. However, it is very difficult to fully assess country buy-in in the current climate of distrust resulting from non-approval of their work plans and budgets, non-payment and outstanding payments to National Coordinators, and outstanding reimbursements (SVG, St Lucia and Grenada) for workshop expenses.
218. Notwithstanding the above, the high cost of energy supplies and products, continuing interest in the project is high, though delays have resulted in a noticeable waning of interest. However, with energy prices not expected to dip appreciably, and more focus being placed on a search for alternative forms of energy, that interest is not expected to dissipate. The public announcement and advertisement by the Development Bank in Saint Lucia of attractive concessional financing to build climate resilience, as well as the promotional campaign which was undertaken by the DFC in Belize, can only provide positive reinforcement for country ownership.

vi. Communication and Public Awareness:

219. Delays in the rolling out of the Public Awareness initiative by Antigua and Barbuda has contributed significantly to the poor public awareness of the project. Also, because of the dependence of the other countries on that material, their education awareness campaigns are also delayed. Initially, the project benefitted from numerous media exposures in each of the participating countries. These were usually associated with the launch of a new initiative, convening of workshops or other significant milestones. The Project has also benefitted from online interests as it is hosted by SIDS-DOCK and linked to the 5Cs web page. However, no independent tracking surveys have been undertaken to assess market penetration.

Criterion	Summary Assessment	Rating
I Factors Affecting Performance		
<i>1. Preparation and readiness</i>	Initial delays suggest a lack of readiness	U
<i>2. Quality of project management and supervision³⁰</i>	Inadequate, given the complaints regarding disbursement of funds, rapid turnover of NC and inability to address and arrest persistent complaints.	U
<i>3. Stakeholders participation and cooperation</i>	Stakeholder participation has generally been positive as more persons in both the public and private sector have benefited from training and were provided with other opportunities to become involved	S
<i>4. Responsiveness to human rights and gender equity</i>	No mention of issues or initiatives specifically intended to respond to concerns about human rights or gender equity	U
<i>5. Country ownership and driven-ness</i>	Growing	MS
<i>6. Communication and public awareness</i>	Initial widespread media coverage has not been followed up with the long-awaited public awareness initiative.	MU
Overall Factors Affecting Performance rating		MU

³⁰ In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment, as the implementing agency.

VI. Conclusions and Recommendations

A. Conclusions

220. At the request of UN Environment Evaluation Office, a comprehensive Executive Summary was provided to support management decision-making. This conclusion should, therefore, be read in conjunction with the Executive Summary.
221. In all the countries visited and consulted, the complaints from present and past National Steering Committee Chairpersons was of poor management at the regional level, particularly the inability to approve work plans and budgets. The only exception being Antigua and Barbuda. Even when those issues were resolved, the long delay in obtaining the equipment, together with concerns as to the reasons for the delays, meant that they were unable to proceed with their own undertakings. In the four PIR reports (2014 – 2017) the project received an implementation rating of U, MU, MS, and U, all indicative of a project which is performing poorly. Since that last review, nothing has changed to warrant anything than an overall rating of “Unsatisfactory”.
222. Table 12 below provides an overview of the ratings given for each of the evaluation criteria. The evaluation criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

Table 12: Evaluation Criteria and Rating Table

Criteria	Summary Assessment	Ref.	Rating
A. Strategic Relevance	The project is fully consistent with UNEP’s strategies and programmes and contributes to the achievement of their objectives in the target countries. It is consistent with the UNFCCC and fits within the broader UN approach for dealing with climate change. Most importantly, it has relevance to the region’s environmental priorities to promote the development and use of sustainable energy in the region so as to build regional resilience to the impacts of a changing climate.	94-97	S
1. Alignment to the UN Environment Medium-Term Strategy (MTS) and Programme of Work (POW).	There is alignment to the UN Environment MTS and POW	94	HS
2. Alignment to the UN Environment/GEF/Donor Strategic Priorities.	There is alignment to the strategic priorities of UN Environment/GEF/Donor	98	HS

Criteria	Summary Assessment	Ref.	Rating
3. Relevance to Regional, Sub-regional and National Environmental Priorities	The project is highly relevant to Regional, sub-regional and National Environmental Priorities	99	HS
4. Complementarity with Existing Interventions	The project was an ideal complement to several other initiatives which are either ongoing or due to come onstream. However, there was no real acknowledgement of gender issues or interests of indigenous populations.	100-103	MS
B. Quality of Project Design	No major flaws in the design other than limited financial allocation, particularly given the number of countries involved, and no mention of indigenous populations and gender issues.	104-111	MS
C. Nature of External Context	External factors did cause some delays. However, timely interventions to limit those delays were not adequate.	112-114	U
D. Effectiveness	The project has been very slow in getting out of the starting block, and three years after its official start, though some progress has been made in commencing some activities, none of the identified outputs have been achieved.	114-181	HU
<i>1. Achievement of outputs</i>	Four years after commencement several of the outputs are partially completed. Some countries are more advanced than others, but overall, the achievements to date can only be described as moderate.		MS
<i>2. Achievement of direct outcomes</i>	While it is still possible to achieve the indicated outcomes, much of that will be dependent on the completion of the outputs.		U
<i>3. Likelihood of impact</i>	Unable to draw any conclusions as to the likelihood of impact given the state of the project		U
E. Financial Management	Financial	182-189	U
<i>1. Completeness of project financial information</i>	There were delays in the submission of financial information particularly in respect of preparation and submission of co-finance reports and annual audits	174-181	U
<i>2. Communication between finance and project management staff</i>	Effort was made to request the financial information, but that was not always forthcoming.		U
<i>3. Compliance with UN Environment standards and procedures</i>	The submitted reports demonstrated compliance, but not always in a timely manner.		U
F. Efficiency	The training initiatives undertaken has been a positive feature of the project. However, the considerable delays resulting in a request for an extension from April 2017 to April 2018 completion date, has overshadowed the few successes.	190-198	MU
G. Monitoring and Reporting		199-204	MS

Criteria	Summary Assessment	Ref.	Rating
1. Monitoring design and budgeting	Monitoring and design are consistent with GEF/UNEP guidelines.		HS
2. Monitoring of project implementation	Delays and an inability to correct problems which consistently arose suggest not enough was being done.		MU
3. Project reporting	Reports prepared, but not all timely, too optimistic and not consistent in terms of format, making tracking difficult.		MU
H. Sustainability		205-209	U
1. Socio-political sustainability	Project delays and inadequate management have resulted in low achievements and enthusiasm at the national levels. However, continued involvement of the countries together with increased awareness of the importance of EE in addressing high energy cost will continue to drive support and ownership.	206-207	MS
2. Financial sustainability	Some co-financing commitments have only recently been realized, which currently limits the potential for the initiative to be financially self-sustaining. With the signing of the MOU for the establishment of the EE/RE Financing Facility window between DFC-Belize and the 5Cs, as well as stated interest by the development bank in Saint Lucia, there is a demonstrated interest which may achieve the intended financing sustainability.	208	U
3. Institutional sustainability	The network of National Coordinators is currently non-existent, which severely limits the likelihood of institutional leadership at the moment. Several training initiatives have been successfully concluded which should enable the establishment of ESCOs. Likewise, the development of the building code, currently under review, and MEPS should provide the legal framework on which EE could become mainstreamed in all new development initiatives.	209	U
I. Factors Affecting Performance		210-219	MU
1. Preparation and readiness	Initial delays suggest a lack of readiness	210	U
2. Quality of project management and supervision ³¹	Inadequate, given the complaints regarding disbursement of funds, rapid turnover of NC and inability to address and arrest persistent complaints.	211-214	MU

31 In some cases, 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment, as the implementing agency.

Criteria	Summary Assessment	Ref.	Rating
3. Stakeholders participation and cooperation	Stakeholders participation have generally been positive as more persons in both the public and private sector have benefited from training and provide other opportunities to become involved	215	S
4. Responsiveness to human rights and gender equity	No mention of issues or initiatives specifically intended to respond to concerns about human rights or gender equity	216	U
5. Country ownership and driven-ness	Growing	217-219	MS
6. Communication and public awareness	Initial widespread media coverage has not been followed up with the long-awaited PA initiative.	220	MU
Overall Project Rating			U
<p>Rating Scale: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU), and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).</p>			

The Way Forward

223. In light of the unsatisfactory ratings and the findings as to the factors undermining the performance of the project, the most obvious conclusion would be to recommend a termination of the project. However, the successes achieved in terms of training provided, combined with opportunities for development of indigenous ESCOs, the expectation from partners such as the DFC and commitments made towards the financing of the solar PV project in St. Vincent and the Grenadines, would make such a decision difficult, if not very disappointing. More importantly, the continuing high cost of energy suggests that there is still room for participating countries to realise the benefits of mainstreaming EE measure in their daily activities and the acceptance of RE technologies as a vehicle for even further benefits.
224. The overall view of this evaluation exercise is that the performance of this project has been, and continues to be, rated as 'Unsatisfactory'.
225. Given the above, there are two apparent considerations for going forward, a) close the project or b) continue, but with substantial changes to the management structure. Both courses of action present challenges and would require additional steps to re-direct the course of the project, as set out in Table ES4 below (*presented as the shortest text first, with no suggestion of preference*). Ultimately it is for UN Environment to lead a process to determine whether each scenario is feasible, and which is most likely to deliver positive outcomes for the intended beneficiaries, given the risks that each course of action entails.
226. A critical consideration in the future of this project is whether sufficient country buy-in exists for the project to continue. On one hand, some countries, especially

Saint Lucia and Belize, the Development Banks have advertised the products that the project was to deliver quite heavily. Antigua and Barbuda are also still committed to the project. At the same time there are some outputs, such as training for ESCOs and the development of a financing facility that still generate interest. On the other hand, there is a general climate of mistrust between the implementing countries and the EA, as well as outstanding issues regarding claims for reimbursement, all of which may not be overcome even if the management structure is substantially changed. There is also ongoing support for the project's objectives from other organisations such as the World Bank, the Caribbean Development Bank, and the European Union.

227. In the view of this evaluation there is value in UN Environment exploring the following possibilities before making a final decision about the future of the project:
- II. (With the executive management of 5Cs) whether or not 5Cs is in a position to adopt the role of EA directly within its Programme Development and Management Unit. This would need to be supported financially from either the USD 500,000 5Cs committed but has not yet provided; 5Cs other sources of funding independent of this project or through a budget revision approved by the GEF. *(A positive outcome of this discussion is critical to moving forwards)*
 - III. (With GEF), the possibility of revising the budget to provide more financial support to NCs for the remainder of the project, leading to a project revision and extension until April 2019. *(A positive outcome of this discussion is critical to moving forwards)*
 - IV. *With previously identified co-funders, whether they are willing to fund the project as originally indicated or in some other form. (A positive outcome of this discussion is important but not critical to moving forwards, assuming that adjustments are made to the scope of the project to fit its secured financing).*
228. If the questions in para 31 above cannot be answered by the end of January 2018 at the latest, or result in negative answers on critical points, then it is the view of this evaluation that UN Environment should lead a process of project closure and return all outstanding funds, including the USD 2,000,000 recently disbursed to 5Cs, to the GEF in accordance with its normal procedures and the project agreement.
229. If the questions in para 31 above can be answered in the positive, UN Environment would need to propose new arrangements to the implementing countries and ask for formal confirmation of their renewed commitment to the project.
230. On the assumption that the project does go forward, recommendations generated from the evaluation exercise are presented in the table below. The recommendations (Table 15) are categorised in three priority levels as follows: 1 – Critical; 2 – High; 3 – Medium; 4-Opportunities for improvement.

	discouraged as it has the potential to create two levels of reporting and accountability, and laying the foundation for further tension between the NSC and 5Cs.
Recommendation #6	While external or unanticipated events such as elections and change of government, hurricanes etc., can negatively impact a project, it is also possible to anticipate such events and ensure that immediately after these events there is sufficient engagement between the EA and the local authorities to obtain reassurance and commitment for going forward. The project team is advised to strengthen its adaptive management and responsiveness to changes in external conditions for the remainder of the project.
Recommendation #7	<p>a) UN Environment (TM) to lead a decision-making process regarding the USD 2,000,000 that was disbursed to 5Cs in June/July 2017 and which has yet to be disbursed to the participating countries. Should these funds be returned to UNEP/GEF (if the project closes) or disbursed to the countries (if the project continues). The decision-making process should involve the GEF, given the destructive climatic events that have recently befallen the Caribbean region.</p> <p>b) UN Environment (TM) to engage with 5Cs and implementing countries to ensure that all outstanding dues at country level have been paid. UN Environment to resolve any differences of opinion regarding the legitimacy of expenditure claims.</p>
Recommendation #8	Project Documents should establish that immediately following the signing of the PCA a certain percentage of national budget allocation should be made available to the country. Subsequent disbursements should be based on measurable targets within an established time-frame.
Recommendation #9	Further investigation of the long delays in the procurement of goods, and the contracting of consultants for services provided is warranted, to confirm that best practices were indeed followed, using the principles of highest quality, economy and efficiency. The next audit, which should cover 2017, should be advised to specifically review the earlier procurement procedure for monitoring equipment.
Recommendation #10	No specific attention was given to gender and indigenous issues relevant to EE and RE management. These should be taken into account in future activities, together with other issues of social equity. It is common knowledge that a significant percentage of households in the Caribbean are headed by women, and more importantly, they are the primary users of EE appliances and technologies in the home. Also, a large percentage of the population in Belize are categorised as indigenous and they may have specific concerns in how they embrace EE/RE.

C. Lessons Learned

231. The following table presents a summary of the main lessons learned from some of the project's successes and challenges.

Table 14: Lessons Learned (see Executive Summary for complete table)

Lesson #1:	One of the major objectives of implementing projects is to assist in building capacity in the target countries. In that regard, it is imperative that the countries are given opportunities to participate in some of the
------------	---

	important decision-making aspects of the project such as the hiring and supervision of PC. The EA should, however, have a role to play, such as vetting the TORs, and reviewing the selection process to ensure that the candidate selected satisfied the criteria of the TORs and leave doubt as to the suitability of the candidate.
Lesson #2:	The EA should develop a procedures manual detailing all that is required of the NCs in terms of preparation/revision of PDs (national component) budgets, Work Plans, Reporting requirements as well as the formats and templates for preparation of all reports, and Financial Reports. These should all have been discussed and agreed upon at the Inception Meeting and a document circulated within a reasonable time (two months) to allow countries sufficient time to become familiar with the process prior to the submission of their first set of reports
Lesson #3:	Elections can, but don't necessarily have to affect project implementation to the extent it is reported to have done in some of the countries. Once elections are called in a participating country, the EA, together with the IA must devise a plan and strategy for timely intervention in the country to engage the necessary governmental officials to ascertain their continued commitment as well as ensuring there is an understanding of what is required of a country's continued involvement to avoid any unnecessary delays.
Lesson #4:	Virtual offices have their place do have a place in the modern business practices, it is imperative that the execution of a project in that faction is known to all and that there is agreement on that approach. It is also imperative that clear rules of operation, particularly as it relates to reporting communications and all other administrative functions associated with the execution are clearly detailed and all involved are fully aware.
Lesson #5:	Managing projects in multiple destinations are nothing new and in fact, is characteristic of how several of GEF funded projects are implemented. However, when undertaken, together with countries being assigned responsibilities which demand the completion of one before another could begin, this requires careful coordination on the part of the EA and demands more management oversight. With a PC who was Part-time, already saddled with reporting responsibilities, without the necessary administrative support, it is hardly surprising that simple tasks such as the convening of Inception Meetings and preparation of reports presented a management challenge.

Annexes

Annex I. Evaluation Terms of Reference

**Mid-Term Evaluation of the UN Environment/Global Environment Facility project
“Energy for Sustainable Development (ESD) in Caribbean Buildings”**

Section 1: PROJECT BACKGROUND AND OVERVIEW

Table 1. Project summary

Sub-programme:	Climate Change - Mitigation	Expected Accomplishment (s):	1b) Energy efficiency is improved and the use of renewable energy is increased in countries to help reduce greenhouse gas emissions and other pollutants as part of their low emission development.
UN Environment approval date:	Nov 1 st , 2012	Programme of Work Output(s):	POW 2008-2009
GEF project ID:	4171	Project type:	Full-Size Project
GEF Operational Programme #:	5	Focal Area(s):	Climate Change
GEF approval date:	27 th Aug 2012	GEF Strategic Priority:	CC1 – Energy Efficiency: To promote energy-efficient technologies and practices in appliances and buildings
Expected start date:	1 st Nov 2012	Actual start date:	March 1 st , 2013
Planned completion date:	April, 2017	Actual completion date:	<i>Not applicable</i>
Planned project budget at approval:	USD 12,484,000	Actual total expenditures reported as of Dec 31st, 2016:	USD

			Full Sized Project - 736,914.61 (Project Preparation Grant - 125,000)
GEF grant allocation:	USD 4,859,000	GEF grant expenditures reported as of [date]:	FSP 736,914.61 PPG 125,000
Project Preparation Grant - GEF financing:	USD 125,000	Project Preparation Grant - co-financing:	USD 175,000
Expected Medium-Size Project/Full-Size Project co-financing:	USD 7,625,500 (including in-kind contributions)	Secured Medium-Size Project/Full-Size Project co-financing:	Still Awaiting co-finance figures from executing agency
First disbursement:	May 21 st , 2013	Date of financial closure:	<i>Not applicable</i>
No. of revisions:	0	Date of last revision:	N/A
No. of Steering Committee meetings:	3	Date of last/next Steering Committee meeting:	Last: Oct 13 th , 2015 Next: ?
Mid-term Review/ Evaluation (planned date):	11/01/2012	Mid-term Review/ Evaluation (actual date):	July 2017 (expected completion date)
Terminal Evaluation (planned date):	To be determined	Terminal Evaluation (actual date):	<i>Not applicable</i>
Coverage - Country(ies):	Antigua & Barbuda; Belize; Grenada; St Lucia and St Vincent and the Grenadines.	Coverage - Region(s):	Caribbean Community (CARICOM) Region
Dates of previous project phases:	No previous phases of this project. However, lessons from the UNDP/GEF CariCom Renewable Energy Development Project were expected to be applied.	Status of future project phases:	No further phases planned

Sources: GEF Project Implementation Report, July 2015 – June 2016 and UN Environment Project Document (ProDoc), undated.

Project rationale

The small island developing states (SIDS) in the Caribbean are highly dependent on imports, particularly food supplies and on petroleum products that are required for economic development and meeting the energy needs of the population. This increasing dependence has long been a major concern for the SIDS, in general, and they have been advocating strongly within the United Nations Framework Convention on Climate Change (UNFCCC) process for increased financial resources to be able to mitigate these impacts.

The vast majority of countries in the Caribbean are dependent on imported petroleum products for more than 90 % of commercial energy consumption. As a result of their small land areas and high levels of energy inefficiency the energy cost of these countries are among the highest in the world, which reduces their global competitiveness. Paradoxically, the same countries have considerable potential for increased use of renewable energy. This project, *Energy for Sustainable Development in Caribbean Buildings (ESD)* was proposed by five member countries of the Caribbean Community (CARICOM) comprising: Antigua & Barbuda, Belize, Grenada, St. Lucia, and Trinidad and Tobago³². The countries recognize that to achieve their goals of sustainable economic development as set out in the Barbados Plan of Action and the Mauritius Strategy of Implementation³³, they will need to increase the use of their renewable energy resources and significantly improve efficiency of their energy use. With support from UN Environment and the Global Environment Facility, the ESD project aims to both '*reduce greenhouse gas (GHG) emissions by 20% by 2033 and make the energy sector in the participating countries more efficient and increase their use of renewable energy*'.

The ESD project represents the first regional project to pilot energy efficiency improvements in the economy in member states of CARICOM while at the same time aiming to increase the use of renewable energy. Since buildings are major consumers of electricity across the region, the project focuses on the buildings sector for improving the efficiency of energy use.

The main stakeholders for intervention are: within the targeted countries, ministries responsible for housing, environment, finance, energy and climate change; bureaus of standards; national building authorities; associations of professional engineers and architects; higher level and technical educational institutions; electric utilities; energy service suppliers; national development banks and energy regulatory authorities.

Project objectives and components

The overall objective of the project is to bring about a 20% reduction in GHG emissions from the building sector in the five participating countries through an integrated approach comprising support for: institutional capacity development in monitoring and assessment; national technical capacity for energy efficiency and the development of national/regional regulatory frameworks along with the

³² Trinidad and Tobago formally withdrew from the initiative in March 2014 and their place has been taken by St Vincent and the Grenadines.

³³ Negotiated agreements under the Commission on Sustainable Development of the United Nations Department of Economic and Social Affairs (UNDESA).

demonstration of energy efficiency in buildings; stimulation of supportive financial and market-based mechanisms and targeted national awareness raising on the benefits of energy efficiency in buildings.

Table 1: Project Results Framework

<u>Objective:</u> To reduce GHG emissions intensity in buildings by 20%		
	Outcomes	Outputs
Component 1: Establishment of an assessment and monitoring system for energy efficiency and renewable energy in buildings	Institutional capacity for management of sector, monitoring and assessment	<i>Output 1.1</i> Building audit reports, statistics on potential savings in domestic, commercial and public sectors
		<i>Output 1.2</i> Identification of measures at the design, construction and maintenance stages of the building life cycle for improved energy efficiency and renewables
		<i>Output 1.3</i> Identify equipment and lighting potentials to reduce fossil fuel use
		<i>Output 1.4</i> Specific energy saving measures and policy options for various classes of buildings are identified and developed
Component 2: Strengthening of national capacity for energy efficiency and renewable energy to support long-term development of the five SIDS	Technical capacity and awareness for Energy Efficiency: Grenada – PV St. Lucia – Lighting Belize – ESCOs	<i>Output 2.1</i> Development of training workshops, seminars on energy efficiency for building designers, contractors architects, renewable energy installers and maintenance personnel
		<i>Output 2.2</i> Publication of manual on best practices on energy efficiency for use in building sector
		<i>Output 2.3</i> Development of energy efficiency courses for national tertiary institutions
Component 3: Development and use of appropriate financial and market-based mechanisms that support sustainable energy use in buildings	Appropriate financial and market based mechanisms that support energy efficiency.	<i>Output 3.1</i> Reduced operating costs and risk hedging against fuel price spikes are integrated into lending
		<i>Output 3.2</i> Fiscal incentives program to increase market uptake and penetration of sustainable energy measures
Component 4: Development and implementation of a demonstration program for sustainable energy use in buildings	Demonstration programme for sustainable energy	<i>Output 4 .1</i> Demonstrations of measures and benefits of energy efficiency in buildings at the national level. Voluntary projects
		<i>Output 4.2</i> Challenge competition for private sector builders for construction and retrofitting of buildings to make a very low purchased energy target of some few kWh/m ² – Private sector competition for ESCOs.
Component 5: Development and adoption of a regulatory framework energy efficient buildings (building codes) and minimum energy performance	Regulatory instruments	<i>Output 5.1</i> Development of guidelines and standards for energy efficient construction practices including renewable energy and products based on investigation of global and regional standards.

standards (MEPS) for appliances and equipment		
Component 6: Increasing regional awareness and improving knowledge management, and sharing with regard to the benefits of energy efficiency and renewable energy and the development of a replication strategy	Regional dissemination	<i>Output 6.1</i> Task reports produced on subtopics: Grenada: PV interconnection and monitoring buildings Antigua & Barbuda awareness and education program materials, schools, general public, St. Lucia: Lighting Belize: ESCO training and program Trinidad & Tobago: Energy Efficiency Regulations

Sources: UN Environment/GEF Project Implementation Report (July 2015 – June 2016) and UN Environment Project Document.

Activities	Task Leading Country	Antigua & Barbuda	Belize	Grenada	St. Lucia	Trinidad & Tobago
Suasion Materials	Antigua & Barbuda	+++	++	++	++	++
Standards and Label Regulations	Trinidad & Tobago	+++	++	++	+ (lighting)	+++
Building Evaluation	Grenada	++	++	+++	++	++
Building Codes	Trinidad & Tobago	++	+++	++	+	+++
Demonstrations	All	++	++	++	++	++
ESCOs	Belize	++	+++	++	++	+
Lighting	St. Lucia	++	++	++	+++	++

+ watching brief or partial deployment

++ active deployment and development

+++ lead on task area

Executing Arrangements

UN Environment is the Implementing Agency and the project is situated in the Climate Change Mitigation Unit of the Energy Branch within the Economy Division. The project belongs to the Climate Change sub-programme (mitigation) under the Programme of Work for 2008-2009. It is designed to contribute to the Expected Accomplishment 1b) *Energy efficiency is improved and the use of renewable energy is increased in countries to help reduce greenhouse gas emissions and other pollutants as part of their low emission development.* The Executing Agency is the Caribbean Community (CARICOM) Climate Change Centre (CCCC or 5Cs). Project Partners are ministries in the target countries:

Ministry of Health and the Environment, *Government of Antigua & Barbuda*

Ministry of Energy, Science and Technology and Public Utilities (MESTPU), Government of Belize

Ministry of Finance, Office of the Prime Minister, Energy Division, Government of Grenada

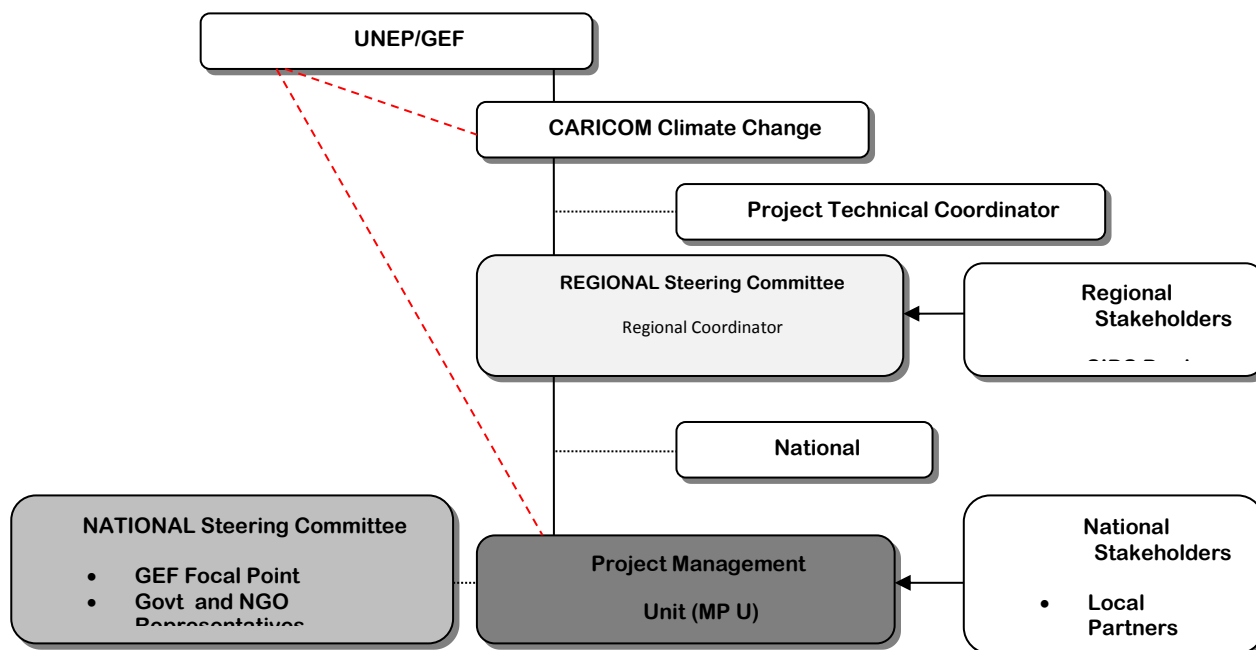
Ministry of Sustainable Development, Energy, Science and Technology, Government of Saint Lucia

Ministry of National Security, Air & Sea Port Development, Office of the Prime Minister, Energy Unit,
Government of Saint Vincent and the Grenadines

The roles of the various parties are as follows: (i) the Caribbean Community Climate Change Centre (5Cs), established in 2002 by the CARICOM governments to address the impacts of climate change and based in Belize, is the lead Executing Agency responsible for overall implementation, including the central coordination of project activities; (ii) National Steering Committees, housed in the ministries listed above of the five participating countries, are responsible for overseeing local project implementation; and (iii) regional and local energy experts will be assisted by specialists from the United Nations Department of Economic and Social Affairs (UNDESA), to provide technical assistance. Further details are available in the UN Environment Project Document (ProDoC), page 125, undated.

Annually, an official Project Steering Committee will be organised by the Executing Agency, 5Cs, comprising representatives from all participating countries, executing partner agencies, financiers, other stakeholders, and UN Environment, Energy Branch to review and discuss the overall status and progress of the project.

Diagram of the implementation structure.



Project Cost and Financing

The total estimated project cost at design was as follows:

	US\$	%
Cost to the GEF Trust Fund	4,859,000	38.9
Co-financing		
Cash		
Executing Agency: 5Cs	550,000	4.4
National Executing Partners	2,266,500	18.2
National Development Banks	2,800,000	22.4
Bilateral (Government of Japan for Belize)	500,000	4.0
Sub-total	6,116,500	
In-kind		
National Executing Partners	1,174,000	9.4
Executing Partner: UNDESA	150,000	1.2

National Executing Partner/NGO: WINDREF	185,000	1.5
Sub-total	1,509,000	
Total Co-financing	7,625,500	
Total Project Cost	12,484,500	100.0

Source: UN Environment Project Document (ProDoc), undated.

The breakdown of the co-financing for the project was as follows:

<i>Name of Co-financier (source)</i>	<i>Project Preparation Cofinance (received – in-kind)</i>	<i>Project (USD)</i>	<i>Total Eligible Commitment accepted</i>	<i>Notes</i>
Caribbean Community Climate Change Centre (5Cs)		550,000	550,000	Cash-
UNDESA	25,000	150,000	175,000	In Kind
Ministry of Land Housing and Environment A&B		550,000	550,000	Cash estimate based on project activities and establishment of a revolving fund
Ministry of Land Housing and Environment A&B	10,000	732,500	742,500	In- Kind, includes Government financing of upgraded public buildings
JICA34 in Belize		500,000	500,000	Cash -Although up to 10M USD is identified, the buildings integrated portion addressing project objectives during the project period is estimate conservatively at 0.5M USD
Development Finance Corporation Belize		800,000	800,000	Soft loan -Excludes normal management costs if their own finance and the equity required of borrowers
Central Buildings Authority Belize		45,000	45,000	In- Kind
Ministry of Natural Resources and Environment Belize	10,000	92,000	102,000	In- Kind

³⁴ Japan International Cooperation Agency

Grenada Development Bank		1,200,000	1,200,000	Soft loan -Excludes normal management costs if their own finance and the equity required of borrowers
WINDREF	10,000	185,000	195,000	In- Kind
St. Lucia Development Bank		800,000	800,000	Soft loan -Excludes normal management costs if their own finance and the equity required of borrowers
Sustainable Development & Environment Unit St. Lucia	110,000	82,500	192,500	In- Kind- EU funded activity related to buildings was instrumental in the project design
Ministry of Housing and the Environment T&T		1,716,500	1,716,500	Cash
Ministry of Housing and the Environment T&T	10,000	222,000	232,000	In- Kind
Total	175,000	7,625,500		

Source: Un Environment Project Document (ProDoc), pg 146

1. There is a certain amount of associated financing for work on energy efficiency in the region, as follows:

- SIDS Dock grant to Organisation of Eastern Caribbean States: USD 2,000,000.
- SIDS Dock grant to UNDP including a concessional loan instrument, eligible countries including

Trinidad & Tobago, St. Lucia, St. Vincent and Grenadines, Dominica, Grenada, Belize, Antigua & Barbuda, St. Kitts and Nevis: USD 2,000,000 plus Caribbean Development Bank own finance and equity of borrowers: more than USD 6,000,000.

- World Bank support to Eastern Caribbean Energy Regulatory Authority: USD 5,600,000.
- The Energy Efficiency Promotion Project managed by CARICOM Regional Organisation for

Standards and Quality (CROSQ) is jointly funded by the European Union (EU)/ACP Energy Facility, German International Cooperation (GIZ) and OECS Secretariat and addresses the introduction of norms, standards and energy efficiency ratings and labels in the 6 independent OECS member countries, to improve Energy Efficiency (EE) at the consumer level, with priority attention to low income households. The proposal, covering Antigua and Barbuda, Dominica, Grenada, Saint Lucia, St. Kitts and Nevis and St. Vincent and Grenadines, was approved by the EU for co-financing and a financing agreement negotiated and concluded between GIZ and the European Union for 5,200,000 Euro.

2. The distribution of the budget between the five implementation countries was planned as follows:

GEF				(in \$)
-----	--	--	--	---------

Agency	Focal Area	Country Name/ Global	Project (a)	Agency Fee (b)	Total c=a+b
UNEP	Climate Change	Antigua & Barbuda	988,740		
UNEP	Climate Change	Belize	988,740		
UNEP	Climate Change	Grenada	988,740		
UNEP	Climate Change	St. Lucia	372,540		
UNEP	Climate Change	St Vincent	741,390		
		UNEP (evaluation)	75,000		
		5C	703,850		
Total GEF Resources			4,859,000	485,900	5,344,900

Source: GEF Project Identification Form, submitted Nov 12th 2009 (refers to April 1st, 2011 GEF Approval Date)

1. Implementation Issues

3. There were significant delays in start-up in the first year of implementation (i.e. from March 2013). The project was effectively re-launched in April 2014 and, therefore, has had two complete years of activity rather than the planned three. The annual Project Implementation Reports (PIR) record low levels of satisfaction³⁵ with project delivery and associated medium to high levels of risk³⁶, summarised in the table below, with further details in the PIRs. While the most recent annual report indicates some improvement in delivery, the short remaining period for implementation (i.e. end date April 2017 with approval for a no-cost extension period to April 2018 ongoing), gives cause for concern.

SATISFACTION LEVELS	PIR June 2013 – July 2014	PIR June 2014 – July 2015	PIR June 2015 – July 2016
<i>Progress towards meeting objective</i>	Moderately Unsatisfactory	Moderately Unsatisfactory	Moderately Satisfactory
<i>Progress in implementation</i>	Unsatisfactory	Moderately Unsatisfactory	Moderately Satisfactory

³⁵ Progress is rated on a 6-point scale: Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory and Highly Unsatisfactory.

³⁶ Risk is rated on a 3-point scale: Low, Medium, High.

RISKS	PIR June 2013 – July 2014	PIR June 2014 – July 2015	PIR June 2015 – July 2016
<i>Overall Project Risk</i>	<i>Medium:</i> Project getting back on track after being stalled for 12 months, and losing a main participating country. MOA with A&B pending signature is delaying project delivery.	<i>High:</i> Project was getting back on track and T&T was replaced by SVG. However, progress regressed with loss of NCs, slow procurement of monitoring equipment and the continuing delays with A&B not signing the MOA have hampered project delivery	<i>Medium:</i> Several activities in Belize, Grenada and St. Vincent and the Grenadines have helped put the project on track. The appointment of a new NC in Antigua and Barbuda has resulted in review and work toward finalisation of project documents. Elections in St. Lucia has negatively impacted project progress.
<i>Top Risks</i>	<i>High:</i> Antigua & Barbuda request to UNEP for direct disbursement bypassing the 5Cs	<i>High:</i> Lack of project funds	<i>High:</i> Lack of co-financing
		<i>High:</i> Slow procurement of monitoring equipment	<i>High:</i> Delivery of monitoring equipment
		<i>Medium:</i> Slow financial reporting	<i>High:</i> Acceleration in project implementation

Source: Summarised from three Project Implementation Reports

4. Challenges have been associated with a range of issues including: raising co-financing in a context of national high debt; establishing and maintaining National Steering Committees; changing national project coordinators, preparing and approving the necessary documentation to support action; delivering essential equipment for monitoring and assessment work; disbursement of funds to country level and the change in one country partner (Trinidad & Tobago were replaced by St Vincent and the Grenadines). The causal relationships between challenges and delays are not currently clear or articulated.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

1. Key Evaluation principles

5. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

6. **The “Why?” Question.** As this is a Mid-term Evaluation particular attention should be given to identifying implementation challenges and risks to achieving the expected project objectives and sustainability. Therefore, the “Why?” question should be at the front of the consultants’ minds all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultants need to go beyond the assessment of “what” the project performance was and make a serious

effort to provide a deeper understanding of “why” the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.

7. **Baselines and counterfactuals.** In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

8. **Communicating evaluation results.** A key aim of the evaluation is to encourage reflection and learning by UN Environment staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation deliverables. Draft and final versions of the main evaluation report will be shared with key stakeholders by the Evaluation Office. There may, however, be several intended audiences, each with different interests and needs regarding the report. The Evaluation Manager will plan with the consultant(s) which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

Objective of the Evaluation

9. In line with the UN Environment Evaluation Policy³⁷ and the UN Environment Programme Manual³⁸, the Mid-Term Evaluation (MTE) is undertaken approximately half way through project implementation to analyze whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. The MTE will assess project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and impacts, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment, the Global Environment Facility and national partners in the five target countries.

10. In the instance of this project there is an additional, specific objective of determining a future course of action. The project ends in April 2017 and the slow rate of implementation suggests that the planned scope of work is unlikely to have been delivered by that date. UN Environment and its partners seek an independent and external view on whether the project should be closed according to the current timeframe or whether there are reasons to seek a no cost extension to complete the work. In order for a no cost extension to be granted UN Environment and its partners would need to have a plan of action that addresses any weaknesses in the project’s current design or recurring issues that undermine satisfactory performance.

2. Key Strategic Questions

11. In addition to the evaluation criteria outlined in Section 10, the evaluation will address the **strategic questions** listed below. These are questions of interest to UN Environment and its partners:

³⁷ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

³⁸ http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf . *This manual is under revision.*

- (a) What are the main factors undermining the performance of this project and what are the causal relationships between them?
- (b) Based on an analysis of the causes of under-performance, what is the recommended way forward?
- (c) To what extent are the targeted reductions in Greenhouse Gas emissions associated with this project well-founded, realistically estimated and feasible to attain?

12. The implementation process and factors affecting performance will be as important in this evaluation as the assessment of performance itself.

3.Evaluation Criteria

13. All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the achievement of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

(i) Strategic Relevance

14. The evaluation will assess, in line with the OECD/DAC definition of relevance, 'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'. The evaluation will include an assessment of the project's relevance in relation to UN Environment's mandate and its alignment with UN Environment's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

15. *Alignment to the UN Environment Medium Term Strategy³⁹ (MTS) and Programme of Work (POW)*
The evaluation should assess the project's alignment with the MTS and POW under which the project was approved and include reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.

(ii) *Alignment to UN Environment /GEF/Donor Strategic Priorities*

Donor, including GEF, strategic priorities will vary across interventions. UN Environment strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building⁴⁰ (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international

³⁹ UN Environment's Medium Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

⁴⁰ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries. GEF priorities are specified in published programming priorities and focal area strategies.

(iii) *Relevance to Regional, Sub-regional and National Environmental Priorities*

The evaluation will assess the extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented. Examples may include: national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc.

(iv) *Complementarity with Existing Interventions*

An assessment will be made of how well the project, either at design stage or during the project mobilization, took account of ongoing and planned initiatives (under the same sub-programme, other UN Environment sub-programmes, or being implemented by other agencies) that address similar needs of the same target groups. The evaluation will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UNDAFs or One UN programming. Linkages with other interventions should be described and instances where UN Environment's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include: stakeholders' participation and cooperation; responsiveness to human rights and gender equity and country ownership and driven-ness.

A. Quality of Project Design

16. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established. This overall Project Design Quality rating is entered in the final evaluation ratings table as item B. In the Main Evaluation Report a summary of the project's strengths and weaknesses at design stage is included.

Factors affecting this criterion may include (at the design stage): stakeholders participation and cooperation and responsiveness to human rights and gender equity, including the extent to which relevant actions are adequately budgeted for.

B. Nature of External Context

17. At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable and unexpected external operating context, the overall rating for Effectiveness may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together. A justification for such an increase must be given.

C. D. Effectiveness

18. The evaluation will assess effectiveness across three dimensions: achievement of outputs, achievement of direct outcomes and likelihood of impact.

i. Achievement of Outputs

The evaluation will assess the project's success in producing the programmed outputs (products and services delivered by the project itself) and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, a table should be provided showing the original formulation and the amended version for transparency. The achievement of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their usefulness and the timeliness of their delivery. The evaluation will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include: preparation and readiness and quality of project management and supervision⁴¹.

ii. Achievement of Direct Outcomes

The achievement of direct outcomes is assessed as performance against the direct outcomes as defined in the reconstructed⁴² Theory of Change. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. As in 1, above, a table can be used where substantive amendments to the formulation of direct outcomes is necessary. The evaluation should report evidence of attribution between UN Environment's intervention and the direct outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UN Environment's contribution should be included.

Factors affecting this criterion may include: quality of project management and supervision; stakeholders' participation and cooperation; responsiveness to human rights and gender equity and communication and public awareness.

iii. Likelihood of Impact

Based on the articulation of longer term effects in the reconstructed TOC (i.e. from direct outcomes, via intermediate states, to impact), *the evaluation will assess the likelihood of the intended, positive impacts becoming a reality.* Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long term impacts. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the EOU website, web.unep.org/evaluation and is supported by an excel-based flow chart called, Likelihood of Impact Assessment (see Annex 1). Essentially the approach follows a 'likelihood tree' from direct outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

⁴¹ In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.

⁴² UN Environment staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the evaluation.

19. The evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.⁴³

20. The evaluation will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication⁴⁴ as part of its Theory of Change and as factors that are likely to contribute to longer term impact. Ultimately UN Environment and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the evaluation will assess the likelihood of the project to make a substantive contribution to the high level changes represented by UN Environment's Expected Accomplishments, the Sustainable Development Goals⁴⁵ and/or the high level results prioritised by the funding partner.

Factors affecting this criterion may include: quality of project management and supervision, including adaptive project management; stakeholders participation and cooperation; responsiveness to human rights and gender equity; country ownership and driven-ness and communication and public awareness.

E. Financial Management

21. Financial management will be assessed under three broad themes: completeness of financial information, communication between financial and project management staff and compliance with relevant UN financial management standards and procedures. The evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The evaluation will assess the level of communication between the Task Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach. The evaluation will verify the application of proper financial management standards and adherence to UN Environment's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted.

Factors affecting this criterion may include: preparation and readiness and quality of project management and supervision.

F. Efficiency

22. In keeping with the OECD/DAC definition of efficiency, the evaluation will assess the cost-effectiveness and timeliness of project execution. Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The evaluation will also assess to what extent any project extension could have been avoided through stronger project management and

⁴³ Further information on Environmental, Social and Economic Safeguards (ESES) can be found at <http://www.unep.org/about/eses/>

⁴⁴ *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

⁴⁵ A list of relevant SDGs is available on the EO website www.unep.org/evaluation

identify any negative impacts caused by project delays or extensions. The evaluation will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

23. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. The evaluation will also consider the extent to which the management of the project minimised UN Environment's environmental footprint.

24. *Factors affecting this criterion may include:* preparation and readiness (e.g. timeliness); quality of project management and supervision and stakeholders participation and cooperation.

G. Monitoring and Reporting

25. The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

i. Monitoring Design and Budgeting

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART⁴⁶ indicators towards the achievement of the projects outputs and direct outcomes, including at a level disaggregated by gender or groups with low representation. The evaluation will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation/review should be discussed if applicable.

ii. Monitoring Implementation

The evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The evaluation should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

Projects funded by GEF have specific evaluation requirements with regard to verifying documentation and reporting (i.e. Project Implementation Reviews, Tracking Tool and CEO Endorsement template⁴⁷), which will be made available by the Task Manager. The evaluation will assess the extent to which both UN Environment and donor reporting commitments have been fulfilled.

Factors affecting this criterion may include: quality of project management and supervision and responsiveness to human rights and gender equity (e.g. disaggregated indicators and data).

⁴⁶ SMART refers to indicators that are specific, measurable, assignable, realistic and time-specific.

⁴⁷ The Evaluation Consultant(s) should verify that the annual Project Implementation Reviews have been submitted, that the Tracking Tool is being kept up-to-date and that in the CEO Endorsement template Table A and Section E have been completed.

H. Sustainability

26. Sustainability is understood as the probability of direct outcomes being maintained and developed after the close of the intervention. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes. Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included. The evaluation will ascertain that the project has put in place an appropriate exit strategy and measures to mitigate risks to sustainability.

i. Socio-political Sustainability

27. The evaluation will assess the extent to which social or political factors support the continuation and further development of project direct outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the evaluation will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

28. Some direct outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other direct outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new resource management approach. The evaluation will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the direct outcomes of a project have been extended into a future project phase. The question still remains as to whether the future project outcomes will be financially sustainable.

iii. Institutional Sustainability

29. The evaluation will assess the extent to which the sustainability of project outcomes is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure.

Factors affecting this criterion may include: stakeholders participation and cooperation; responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined); communication and public awareness and country ownership and driven-ness.

I. Factors and Processes Affecting Project Performance

30. *These factors are rated in the ratings table, but are discussed as cross-cutting themes as appropriate under the other evaluation criteria, above.*

i. Preparation and Readiness

This criterion focuses on the inception or mobilisation stage of the project. The evaluation will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In

particular the evaluation will consider the nature and quality of engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements. (Project preparation is covered in the template for the assessment of Project Design Quality).

ii. Quality of Project Implementation and Execution

Specifically for GEF funded projects, this factor refers separately to the performance of the executing agency and the technical backstopping and supervision provided by UN Environment, as the implementing agency.

The evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with UN Environment colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive project management should be highlighted.

iii. Stakeholder Participation and Cooperation

Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UN Environment. The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups, should be considered.

iv. Responsiveness to Human Rights and Gender Equity

The evaluation will ascertain to what extent the project has applied the UN Common Understanding on the human rights based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the evaluation will assess to what extent the intervention adheres to UN Environment's Policy and Strategy for Gender Equality and the Environment.

The report should present the extent to which the intervention, following an adequate gender analysis at design stage, has implemented the identified actions and/or applied adaptive management to ensure that Gender Equity and Human Rights are adequately taken into account. In particular, the evaluation will consider to what extent project design (section B), the implementation that underpins effectiveness (section D), and monitoring (section G) have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

v. Country Ownership and Driven-ness

The evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. The evaluation will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices. This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. This ownership should adequately represent the needs and interests of all gender and marginalised groups.

vi. Communication and Public Awareness

The evaluation will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes

or shape behaviour among wider communities and civil society at large. The evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gender or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

31. The Mid-Term Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

32. The findings of the evaluation will be based on the following:

(a) A **desk review** of:

Relevant background documentation, inter alia:

- Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
- Project reports such as Project Implementation Reports, other progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews and Tracking Tool etc.;
- Project outputs: see Table 1, above;
- Evaluations/reviews of similar projects (specifically, UNDP/GEF CARICOM Renewable Energy Development Project).

(b) **Interviews** (individual or in group) with:

- UN Environment Task Manager (TM);
- Project management team;
- UN Environment Fund Management Officer (FMO);
- Project partners, including ministry partners listed in section 4 above.
- Private and professional sector representatives
- Relevant resource persons.

(c) **Surveys** (if appropriate)

(d) **Field visits:** in-country visits to a minimum of three of the five target countries.

(e) **Other data collection tools** (as needed)

(f) Evaluation Deliverables and Review Procedures

33. The evaluation team will prepare:

- **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.

- **Preliminary Findings Note:** typically in the form of a powerpoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for review and comment.
- **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a stand alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.
- **Evaluation Bulletin:** a 2-page summary of key evaluation findings for wider dissemination through the EOU website (to be discussed with the Evaluation Manager).

34. **Review of the draft evaluation report.** The evaluation team will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Project Manager, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the evaluation team where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the evaluation team for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

35. Based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

36. The Evaluation Manager will prepare a **quality assessment** of the first and final drafts of the main evaluation report, which acts as a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in template listed in Annex 1.

37. At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Task Manager. The Evaluation Office will track compliance against this plan on a six monthly basis.

(g) The Consultants' Team

38. For this evaluation one Evaluation Consultant will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager, Janet Wildish, in consultation with the UN Environment Task Manager, Geordie Colville, the Project Assistant, Cicilia Magare, the Fund Management Officer Leena Darlington and the Sub-Programme Coordinator, Ermira Fida, of the Climate Change sub-programme. The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UN Environment Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

39. The Consultant will be hired for 4 months spread over the period 1st April, 2016 to 30th September, 2017 and should have: an advanced university degree in environmental sciences, international development or other relevant political or social sciences area; a minimum of 20 years of technical / evaluation experience, including of evaluating large, regional or global programmes and using a Theory of Change

approach; substantial experience of working with national and international institutions in Caribbean countries on development initiatives; a broad understanding of energy efficiency; excellent writing skills in English and, where possible, knowledge of the UN system, specifically of the work of UN Environment. Experience in managing partnerships, knowledge management and communication is desirable for all evaluation consultants.

40. The Consultant will be responsible, in close consultation with the Evaluation Office of UN Environment, for overall management of the evaluation and timely delivery of its outputs, described above in Section 11 Evaluation Deliverables, above and will ensure that all evaluation criteria and questions are adequately covered.

(h) Schedule of the evaluation

41. The table below presents the tentative schedule for the evaluation.

Table 3. Tentative schedule for the evaluation

Milestone	Deadline
Inception Report	<i>To be completed based on discussions between the consultant, project team and Evaluation Manager</i>
Evaluation Mission	
Telephone interviews, surveys etc.	
Powerpoint/presentation on preliminary findings and recommendations	
Draft report to Evaluation Manager (and Peer Reviewer)	
Draft Report shared with UN Environment Project Manager and team	
Draft Report shared with wider group of stakeholders	
Final Report	
Final Report shared with all respondents	

(i) Contractual Arrangements

42. Evaluation Consultants will be selected and recruited by the Evaluation Office of UN Environment under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UN Environment/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

43. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Office of expected key deliverables. The schedule of payment is as follows:

44. Schedule of Payment for the [Consultant/Team Leader]:

Deliverable	Percentage Payment
Approved Inception Report	30%
Approved Draft Main Evaluation Report	30%
Approved Final Main Evaluation Report	40%

45. Fees only contracts: Air tickets will be purchased by UN Environment and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Office and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

46. The consultants may be provided with access to UN Environment’s Programme Information Management System (PIMS) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.

47. In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UN Environment Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UN Environment’s quality standards.

If the consultant(s) fail to submit a satisfactory final product to UN Environment in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Annex II. Response to Stakeholder Comments

During the evaluation process feedback and comments were invited from implementing partners and evaluation process respondents. In most cases these led to clarifications of the text or corrections to factual details. A few comments, listed below, did not lead to a revision of the text and are recorded here for the purposes of transparency.

Place in Evaluation Report	Comment Received	Response
<p>Item 24, pg 12 'In all the countries visited and consulted, the experiences of present and past National Steering Committee Chairpersons were of poor management at the regional level, particularly the inability to either approve work plans and budgets or provide adequate feedback to allow the plans to be improved and finalised'</p>	<p>The Executing Agency challenges the depiction of 'poor management at the regional level, particularly the inability to either approve work plans and budgets or provide adequate feedback to allow the plans to be improved and finalised' (para 24, pg 12).</p>	<p>After a review of the contributions and evidence provided during the evaluation process, the UN Environment Evaluation Office has no grounds to alter the text.</p>
<p>Item 218, pg 53 'On the surface, there is little evidence of country buy-in, except in Antigua and Barbuda, and to some extent Belize. However, it is very difficult to fully assess country buy-in in the current climate of distrust resulting from non-approval of their work plans and budgets, non-payment and outstanding payments to National Coordinators, and outstanding reimbursements (SVG and Grenada) for workshop expenses.</p>	<p>The Executing Agency challenges the evaluation report's finding of 'little evidence of country buy-in' (para 218, pg 53) and asserts that: a) all National Coordinators were selected by their respective governments and b) all National Coordinators were under contract except for Grenada, where the Government did not offer a contract to the National Coordinator, despite requests from the PMU</p> <p>With regard to the non-payment and outstanding payments to National Coordinators, and outstanding reimbursements (SVG and Grenada) for</p>	<p>After a review of the contributions and evidence provided during the evaluation process, the UN Environment Evaluation Office has no grounds to alter the text.</p>

	workshop expenses (para 24, pg 12) the Executing Agency asserts that payments are based on the satisfactory delivery and acceptance of reports by the Project Technical Coordinator and authorized by the Executive Director.	
--	---	--

Annex III. Schedule of Evaluation Activities

No	Activity	Milestone/Date (s)
1	Start of the evaluation	
2	Inception report	June 6 th
3	Comments from Evaluation Office	June 14 th
4	Field visits - Belize - Antigua & Barbuda - Saint Lucia - Grenada	Al Binger 14 th June, New York 19 th June (in Trinidad)
5	Zero Draft report	October 2017
6	Comments from Evaluation Office	
7	First draft report	
8	Comments from stakeholders	
9	Final report	

Annex IV: Persons Met and Designation

Country	Personnel/Name	Designation	Institution
Belize	Dr Al Binger	Project Technical Coordinator	CCCCC, 2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Ms Christine Neves Duncan	Project Coordinator	CCCCC, 2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Ms Lisa Cervantes	Finance Officer (Ag.)	CCCCC, 2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Ms Allison Williams	Procurement Officer	CCCCC, 2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Dr Mark Bynoe	Assistant Executive Director and Head, Programme Development and Management Unit	CCCCC, 2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Mr Lennox Johnson	Financial Officer (Ex.) CCCCC	1406/1407 Camalote Vlg. P.O. Box 339 Belmopan City BELIZE
	Mr Ambrose Tillett	Chairman NSC (Ex.) Director, Electricity	Public Utilities Commission Belize City, Belize
	Ms Khara Roaches	National Project Coordinator (Ex.)	2nd Floor, Lawrence Nicholas Building, P.O. Box 563, Bliss, Parade, Belmopan
	Mr Ryan Cobb	Chairperson, NSC (Ag.) Energy Officer	Energy Unit, Ministry of Public Service, Energy and Public Utilities
	Mr Deon Kelly	Energy Officer	Energy Unit, Ministry of Public Service, Energy and Public Utilities
	Mr Franklyn Magloire	Asst. General Manager, Lending Operations	Development Finance Corp Bliss Parade, Belmopan, Belize
Antigua & Barbuda (Tel/Skype only)	Mr Churchill Norbert	National Coordinator	Department of the Environment
Saint Lucia	Ms Judith Ephraime	GEF Focal Point	Department of Sustainable Dev. Ministry of Education, Innovation, Gender Relations and Sustainable Development
	Ms Benise Joseph	Energy Officer, Renewable Energy Division	
	Mr Kurt Inglis	Project Coordinator	
	Mr Örjan Joe Lindberg	Project Coordinator (Ret.)	
	Mr Sylvester Clauzel	Former PS & Chairman NSC	
Saint Lucia	Mr Vern Emmanuel	Member NSC	Engineering Consultants & Prg. Managers P.O. Box 1994, Castries, Saint Lucia
	Mr Philbert Francis	Business Development & Marketing Manager	Saint Lucia Development Bank The Financial Centre Bridge Street PO Box 368. City, Castries.

Mid-Term Evaluation: Energy for Sustainable Development in Caribbean Buildings

Country	Personnel/Name	Designation	Institution
	Ms Catherine Charles	Services Development Manager	Saint Lucia Development Bank The Financial Centre Bridge Street PO Box 368. City, Castries.
Grenada	Mr John Auguste	Senior Energy Officer	Ministry of Finance, Planning, Economy, Energy & Cooperatives -
	Mr Robert Medford	Quality Manager	Grenada Bureau of Standards
	Mr Shevon Slinger	Head, Materials Testing Laboratory	Grenada Bureau of Standards
	Dr Hugh Sealy	Department of Public Health and Preventive Medicine, (WINDRIFF)	St. George's University, St. George's, Grenada.
St. Vincent & the Grenadines (Tel/Skype only)	Mr Ellsworth Dacon	Director, Energy Unit	Ministry of Economic Planning & Development
UN Environment	Ms Janet Wildish, PhD	Senior Evaluation Officer	United Nations Environment Prog. NOF Block 2, 3rd Floor, North Wing PO Box 30552-GPO-00100, Nairobi, Kenya
	Mr Geordie Colville	Task Manager	UN Environment NOF Block 2, 3rd Floor, North Wing, PO Box 30552-GPO-00100, Nairobi, Kenya
	Ms Cicilia Magare	Project Assistant Climate Change Mitigation Unit, Energy Branch, Economy Division	UN Environment P. O. Box 30552 Nairobi, Kenya
	Ms Leena Darlington	Fund Management Officer UN Environment, Economy Division, Energy and Climate Branch	UNEP/GEF Climate Mitigation Unit NOF Block 2 – 1 North, PO Box 30552-GPO-00100, Nairobi, Kenya
	Ms Faith Karuga	Economy Division Assistant Fund Management UN Environment, Economy Division, Energy and Climate Branch	UN Environment, Economy Division, Energy and Climate Branch UNEP/GEF Climate Mitigation Unit NOF Block 2 – 1 North, PO Box 30552-GPO-00100, Nairobi, Kenya

Annex V. Bibliography

Project documents

1. Project Identification Form (PIF) for the Project
2. Request for CEO Endorsement/Approval
3. Project Document and Appendices
4. Annual Project Implementation Reviews (PIRs) for 2014 to 2017
5. Minutes of Project's Regional Coordinating Committee meetings for 2014, 2015 and 2016
6. Half Yearly Progress Report from March 2013 to December 31,2016
7. Selected correspondence between UN Environment and CCCCC dating from 2013 to 2017
8. Annual work plans and budgets or equivalent, revisions to the logical framework and project financing;
9. Documentation related to project outputs (Training Workshops) and relevant materials published on the project website
10. Audit of the Financial Records of GEF Full Size project: Energy for Sustainable Development in Caribbean January 1, 2013 to December 31, 2014
11. Mission Report Period: 12-13 October 2015
12. UNEP/GEF Procurement of Methods and Threshold
13. Project Cooperation Agreement (PCA) 2012/020 between CCCCC and UNEP for a GEF Full Size Project Energy for Sustainable Development in Caribbean Buildings
14. Memorandum of Agreement between Caribbean Community Climate Change Centre and respective Governments (Antigua and Barbuda, Belize, Grenada, Saint Lucia and St. Vincent and the Grenadines)
15. Contractual Agreement Between Development Finance Corporation, Caribbean Community Climate Change Centre and Ministry of Public Service, Energy and Public Utilities (Belize)

Publications

16. Alexander Ochs et al., Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS): Baseline Report
17. Bali Strategic Plan for Technology Support and Capacity Building **UNEP/GC.23/6/Add.1**
18. CCCCC (2015) Guide to Conducting Energy Audits
19. GEF-4 Focal Area Strategies and Strategic Programming
20. <https://www.thegef.org/documents/gef-4-focal-area-strategies-and-strategic-programming>
21. Jamaica to host energy efficiency building code project launch Wednesday, March 22, 2017 http://www.jamaicaobserver.com/news/Jamaica-to-host-energy-efficiency-building-code-project-launch_93261
22. SIDS DOCK (Sustainable Energy and Climate Resilience Organisation <http://sidsdock.org/>
23. Tillett Ambrose et. Al (2011) Belize National Energy Policy Framework
24. UN Environment Evaluation Policy <http://www.unevaluation.org/document/detail/1914>
25. UN Environment Medium Term Strategy (MTS) and Programme of Work (POW) 2010 - 2013
26. United Nations Environment Programme Medium-term Strategy 2010–2013 and Assessment (Washington, DC: Worldwatch Institute, 2015)

Annex VI. Consultant(s) Résumé

David A. Simmons has more than 25 years of experience working in various areas related to Environmental Policy, Planning and Management and Sustainable Development. Mr Simmons has considerable experience in the areas of institutional analysis and environmental policy planning and management having been contracted to undertake several related consulting assignments covering Climate Change Adaptation, National Biodiversity Strategies and Action Plans, and Coastal and Marine Policy, Planning and Management.

Mr Simmons has considerable experience of working on complex projects, e.g., the GEF-funded, and UN Environment executed *“Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWECO)”* being implemented in 9 Caribbean countries; The GEF funded, UNEP executed project to: *“Increase Saint Lucia capacity to monitor MEA implementation and sustainable development”*, based on a wide participatory process, and taking into account baseline and priorities for national information management; and, the GEF funded and World Bank executed *“OECS Solid and Ship-generated Waste Management project”*. He has also conducted several evaluation exercises including the GEF funded, UNEP executed *Integrated Watershed and Coastal Areas Management (IWCAM) Project (2012)*; and the GEF funded, UNEP executed *“Building a Sustainable National Marine Protected Area Network – The Bahamas”* Parks and Protected Areas Network (2015).

Annex VII. Quality Assessment of the Evaluation Report

Quality Assessment of the Evaluation Report

Evaluation Title:

All UN Environment evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills. Nevertheless, the quality assessment is used as a tool for providing structured feedback to evaluation consultants, especially at draft report stage. This guidance is provided to support consistency in assessment across different Evaluation Managers and to make the assessment process as transparent as possible.

	UN Environment Evaluation Office Comments	Draft Report Rating	Final Report Rating
Substantive Report Quality Criteria			
<p>Quality of the Executive Summary:</p> <p>The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.</p>	<p>Draft report: Comprehensive</p> <p>Exec Summary provided to support management decision making.</p> <p>Final report:</p>	6	
<p>I. Introduction</p> <p>A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)</p> <p>Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?</p>	<p>Draft report:</p> <p>All items covered.</p> <p>Final report:</p>	5	
<p>II. Evaluation Methods</p> <p>This section should include a description of how the <i>TOC at Evaluation</i>⁴⁸ was designed (who was involved etc.) and applied to the context of the project?</p> <p>A data collection section should include: a description of evaluation methods and information sources used, including the number and type</p>	<p>Draft report:</p> <p>Comprehensive without being over long.</p>	5.5	

⁴⁸ During the Inception Phase of the evaluation process a *TOC at Design* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions). During the

<p>of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.).</p> <p>The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>It should also address evaluation limitations such as: low or imbalanced response rates across different groups; gaps in documentation; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views.</p>	<p>Final report:</p>		
<p>III. The Project</p> <p>This section should include:</p> <ul style="list-style-type: none"> • <i>Context</i>: Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses). • <i>Objectives and components</i>: Summary of the project's results hierarchy as stated in the ProDoc (or as officially revised) • <i>Stakeholders</i>: Description of groups of targeted stakeholders organised according to relevant common characteristics • <i>Project implementation structure and partners</i>: A description of the implementation structure with diagram and a list of key project partners • <i>Changes in design during implementation</i>: Any key events that affected the project's scope or parameters should be described in brief in chronological order • <i>Project financing</i>: Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing 	<p>Draft report:</p> <p>All items covered in a clear and concise manner.</p> <p>Final report:</p>	<p>6</p>	
<p>IV. Theory of Change</p> <p>The TOC at Evaluation should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.</p> <p>Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do not follow OECD/DAC definitions of different results levels, project results may need to be re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/revised Prodoc logframe/TOC and b) as formulated in the TOC at Evaluation. <i>The two results hierarchies should be presented as a two-column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'.</i></p>	<p>Draft report:</p> <p>Good consideration of causal pathways</p> <p>Final report:</p>	<p>6</p>	

evaluation process this TOC is revised based on changes made during project intervention and becomes the TOC at Evaluation.

<p>F. Efficiency To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p> <ul style="list-style-type: none"> • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of making use of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • The extent to which the management of the project minimised UN Environment’s environmental footprint. 	<p>Draft report:</p> <p>Final report:</p>	<p>6</p>	
<p>G. Monitoring and Reporting How well does the report assess:</p> <ul style="list-style-type: none"> • Monitoring design and budgeting (<i>including SMART indicators, resources for MTE/R etc.</i>) • Monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>) • Project reporting (<i>e.g. PIMS and donor report</i>) 	<p>Draft report:</p> <p>Final report:</p>	<p>6</p>	
<p>H. Sustainability How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes including:</p> <ul style="list-style-type: none"> • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability 	<p>Draft report:</p> <p>Final report:</p>	<p>6</p>	
<p>I. Factors Affecting Performance These factors are <u>not</u> discussed in stand-alone sections but are integrated in criteria A-H as appropriate. To what extent, and how well, does the evaluation report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> • Preparation and readiness • Quality of project management and supervision⁴⁹ • Stakeholder participation and co-operation • Responsiveness to human rights and gender equity • Country ownership and driven-ness • Communication and public awareness 		<p>6</p>	
<p>VI. Conclusions and Recommendations</p> <p>i) Quality of the conclusions:</p> <ul style="list-style-type: none"> • The key strategic questions should be clearly and succinctly addressed within the conclusions section. • It is expected that the conclusions will highlight the main strengths and weaknesses of the project, and connect them in a compelling story line. • Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report. 	<p>Draft report:</p> <p>Repetition needs to be removed.</p> <p>Final report:</p>	<p>5</p>	
<p>ii) Quality and utility of the lessons:</p> <ul style="list-style-type: none"> • Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. 	<p>Draft report:</p> <p>Final report:</p>	<p>5</p>	

⁴⁹ In some cases ‘project management and supervision’ will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.

<ul style="list-style-type: none"> Lessons must have the potential for wider application and use and should briefly describe the context from which they are derived and those contexts in which they may be useful. 			
<p>iii) Quality and utility of the recommendations:</p> <ul style="list-style-type: none"> To what extent are the recommendations proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when. Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations. 	<p>Draft report:</p> <p>Recommendation on gender/marginalised groups and involvement of regional/country offices needed.</p> <p>Final report:</p>	5.5	
VII. Report Structure and Presentation Quality			
<p>i) Structure and completeness of the report:</p> <ul style="list-style-type: none"> To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete? 	<p>Draft report:</p> <p>All elements covered as described in the guidelines. Very little amendment required.</p> <p>Final report:</p>	6	
<p>ii) Quality of writing and formatting:</p> <ul style="list-style-type: none"> Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow Evaluation Office formatting guidelines? 	<p>Draft report:</p> <p>Very high-quality draft report – well-structured, clearly written, concise whilst providing all the detail required.</p> <p>Final report:</p>	6	
OVERALL REPORT QUALITY RATING		5.8	

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

Mid-Term Evaluation: Energy for Sustainable Development in Caribbean Buildings

At the end of the evaluation, compliance of the evaluation process against the agreed standard procedures is assessed, based on the table below. *All questions with negative compliance must be explained further in the table below.*

Evaluation Process Quality Criteria	Compliance	
	Yes	N
Independence:		
1. Were the Terms of Reference drafted and finalised by the Evaluation Office?	Y	
2. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	Y	
3. Was the final selection of the Evaluation Consultant(s) made by the Evaluation Office?	Y	
4. Was the evaluator contracted directly by the Evaluation Office?	Y	
5. Was the Evaluation Consultant given direct access to identified external stakeholders in order to adequately present and discuss the findings, as appropriate?	Y	
6. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		N
7. If Yes to Q6: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?		
Financial Management:		
8. Was the evaluation budget approved at project design available for the evaluation?	Y	
9. Was the final evaluation budget agreed and approved by the Evaluation Office?	Y	
10. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process?	Y	
Timeliness:		
11. If a Terminal Evaluation: Was the evaluation initiated within the period of six months before or after project operational completion? Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?	N/A	I/A
12. Were all deadlines set in the Terms of Reference respected, as far as unforeseen circumstances allowed?	Y	
13. Was the inception report delivered and reviewed/approved prior to commencing any travel?	Y	
Project's engagement and support:		
14. Did the project team, Sub-Programme Coordinator and identified project stakeholders provide comments on the evaluation Terms of Reference?	Y	
15. Did the project make available all required/requested documents?		N
16. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?		N
17. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?		N
18. Was close communication between the Evaluation Consultant, Evaluation Office and project team maintained throughout the evaluation?	Y	
19. Were evaluation findings, lessons and recommendations adequately discussed with the project team for ownership to be established?	Y	
20. Did the project team, Sub-Programme Coordinator and any identified project stakeholders provide comments on the draft evaluation report?	Y	
Quality assurance:		
21. Were the evaluation Terms of Reference, including the key evaluation questions, peer-reviewed?	Y	
22. Was the TOC in the inception report peer-reviewed?	Y	
23. Was the quality of the draft/cleared report checked by the Evaluation Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	Y	
24. Did the Evaluation Office complete an assessment of the quality of both the draft and final reports?	Y	
Transparency:		
25. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	Y	

26. Did the Evaluation Manager disseminate (or authorize dissemination) of the cleared draft report to the project team, Sub-Programme Coordinator and other key internal personnel (including the Reference Group where appropriate) to solicit formal comments?	Y	
27. Did the Evaluation Manager disseminate (or authorize dissemination) appropriate drafts of the report to identified external stakeholders, including key partners and funders, to solicit formal comments?	Y	
28. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	Y	
29. Did the Evaluation Consultant(s) respond to all factual corrections and comments?	Y	
30. Did the Evaluation Office share all comments and Evaluation Consultant responses with all those who were invited to comment?	Y	

Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.

Process Criterion Number	Evaluation Office Comments
15,16,17	Weaknesses that were experienced in project implementation also affected the evaluation. Additional efforts were made to gather all the available relevant documentation, especially on the procurement processes. An audit report was provided after the draft evaluation report had been written.
14	There was no Sub Programme Coordinator in post at the time of this evaluation. The evaluation collaborated with the GEF Liaison Officer.
29, 30	The wider circulation of this draft report was delayed to allow the project team time to discuss possible ways forward. However, key respondents were given the chance to comment and received comments were addressed. A table of unresolved comments is attached as Annex II.